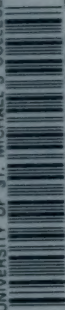


UNIVERSITY OF ST. MICHAEL'S COLLEGE



3 1761 01858973 9







18/-

1/62



# THE LOEB CLASSICAL LIBRARY

FOUNDED BY JAMES LOEB, LL.D.

EDITED BY

† T. E. PAGE, C.H., LITT.D.

† E. CAPPS, PH.D., LL.D.

† W. H. D. ROUSE, LITT.D.

L. A. POST, M.A.

E. H. WARMINGTON, M.A., F.R.HIST.SOC.

## ARISTOTLE

### PROBLEMS

#### II

BOOKS XXII—XXXVIII

### RHETORICA AD ALEXANDRUM



# ARISTOTLE

## PROBLEMS

### II

BOOKS XXII—XXXVIII

WITH AN ENGLISH TRANSLATION BY

W. S. HETT, M.A.

SOMETIME SCHOLAR OF WADHAM COLLEGE, OXFORD

## RHETORICA AD ALEXANDRUM

WITH AN ENGLISH TRANSLATION BY

H. RACKHAM, M.A.

FELLOW AND LECTURER OF CHRIST'S COLLEGE, CAMBRIDGE



LONDON

WILLIAM HEINEMANN LTD

CAMBRIDGE, MASSACHUSETTS

HARVARD UNIVERSITY PRESS

MCMLVII

*First printed 1937*  
*Revised and reprinted 1957*



*Printed in Great Britain*

# CONTENTS

	PAGE
PROBLEMS:	
BOOK XXII. . . . .	2
BOOK XXIII. . . . .	12
BOOK XXIV. . . . .	42
BOOK XXV. . . . .	54
BOOK XXVI. . . . .	70
BOOK XXVII. . . . .	116
BOOK XXVIII. . . . .	128
BOOK XXIX. . . . .	136
BOOK XXX. . . . .	154
BOOK XXXI. . . . .	182
BOOK XXXII. . . . .	202
BOOK XXXIII. . . . .	210
BOOK XXXIV. . . . .	224
BOOK XXXV. . . . .	232
BOOK XXXVI. . . . .	238



# CONTENTS

## PROBLEMS

BOOK XXXVII.	.	.	.	.	.	240
BOOK XXXVIII.	.	.	.	.	.	248
INDEX	.	.	.	.	.	451

## RHETORICA AD ALEXANDRUM:

INTRODUCTION .	.	.	.	.	258
TEXT AND TRANSLATION	.	.	.	.	266
INDEX	.	.	.	.	456

ARISTOTLE'S  
PHYSICAL PROBLEMS

# ΑΡΙΣΤΟΤΕΛΟΥΣ

## ΦΥΣΙΚΑ ΠΡΟΒΛΗΜΑΤΑ

### ΚΑΤ' ΕΙΔΟΣ ΣΥΝΑΓΩΓΗΣ

ΚΒ

ΟΣΑ ΠΕΡΙ ΟΠΩΡΑΝ

930 a  
δ

Διὰ τί τὴν ὀπώραν ὕστερον ἢ πρότερον φαγοῦσιν 1  
οὐκ ἀνάλογος<sup>1</sup> τοῖς αὐτοῖς ὁ ὄγκος τῆς πληρώσεως  
γίνεται; ἢ ὅτι βαρυτέρα ἐστὶν ἡ ὀπώρα πολὺ τῶν  
σιτίων; δηλοῖ δὲ τὰ σῦκα, ἐὰν ὕστατα βρωθῇ.  
10 τελευταῖα γὰρ ἐμεῖται. ἐὰν μὲν οὖν πρῶτα, διὰ  
βάρος κάτω πορευόμενα εὐρυχωρίαν ἄνω ποιεῖ,  
ὥστε ῥαδίως δέχεσθαι τὸν ὄγκον τῶν σιτίων.  
ἀνάπαλιν δὲ εἰσελθόντα τὰ σιτία, διὰ τὸ μὴ κάτω  
φέρεσθαι, ταχὺ τοῦ ἄνω κενοῦ προσλαμβάνει.

Διὰ τί τῶν γλυκέων ὄντων ὁμοιοτέρων ἡμῖν ἢ 2  
15 τῶν δριμέων, θᾶττον πληρούμεθα ὑπὸ τῶν γλυ-  
κέων; εἰκὸς δὲ ἦν ἡττον· ὑπὸ γὰρ τῶν ὁμοίων  
ἡττον ἦν εἰκὸς πληροῦσθαι. ἢ ὅτι οὐχ ὁμοίως τό-  
τε ἀγγεῖον πληροῦται ταχύ, ἐξ οὗ πληρούμεθα,

<sup>1</sup> ἀνάλογος most mss. : ἀνάλογον Ruelle.

ARISTOTLE'S  
PHYSICAL PROBLEMS  
ARRANGED ACCORDING TO THEIR  
CONTENTS  
BOOK XXII

PROBLEMS CONCERNING FRUIT

WHY is it that the quantity of food needed to produce satiety is not proportionate in the same persons, but varies according to whether they eat fruit after or before a meal? Is it because fruit is much heavier than the same volume of solid food? Figs prove this, if they are eaten last; for they are vomited last. If, then, they are eaten first, owing to their weight they sink down and leave plenty of room above, so as to admit easily the volume of solid food. Conversely, when the solid food enters, because it does not travel downwards, it quickly fills the upper empty space.

Why is it that, although sweet food is more like our bodies than bitter, we are much more quickly sated by sweet food? It might seem natural that we should be less so; for it is natural that we should be less easily sated with what is like us. Is it because the receptacle from which we are sated and the body which is nourished are not filled equally quickly, but

980 a

καὶ τὸ τρεφόμενον, ἀλλ' ἐνίοτε ἢ μὲν κοιλία πλήρης  
 ἐστίν, ὅσον τῶν διψώντων, τὸ δὲ δίψος οὐδὲν ἡττόν  
 20 ἐστίν. οὐ γὰρ τῷ ταύτην εἶναι πλήρη παυόμεθα  
 διψῶντες, ἀλλὰ τῷ ἕκαστον τῶν τοῦ σώματος τὸ  
 αὐτῷ οἰκεῖον ἐσπακέναι, καὶ ὅταν ἐκείνα ἀπολάβῃ  
 ἱκανῶς, τότε παυόμεθα διψῶντες. καὶ πεινῶντες  
 δὲ ὡσαύτως.

Διὰ τί θᾶττον πληρούμεθα ἀπὸ τῶν γλυκέων ἢ 3  
 25 ἀπὸ τῶν δριμέων; ἢ ὅτι θᾶττον παυόμεθα ἐπι-  
 θυμοῦντες τῶν γλυκέων; ἢ ὡς μὲν ἡ κοιλία  
 πληροῦται, οὕτω καὶ ἡμεῖς ὑπὸ τῶν γλυκέων,  
 οὐχ ὁμολογεῖται, ὅτι δὲ ἡ ἐπιθυμία θᾶττον ὑπ'  
 αὐτῶν πληροῦται, τοῦτ' ἂν εἴη λεκτέον; ἢ ὅτι ἡ  
 μὲν ἐπιθυμία, ὡς ἀπλῶς εἰπεῖν, ἐστὶ μὲν ἔνδεια,  
 30 καὶ ὅταν μηκέτι ἔχωμεν τροφήν ἢ ὀλίγην; τὰ  
 μὲν οὖν δριμέα οὐκ ἐστὶ τρόφιμα, ἀλλὰ τροφήν  
 μὲν ὀλίγην ἔχει, τὸ δὲ περίττωμα πολὺ. εἰκότως  
 οὖν πολλὰ ταῦτα ζητοῦμεν ἐσθίειν καὶ οὐκ ἐμ-  
 πιπλάμεθα αὐτῶν<sup>1</sup> τὴν ἐπιθυμίαν, διὰ τὸ ἔτι  
 προσδεῖσθαι τροφῆς, ταῦτα δὲ μὴ ἔχειν τροφήν.  
 35 τὰ δὲ γλυκέα ᾗπαντά ἐστὶ τροφή, καὶ ἀπὸ μικρῶν  
 τοιούτων πολλὴν λαμβάνει τὸ σῶμα. ὅταν οὖν  
 ἀπολάβῃ πολλὴν τροφήν, οὐκέτι δύναται ἐσθίειν  
 διὰ τὸ μὴ ὑποφέρειν. εἰκότως οὖν θᾶττον ὑπὸ  
 τῶν γλυκέων πληρούμεθα.

Διὰ τί τὰ περικάρπια καὶ τὰ κρέα, καὶ ὅσα 4  
 930 b τοιαῦτα ἐν τοῖς ἀσκοῖς ᾄσηπτα γίνεται ὅταν  
 σφόδρα φυσηθῶσι, καὶ τὰ ἐν τοῖς ἀκριβῶς περι-  
 πωματιζομένοις ὡσαύτως; ἢ διότι σήπεται μὲν  
 κινούμενα πάντα, τὰ δὲ πλήρη ἀκίνητα; ἀδύνατον  
 γὰρ ἄνευ κενοῦ κινηθῆναι, ταῦτα δὲ πλήρη.

<sup>1</sup> αὐτῶν Ruelle.



## PROBLEMS, XXII. 2-4

sometimes the stomach may be full, as in the case of the thirsty, but their thirst is no less? For we do not cease being thirsty because the stomach is full, but because each part of the body has drawn in its own proper food, and when all these have taken what they require, then we cease to be thirsty. The same is true with hunger.

Why are we more quickly sated with sweet than 3 with bitter foods? Is it because we cease to crave for the sweet more quickly? Or while it is not generally admitted that we become sated as our stomach is filled with sweet foods, yet might it not be said that our desire is more quickly satisfied by them? Or is it because desire, to describe it in simple terms, is a form of want, and arises when we no longer have sustenance or only a little? Now bitter things are not nutritive; they contain little nutriment but much waste product. Naturally, therefore, we seek to eat them in large quantities, and do not satisfy our desire with them, because we still require nourishment and bitter things do not contain it. But all sweet things are nourishment, and the body derives much nourishment from a few of them. But when it has absorbed a large quantity of nourishment, it can no longer eat because it can no longer tolerate it. Naturally, therefore, we are more quickly sated by the sweet.

Why is it that fruits and meat and all similar things 4 which are put in leather bottles remain without decaying, when the bottles are fully blown up, and that the same thing happens in vessels whose lids are tightly sealed? Is it because movement is the cause of decay, and when the containers are full there is no movement? For movement is impossible without an empty space and these are full.

5 Διὰ τί μετὰ τὰ σαπρὰ τῶν περικαρπίων ὁ οἶνος 5  
 πικρὸς φαίνεται πινόμενος; ἢ ὅτι τὴν πικρότητα  
 ἔχει ἢ σαπρότης ἢ τοιαύτη; τὸ οὖν ἐπιμένον ἐπὶ  
 τῇ γλώττῃ, μιγνύμενον τῷ πόματι καὶ διαχεόμενον  
 10 φαίνεται ἐσθιόμενον διὰ τὸ πολλῶν ἄπτεσθαι καὶ  
 εἰς μικρὰ διανενεμῆσθαι τὸν τοιοῦτον χυμόν.

Διὰ τί τὰ τραγήματα ἐδεστέον; ἢ ἕνεκα τοῦ 6  
 πιεῖν ἱκανόν; οὐ γὰρ μόνον ποτέον τῆς δύψης  
 χάριν τῆς ἐπὶ τοῖς σιτίοις, ἀλλὰ καὶ μετὰ τὸ σιτίον.

15 Διὰ τί τὰ ὀπτὰ κάρυα ψυχθέντα χεῖρω γίνεται, 7  
 καὶ ὁ ἄρτος δὲ καὶ ὁ βάλανος καὶ πολλὰ τῶν  
 τοιούτων, θερμανθέντα δὲ πάλιν βελτίω; ἢ διότι  
 ψυχθέντος μὲν πέπηγεν ὁ χυμός, ἀναχλιανθέντος  
 δὲ πάλιν χεῖται; ἢ δὲ ἡδονὴ γίνεται διὰ τὸν  
 χυμόν.

20 Διὰ τί ἐπὶ τῇ ἀπολαύσει τῆς ὀπώρας, οἶον σύκων 8  
 καὶ τῶν τοιούτων, ἢ οἶνον ἄκρατον δεῖ ἐπιπίνειν  
 ἢ ὕδωρ; ταῦτα δὲ ἐναντία. ἢ ὅτι ἡ ὀπώρα καὶ  
 θερμὴ ἐστὶ καὶ ὑγρὰ διὰ τὴν γένεσιν; ἔχει γὰρ  
 πολὺ πῦρ καὶ ὑγρότητα, ὥστε διὰ μὲν τὸ πῦρ οἶον  
 25 ζέσιν ποιεῖ ὁ χυμός εἴσω, ὅπερ ἔξω τὸ γλεῦκος  
 ποιεῖ. ἦττον δὲ ἔχει δύναμιν καὶ τὰ ἄλλα τὰ  
 ἀκρόδρυα. τὸ δὲ τῆς ὑγρότητος πλήθος ἀπεψίαν  
 ποιεῖ. τὸ μὲν οὖν ὕδωρ διὰ τὴν ψυχρότητα  
 σβεννύει τὴν ζέσιν, ὁ δὲ οἶνος διὰ τὴν θερμότητα  
 ὡς ἐπὶ τὸ πολὺ· ὥσπερ γὰρ πῦρ ἐνίοτε πυρός, ἐὰν  
 30 ἦ ἔλαττον, ἀφαιρεῖται τὴν ἰσχύν. μᾶλλον δὲ τῇ  
 θερμότητι πεπτικός ἐστὶ τῆς ὑγρότητος, καὶ διὰ  
 βάρος κατακρατεῖ τῶν τῆς ζέσεως ἐπιπολασμῶν.

Διὰ τί τῶν ἰσχάδων γλυκύταται αἱ δίχα ἐσχι- 9  
 σμέναι, οὔτε δὲ αἱ πολυσχιδεῖς οὔτε αἱ ἀσχιδεῖς;

## PROBLEMS, XXII. 5-9

Why does wine when drunk after eating rotten 5 fruit taste bitter? Is it because there is an element of bitterness in such rottenness? That which remains on the tongue, when mixed with the drink and penetrating it, makes it bitter. The fruit itself when eaten seems less bitter because juice of this kind touches many parts, and so is divided into small particles.

Why should one eat dried fruits? Is it in order 6 that we may drink enough? For one must drink, not merely because of the thirst which arises while eating solid food, but also after solid food.

Why are roasted nuts less pleasant when they are 7 cold, as also are bread, acorns, and many similar things, but much pleasanter when they are hot? Is it because when they are cold the juice is congealed, but flows again when they are warmed? And the pleasure is due to the juice.

Why should one pour unmixed wine or water over 8 figs and the like for the real enjoyment of the fruit? For these are opposites. Is it because fruit is both warm and moist because of its origin? For it contains much heat and moisture, so that owing to the heat the juice produces a form of boiling within, just as must does outside. The other class, namely the hard-shelled fruits, have this power in a less degree. But the quantity of moisture causes a difficulty of concoction. The water, then, because of its coldness extinguishes the boiling, but the wine generally does so by its warmth; just as a fire sometimes takes away the strength of a fire, if it is smaller. Wine, then, by its heat more easily causes the concoction of the moisture, and owing to its weight it prevails over the surface of the boiling.

Why are the sweetest dried figs those which are 9 divided in half, and neither the much-divided nor

930 b ἡ διότι ἐκ μὲν τῶν πολυσχιδῶν διαπέπνευκεν καὶ  
 35 ἐξίικμακεν μετὰ τοῦ ὑγροῦ τὸ πλεῖστον τοῦ γλυ-  
 κέος, ἐν δὲ ταῖς μεμυκνίαις πλεῖον τὸ ὕδατῶδες  
 ἔστι διὰ τὸ μὴ ἡτμικέναι; αἱ δὲ ἐσχισμέναι μὲν,  
 μὴ εἰς πολλὰ δέ, ἀμφοτέρων τούτων ἐκτός εἰσι  
 τῶν παθημάτων.

Διὰ τί ταῖς καμίνοις ξηραίνόμενα<sup>1</sup> τὰ σῦκα 10  
 931 a σκληρότερα γίνεται, εἰὰν ψυχθῇ ἐν τῇ καμίνῳ, ἢ  
 ἂν ἐξαιρεθέντα ψυχθῇ; ἢ ὅτι ἐν μὲν τῇ καμίνῳ  
 ἐξατμίζει πᾶν τὸ ὑγρὸν ὑπὸ τοῦ θερμοῦ, ἔξω δὲ  
 περιεστηκῶς ὁ ἀὴρ ψύχων κωλύει τὸ ὑγρὸν ἐξιέναι  
 5 καὶ συνίστασθαι; μᾶλλον γὰρ ἐξατμίζει. ἔστι δὲ  
 τὰ μὲν ξηρὰ σκληρά, τὰ δὲ ὑγρά μαλακά.

Διὰ τί παρὰ τὰ στρυφνὰ ὁ οἶνος καὶ τὸ ὕδωρ 11  
 φαίνεται γλυκύτερα, οἷον εἰάν τις βαλάνους ἢ  
 μύρτα ἢ τι τῶν τοιούτων διατράγῃ; ἢ εἰκότως,  
 καθάπερ καὶ ἐπὶ τῶν ἄλλων; πᾶν γὰρ τὸ αὐτὸ  
 10 παρὰ τὸ ἐναντίον μᾶλλον φαίνεται, οἷ δὲ τῶν ἐναν-  
 τίων χυμοὶ ἀντικείμενοί πῶς εἰσιν. ἢ ὅτι, καθάπερ  
 ἐπὶ τῶν βαπτομένων, ὑπὸ τῶν στρυφνῶν ἢ γλῶττα  
 προδιεργάζεται καὶ τοὺς πόρους ἀνοίγεται, ὥστε  
 μᾶλλον διέναι τὸ γλυκύ; καὶ γὰρ τὰ βαπτόμενα  
 τούτου ἔνεκεν προβρέχουσιν ἐν τοῖς στρυφνοῖς,  
 15 τῷ διεργασθὲν μᾶλλον δέχεσθαι τὴν βαφήν.

Διὰ τί τὰ γλυκέα ἡττον δοκεῖ γλυκέα εἶναι 12  
 θερμὰ ὄντα ἢ ὅταν ψυχθῇ; πότερον ὅτι ἅμα δύο  
 αἰσθήσεις γίνονται ἀμφοῖν, ὥστε ἢ τοῦ θερμοῦ  
 ἐκκρούει τὴν ἐτέραν; ἢ ὅτι καὶ τὸ γλεῦκος  
 20 θερμόν; ὥσπερ οὖν πῦρ γίνεται ἐπὶ πῦρ. κωλύει

<sup>1</sup> ξηραίνόμενα Sylburgh : ψυχόμενα Ruelle.

## PROBLEMS, XXII. 9-12

the undivided? Is it because in the case of much-divided figs most of the sweetness has escaped and evaporated with the moisture, but in those which are closed up there is more moisture because it has not evaporated? Figs divided in half, and not into many portions, escape both these results.

Why is it that figs which are dried in ovens 10 grow harder if they are cooled in an oven than if they are taken out and cooled? Is it because in the oven all the moisture evaporates under the influence of the heat, but outside the surrounding air which cools them prevents the moisture from escaping and congealing? For there is more evaporation (in the former case). Now dry things are hard and wet ones soft.

Why do wine and water seem sweeter when taken 11 with sour food; for instance if one eats acorns or myrtle-berries or anything of the kind? Or is this natural, as in all other cases? For the identity of a thing becomes more obvious when contrasted with its opposite, and the flavours of opposites are in a sense antithetic. Or is it that, as in the case of things dyed, the tongue has been already worked upon by what is sour and opens its pores, so that the sweet penetrates more? This is why they soak things which are to be dyed in sour liquid beforehand, so that by having been worked upon the material may take the dye more easily.

Why do sweet foods taste less sweet when they are 12 hot than when they have been cooled? Is it because there are two separate sensations of the two qualities occurring at the same time, so that the sensation of the hot drives out the other? Or is it because sweetness is hot? In that case it is like adding fire to fire.



931 a

οὖν ἢ θερμότης. ἢ ὅτι τὸ πῦρ ἀφαιρεῖται τὰς  
δυνάμεις ἀπάντων διὰ τὸ κινητικὸν εἶναι; ἐγ-  
γυτέρω οὖν τοῦ μεταβάλλειν ἐστὶ θερμὰ ὄντα,  
ἀποψυχθέντα δὲ ἔστηκεν.

Διὰ τί ποτε τὰ ἄχυρα τὰ μὲν σκληρὰ πέττει, τὰ 13  
δὲ πεπεμμένα οὐ σήπει; ἢ ὅτι τὰ ἄχυρα θερμόν τε  
25 καὶ ὀλκὸν ἐστίν; τῇ μὲν οὖν θερμότητι πέττει,  
τῷ δὲ ὀλκὸν εἶναι τὸν ἰχῶρα τὸν σηπόμενον δέχεται·  
διὸ οὐ σήπει.

Διὰ τί τὰ σῦκα μαλακὰ καὶ γλυκέα ὄντα λυ- 14  
μαίνεται τοὺς ὀδόντας; ἢ διὰ τὴν γλισχρότητα  
προσέρχεται τοῖς οὖλοις, καὶ παρεμπίπτει διὰ  
30 τῶν ὀδόντων εἰς τὰ διὰ μέσου διὰ τὸ μαλακὰ εἶναι,  
καὶ σῆψιν ποιεῖ ταχέως ἅτε θερμὰ ὄντα; τάχα  
δὲ ἴσως καὶ διὰ τὴν σκληρότητα τῶν κεγχραμίδων  
ἐν τῇ τούτων κατεργασίᾳ πονοῦσι ταχέως οἱ  
ὀδόντες.

## PROBLEMS, XXII. 12-14

So the heat prevents (the sensation of sweet). Or is it because fire takes away the power of anything because it produces movement? Hot things, then, are nearer to a state of change, but when cooled they become stationary again.

Why does chaff ripen hard fruit but does not rot 13 what is already ripe? Is it because chaff is hot and absorbent? It ripens by its heat, but being absorbent it takes up the rotting liquid; hence the fruit does not decay.

Why do figs which are soft and sweet damage the 14 teeth? Do they attack the gums because they are glutinous, and pass into the spaces between the teeth because they are soft, and produce decay quickly because they are hot? Perhaps also the teeth soon suffer in dealing with them owing to the hardness of the small seeds they contain.

# ΚΓ

## 931 a ΟΣΑ ΠΕΡΙ ΤΟ ΑΛΜΥΡΟΝ ΥΔΩΡ ΚΑΙ ΘΑΛΑΤΤΑΝ

35 Διὰ τί τὸ κῦμα οὐκ ἐπιγελᾷ ἐν τοῖς βαθέσι 1  
πελάγεσιν, ἀλλ' ἐν τοῖς μικροῖς καὶ βραχέσιν; ἢ  
ὅτι τὸ μικρὸν ὑγρὸν φερόμενον μᾶλλον διαιρεῖται  
ὑπὸ τοῦ πνεύματος ἢ τὸ πολὺ;

Διὰ τί τὰ κύματα πρότερον φοιτᾷ ἐνίοτε τῶν 2  
ἀνέμων; ἢ ὅτι πρὸς τῇ ἀρχῇ τοῦ πνεύματος ἢ  
931 b θάλαττα ὡσθεῖσα πρώτη τὴν ἐχομένην αἰετὰν ταῦτόν  
ποιεῖ; διόπερ οὔσης αὐτῆς συνεχοῦς καθάπερ μιᾷ  
πληγῇ συνεχεῖ πάσαις γίνεται. τὸ δὲ ἐν ἐνὶ  
χρόνῳ γίνεται, ὥστε συμβαίνει τὴν τε πρώτην  
καὶ τὴν ἐσχάτην ἅμα κινεῖσθαι. ὁ δὲ ἀῆρ οὐ  
5 τάσχει τοῦτο, ὅτι οὔτε ἐστὶν ἐν σῶμα συνεχές, τῷ  
πολλὰς πάντοθεν ἀντικρούσεις λαμβάνειν, αἱ πολ-  
λάκις κωλύουσι τὴν πρώτην καὶ νεανικωτάτην  
κίνησιν, τὴν τε θάλασσαν οὐ ποιοῦσι τοῦτο διὰ  
τὸ βαρυτέραν καὶ δυσκίνητοτέραν αὐτοῦ εἶναι.

Διὰ τί τὰ πλοῖα γέμειν δοκεῖ μᾶλλον ἐν τῷ 3  
10 λιμένι ἢ ἐν τῷ πελάγει, καὶ θεῖ δὲ θᾶπτον ἐκ τοῦ  
πελάγους πρὸς τὴν γῆν ἢ ἀπὸ τῆς γῆς εἰς τὸ  
πέλαγος; ἢ ὅτι τὸ πλέον ὕδωρ ἀντερείδει μᾶλλον

## BOOK XXIII

### PROBLEMS CONNECTED WITH SALT WATER AND THE SEA

WHY do not the waves ripple in deep seas, but only 1  
in small and shallow ones? Is it because a small  
quantity of water as it is carried along is more  
divided by the wind than a large quantity?

Why do the waves sometimes move before the 2  
winds reach them? Is it because near the source of  
the wind the sea being driven along first continually  
produces the same effect on the part next to it?  
Consequently, as the sea is continuous, all parts are  
affected as if by one continuous blow. But this  
action is simultaneous, so that the first and last  
parts are moved at the same time. The air does  
not suffer the same effect, because it is not one con-  
tinuous body, for it receives many contrary impulses  
from all quarters, which often check the first and  
the most vigorous movement, but they do not pro-  
duce this effect on the sea, because it is heavier and  
more difficult to move than the air.

Why is it that ships appear more heavily laden in 3  
harbour than they do in the open sea, and run faster  
from the sea towards the land than from the land  
towards the sea? Is it because the larger quantity  
of water offers more resistance than the small

931 b

τοῦ<sup>1</sup> ὀλίγου, ἐν δὲ τῷ ὀλίγῳ δέδυκεν διὰ τὸ κρατεῖν αὐτοῦ μᾶλλον; ὥθει γὰρ κάτωθεν τὸ ὕδωρ ἄνω.  
 15 ἐν μὲν οὖν τῷ λιμένι ὀλίγη ἐστὶν ἡ θάλασσα, ἐν δὲ τῷ πελάγει βαθεῖα. ὥστε καὶ ἄγειν πλεον δόξει ἐν τῷ λιμένι καὶ κινήσεται χαλεπώτερον διὰ τὸ δεδυκέναι μᾶλλον καὶ ἥττον ἀντερείδειν τὸ ὕδωρ. ἐν τῷ πελάγει δὲ τὰναντία τούτων ἐστίν.

Διὰ τί, ὅταν τι ρίφθῃ εἰς τὴν θάλατταν κυμαί- 4  
 20 νουσαν, οἶον ἡ ἄγκυρα, γαλήνη γίνεται; ἡ διότι ἴσταται ἡ θάλαττα τῷ φερομένῳ, μεθ' οὗ ἀὴρ συγκαταφέρεται, ὃς ἐπ' εὐθείας κάτω φερόμενος καὶ ἐνταῦθα ἐπισπασθεὶς συνεπισπάται τὸ ἐκ πλαγίου κινοῦν τὴν θάλατταν; ὁ δὲ κλύδων τῆς θαλάττης οὐκ ἄνωθεν κάτω γίνεται ἀλλ' ἐπιπολῆς.  
 25 οὗ λήξαντος γαλήνη γίνεται. ἔτι συνιοῦσα ἡ θάλασσα εἰς τὰ διαστάνα τῷ φερομένῳ δίνην ποιεῖ. ἡ δὲ δίνη κύκλῳ φέρεται. ἐπεὶ δὲ ἡ εὐθεία τοῦ κύκλου κατὰ σημεῖον ἄπτεται, τὰ δὲ κύματα ἐπ' εὐθείας λοξῆς φέρεται, συμβαίνοι ἂν αὐτὰ τοῦ ἐξωτάτου τῆς δίνης κατὰ σημεῖον  
 30 ἄπτεσθαι, διὰ τε τὰ εἰρημένα καὶ διὰ τὴν τῆς δίνης φοράν, ἡ προσιοῦσα ἀπωθεῖται αὐτά. ἀκύμου δὲ ὄντος τοῦ κατ' αὐτὴν τόπου, γαλήνην ἐν τῇ ῥήξει αὐτῆς συμβαίνει γίνεσθαι, ὅτι συγκαταβὰς ὁ ἀὴρ τῷ ἐνεχθέντι κάτω, ἀναφερόμενος καὶ ὠθὼν ἄνω τὴν θάλατταν καθάπερ πομφολυγοῖ αὐτήν.  
 35 ἡ γὰρ πομφόλυξ ὑγροῦ ὑπ' αἰέρος κάτωθεν ἀνωθουμένου ἐστίν. πομφόλυξ δὲ πᾶσα λεία καὶ γαληνός ἐστιν. σημεῖα δὲ τῶν εἰρημένων ἐστί.

<sup>1</sup> ἐκ τοῦ Ruelle.



### PROBLEMS, XXIII. 3-4

quantity, and in the small quantity the ship sinks because it exercises more influence over it? For it thrusts the water up from below. Now in harbour the sea is shallow, but in the open sea it is deep. So that the ship in harbour will appear to be carrying more, and will move with greater difficulty, because it has sunk farther and the water supports it less. But in the open sea the opposite of this is true.

Why is it that, when any object, such as an anchor, 4 is thrown into a rough sea, a calm ensues? Is it because the sea is steadied by the moving object, with which air is carried down; the air travelling downwards in a straight line and drawn in that direction draws with it the sidelong force which moves the sea? Now the sea wave does not travel down from above but along the surface; when this force ceases, a calm ensues. Now the sea coming in to fill the gap created by the travelling body makes an eddy, and an eddy travels in a circle. But, since a straight line touches a circle at a point, and the movement of the wave is in an oblique straight line, it would follow that the waves touch the outside of the eddy at a point, both for the reasons already given and owing to the movement of the eddy, which, as it moves, repels the waves. As the place where the eddy is is free from waves, a calm must occur at the point where the surface is broken, because the air which was carried downwards with the moving object travels upwards again, and thrusting the sea upwards, as it were, produces bubbles on it; for the bubble consists of the moisture thrust up by the air from below. Every bubble is smooth and calm. There is proof of what has been said; a little later the sea

981 b

μετέωρος γὰρ ἡ κατὰ τὸ ἐνεχθὲν κάτω θάλαττα  
τῆς πέριξ γίνεται μικρὸν ὕστερον.

Διὰ τί ἐνίοτε πλοῖα θέοντα ἐν τῇ θαλάττῃ εὐδίας 5

982 a

καταπίνεται καὶ ἀφανῆ γίνεται, ὥστε μὴδὲ ναυάγιον  
ἀναπλεῖν; ἢ ὅταν ἀνθρώδης τόπος ἐν τῇ ὑπὸ τὴν  
θάλατταν γῆ ῥαγῇ, ἅμα εἰς τὴν θάλατταν καὶ ἔσω  
ἀκολουθεῖ τῇ τοῦ πνεύματος φορᾷ; ὁμοίως δὲ καὶ  
■ πάντα φερομένη κύκλῳ φέρεται κάτω. τοῦτο δέ  
ἐστι δῖνος. τὰ δὲ περὶ Μεσσηνίην ἐν τῷ πορθμῷ  
πάσχει μὲν τοῦτο διὰ τὸν ῥοῦν (γίνονται γὰρ αἱ  
δῖναι ὑπὸ τούτου) καὶ καταπίνεται εἰς βυθὸν διὰ  
ταῦτά τε, καὶ ὅτι ἡ θάλαττα βαθεῖά τε καὶ ἡ γῆ  
ὑπαντρος μέχρι πόρρω. φέρουσιν οὖν εἰς ταῦτα  
10 ἀποβιαζόμεναι αἱ δῖναι· διὸ οὐκ ἀναπλεῖ αὐτόθι τὰ  
ναυάγια. ὁ δὲ ῥοῦς γίνεται, ὅταν παυσαμένου τοῦ  
προτέρου ἀντιπνεύση ἐπὶ τῆς θαλάττης ῥεύσης τῷ  
προτέρῳ πνεύματι, μάλιστα δὲ ὅταν νότος ἀντι-  
πνεύση. ἀντιπνέοντα γὰρ ἀλλήλοις τὰ ρεύματα  
παρεκθλίβεται ὥσπερ ἐν τοῖς ποταμοῖς, καὶ γίνονται  
15 αἱ δῖναι. φέρεται δὲ ἐλιττομένη ἡ ἀρχὴ τῆς κι-  
νήσεως ἄνωθεν ἰσχυρὰ οὔσα. ἐπεὶ οὖν εἰς πλάγιον  
οὐκ ἔστιν ὁρμᾶν (ἀντωθεῖται γὰρ ὑπ' ἀλλήλων),  
ἀνάγκη εἰς βάθος ὠθεῖσθαι, ὥστε καὶ ὁ ἂν ληφθῇ  
ὑπὸ τῆς δίνης, κἀνάγκη συγκαταφέρεσθαι. διὸ  
ἀνάσιμα τὰ πλοῖα ποιοῦνται· ἥδη γὰρ ὀρθόν ποτε  
20 μνημονεύεται καταποθέν.

Διὰ τί ἡ θάλαττα λευκοτέρα ἢ ἐν τῷ Πόντῳ ἢ 6  
ἢ ἐν τῷ Αἰγαίῳ; πότερον διὰ τὴν ἀνάκλασιν τῆς

## PROBLEMS, XXIII. 4-6

over the spot where the object has been thrown in rises to a higher level than the surrounding water.

Why is it that sometimes craft travelling on the 5 sea in fine weather are sunk and completely disappear, so that no wreckage even comes to the surface? Is it because when a spot in the ground underneath the sea breaks and forms a hollow, they follow the movement of the air down into the sea and into the hollow? Similarly the sea travelling in a circle in every direction is carried below. This is a whirlpool. Ships in the Straits of Messina suffer thus because of the stream (which is the cause of whirlpools), and they are swallowed up into the depths, both for this reason and because the sea is deep and the ground beneath it full of hollows to a great distance. The eddies overpower the ships and carry them into the hollows; that is why no wrecks rise from there. A current is formed when after the cessation of the former wind from one direction it blows in the opposite direction over a sea which is running under the influence of the previous wind, and particularly when the south wind is the contrary wind. For the currents blowing in opposite directions thrust each other aside, just as they do in rivers, and eddies are formed. But the original movement from above travels round and round because it is strong. Since, then, they cannot move obliquely (for they are repelled by each other), they must be driven downwards, so that anything caught by the eddy must be carried down with it. This is why ships are made with the ends turned up; for it is recollected that sometimes one with straight ends has been swallowed up.

Why is the water in the Pontus whiter than that 6 in the Aegean? Is it due to the refraction of the

982 a

ὄψεως τὴν γινομένην ἀπὸ τῆς θαλάττης εἰς τὸν  
 αἶρα; ὁ μὲν γὰρ περὶ τὸν Πόντον ἀῆρ παχὺς καὶ  
 25 λευκός, ὥστε καὶ τῆς θαλάττης ἢ ἐπιφάνεια τοιαύτη  
 φαίνεται, ὁ δὲ ἐν τῷ Αἰγαίῳ κυανοῦς διὰ τὸ μέχρι  
 πόρρω εἶναι καθαρός, ὥστε καὶ ἡ θάλαττα ἀν-  
 αυγοῦσα τοιαύτη φαίνεται. ἢ ὅτι πᾶσαι αἱ λίμναι  
 λευκότεραι τῆς θαλάττης; ὁ δὲ Πόντος ἐστὶ  
 λιμνώδης διὰ τὸ πολλοὺς ποταμοὺς εἰς αὐτὸν ῥεῖν.  
 30 αἱ δὲ λίμναι διαλευκότεραι τῆς θαλάττης καὶ τῶν  
 ποταμῶν· γράφουσι γοῦν οἱ γραφεῖς τοὺς μὲν ποτα-  
 μοὺς ὠχροὺς, τὴν δὲ θάλατταν κυανέαν. ἢ ὅτι διὰ  
 μὲν τοῦ ποτίμου οὐ<sup>1</sup> διέρχεται ταχὺ ἢ ὄψις, καὶ  
 ἀνακλᾶται πρὸς τὸν αἶρα, ἀπὸ δὲ τῆς θαλάσσης  
 οὗτ' ἄνω ἀνακλᾶται διὰ τὸ μὴ λείον εἶναι τὸ ὕδωρ·  
 35 κάτω δὲ ἀποκάμνει βαδίζουσα· διὸ μέλαινα φαί-  
 νεται; ἐν δὲ τοῖς λιμνώδεσιν ἐπιπολῆς ὄντος τοῦ  
 ποτίμου, κάτω δὲ τοῦ ἀλμυροῦ, οὐ διέρχεται, ἀλλὰ  
 ἀνακλᾶται πρὸς τὴν αὐγὴν· διὸ φαίνεται λευκὴ ἢ  
 ἐπιφάνεια αὐτῆς.

Διὰ τί ἡ θάλαττα τοῦ ποτίμου ὕδατος ἥττον 7  
 982 b ψυχρά, καὶ τὰ ἀλυκὰ τῶν γλυκέων; πότερον ὅτι  
 πυκνότερον ἢ θάλαττα καὶ μᾶλλον σῶμα; τὰ δὲ  
 τοιαῦτα ἥττον ψύχεται, ὥσπερ καὶ θερμαίνεται  
 μᾶλλον· σωστικωτέρα γὰρ τοῦ θερμοῦ διὰ τὴν  
 5 πυκνότητα. ἢ ὅτι λιπαρωτέρα ἢ θάλαττα; διὸ  
 καὶ οὐ σβέννυσι τὴν φλόγα. ὁμοίως καὶ ἐπὶ τῶν  
 ἄλλων. τὸ δὲ λιπαρώτερον θερμότερον. ἢ ὅτι γῆς  
 πολὺ ἔχει, ὥστε ξηρότερον; τὸ δὲ ξηρότερον  
 θερμότερον.

Διὰ τί θάλαττα εὐδιοπτοτέρα τοῦ ποτίμου, παχυ- 8  
 τέρα οὖσα; λεπτότερον γὰρ τὸ πότιμον τοῦ

## PROBLEMS, XXIII. 6-8

sight which takes place from the sea into the air? For the air in the Pontus is thick and white, so that the surface of the sea wears the same appearance, but the air in the Aegean seems blue because it is clear for such a long distance, so that the sea reflecting it seems similar. Is it because all lakes are whiter than the sea? And the Pontus resembles a lake because many rivers flow into it. Lakes, indeed, are whiter than both sea and rivers; so painters paint their rivers a pale colour, but the sea blue. Or is it because the vision does not easily penetrate fresh water, and is refracted to the air, but from the sea it is not refracted because the water is not smooth; but the sight in penetrating below grows weary; and so the sea appears black? But in water resembling a lake, as the fresh water is on the surface and the salt water beneath, it does not penetrate, but is refracted towards the daylight; consequently its surface appears to be white.

Why is the sea less cold than fresh water, and 7 brackish less cold than sweet water? Is it because the sea is denser and contains more solid matter? Such things cool less, just as they also grow more hot; for they conserve heat more easily owing to their density. Or is it because sea-water is more fatty, and so does not extinguish the flame? The same thing is true of other substances. For what is more fatty is warmer. Or is it because it contains much earth, and so is drier? For the dry is also warmer.

Why is the sea more transparent than fresh water, 8 although it is denser? For fresh water is lighter

---

<sup>1</sup> The ms. has *ov* in the wrong place, as shown by the translation of Th. G.

982 b

- 10 ἄλμυροῦ. ἥ οὐ τὸ λεπτὸν αἷτιον, ἀλλ' εὐθυωρίαί  
τῶν πόρων πλείσται καὶ μέγισταί εἰσιν; τὸ μὲν  
οὖν πότιμον πυκνὸν διὰ λεπτομέρειάν ἐστιν, τὸ δὲ  
ἄλμυρον μέγала ἔχει τὰ διάκενα. ἥ ὅτι καθαρώ-  
τερον ἢ θάλαττα; γῆ μὲν γὰρ οὐκ ἔστιν, ἡ δὲ  
ἄμμος βαρεῖα οὕσα ὑφίσταται. τὰ δὲ πότιμα  
15 γεώδη. αὕτη<sup>1</sup> δὲ ἐν τῷ μεταξὺ φερομένη ἀνα-  
θολοῦται ταχύ.

Διὰ τί ἐν τοῖς βορείοις εὐδιοπτοτέρα ἢ θάλαττα 9  
ἢ ἐν τοῖς νοτίοις; ἥ ὅτι ἐν τῇ γαλήνῃ χρώμα ἔχει  
ἢ θάλαττα; λιπαρὸν γὰρ ἔνεστιν ἐν τῷ ἄλμυρῷ  
χυμῷ. σημεῖον δέ· ἐκκρίνεται γὰρ ἔλαιον ἐν ταῖς  
20 ἀλέαις. εὐδίας οὖν οὔσης καὶ ἀλεεινοτέρας τῆς  
θαλάττης διὰ κουφότητα ἐπανθεῖ ἄνω ὁ τοιοῦτος  
χυμός. τοῖς δὲ βορείοις ἦττον διὰ τὸ ψύχος. ἔστιν  
δὲ τὸ ὕδωρ εὐδιοπτότερον τοῦ ἐλαίου· τὸ γὰρ ἔλαιον  
χρώμα ἔχει, τὸ δὲ ὕδωρ ἄχροον παρεμφαινόμενον  
σαφεστέραν ποιεῖ τὴν ἔμφασιν.

- 25 Διὰ τί λουσάμενοι τῇ θαλάττῃ θάττον ξηραί- 10  
νονται, βαρυτέρα οὔση τῶν ποτίμων; ἥ ὅτι  
παχυτέρα καὶ γεώδης ἢ θάλαττα; ὀλίγον οὖν  
ἔχουσα τὸ ὑγρὸν ξηραίνεται θάττον.

- Διὰ τί τὰ κύματα ἀνεμώδη; ἥ ὅτι σημεία ἐστι 11  
30 πνεύματος ἐσομένου; ἔστι γὰρ τὸ πνεῦμα σύνωσις  
ἀέρος. ἥ διὰ τὸ αἰεὶ προωθεῖσθαι γίνεται; προωθεῖ  
δὲ οὐ συνεχές πῶ ὃν τὸ πνεῦμα, ἀλλὰ ἀρχόμενον.  
τὸ μὲν δὴ πρῶτον ὥσπερ προεμαράνθη, ἄλλο δὲ  
τοῦτο προέωσε καὶ ἄλλην πυκνότητα ἤγαγεν καὶ  
35 ἀπεμαράνθη. ὥστε δῆλον, ὅταν ἦδῃ τὸ προωθού-  
μενον παρῇ, ὅτι ἥξει καὶ τὸ κινεῖν· ἀρχόμενον γὰρ  
τοῦτο ποιεῖ.

<sup>1</sup> αὕτη Forster : αὐτὴ Ruelle.



than salt water. Or is the lightness not the cause, but the fact that the direct passages through it are many and very large? In that case fresh water is dense because of the smallness of its parts, while salt water contains large empty spaces. Or is it because the sea is purer? For there is no earth in it and the sand being heavy lies at the bottom. But fresh water is earthy. And the earth moving in the middle of it is quickly stirred into mud.

Why is the sea more transparent in the north than 9 in the south? Is it because the sea has colour in a calm? For there is a greasy element in brackish liquid. There is evidence for this; for in the warm weather oil is exuded. So, when the sea is calm and warmer, juice of this kind rises to the surface owing to its lightness. This is less true in the north because of the cold. For water is more easily transparent than oil; for oil has colour, but water appearing colourless gives a clearer picture.

Why do those who wash in the sea get dry more 10 quickly, seeing that it is heavier than fresh water? Is it because the sea is denser and earthy? So as it contains but little moisture it dries more quickly.

Why do waves imply wind? Is it because they 11 prove that the wind is coming? For wind is a thrusting together of the air. Does wind arise because the air is continually being thrust forward? But the wind thrusts the air forward when it is not yet blowing continuously, but is only beginning to do so. So the first breath so to speak dies away, but it has thrust forward another breath and driven on another mass of air and then died away. So that it is clear, when what is thrust forward is present, that which sets it moving will also follow; for it causes this effect when it begins to blow.



932 b

Διὰ τί τὸ κῦμα προεκπίπτει τοῦ πνεύματος; ἢ 12  
 ὅτι οὐχ ἅμα παύεται τὸ πνεῦμα [τὸ] πνέον καὶ ἡ  
 θάλαττα κυμαίνουσα, ἀλλ' ὕστερον ἢ θάλαττα;  
 933 a ἐνδέχεται γὰρ τὸ κινήσαν πνεῦμα φθαρῆναι πρὸ τοῦ  
 γενέσθαι αἰσθητόν. ὥστε οὐ πρότερον τὸ κῦμα  
 πνεύματος, ἀλλὰ τὸ μὲν λανθάνει, τὸ δὲ οὐ. ἢ οὐχὶ  
 τὰ πνεύματα ἅμα πανταχοῦ πνεῖ, ἀλλ' ὅθεν ἡ ἀρχὴ  
 5 πρότερον; ἅμα δὲ πνεῖ καὶ τὴν πλησίον θάλατταν  
 κινεῖ, αὕτη δὲ τὴν ἐχομένην· καὶ οὕτως ἂν ἐνδέχοιτο  
 πρότερον τὸ κῦμα ἐκπίπτειν. ὑπὸ γὰρ τῆς θαλάσ-  
 σης καὶ οὐχ ὑπὸ τοῦ πνεύματος ἡ κίνησις, ἡ θάττων  
 τοῦ ἀέρος, ἢ τῆς θαλάττης.

Διὰ τί ἐν τῇ θαλάττῃ μᾶλλον νεῖν δύνανται ἢ ἐν 13  
 10 τοῖς ποταμοῖς; ἢ ὅτι ὁ νέων αἰὲ ἐπιστηριζόμενος  
 ἐν τῷ ὕδατι νεῖ, ἐν δὲ τῷ σωματωδεστέρῳ μᾶλλον  
 ἀποστηρίξεσθαι δυνάμεθα, σωματωδέστερον δὲ ἐστὶ  
 τὸ θαλάττιον ὕδωρ τοῦ ποταμίου· παχύτερον γὰρ  
 ἐστὶ καὶ μᾶλλον ἀντερείδειν δυνάμενον.

Διὰ τί ποτε ἐν τῇ θαλάττῃ πλείω χρόνον δια- 14  
 15 τελεῖν δύνανται ἢ ἐν τῷ ποταμῷ; ἢ διότι τὸ  
 ποτάμιον ὕδωρ λεπτόν ἐστιν; μᾶλλον οὖν παρ-  
 εισδυόμενον πνίγει.

Διὰ τί ἡ μὲν θάλαττα κάεται, τὸ δὲ ὕδωρ οὐ; 15  
 ἢ κάεται μὲν κακεῖνο, ἡ δὲ θάλαττα ἥττον σβέννυσι  
 τὸ πῦρ διὰ τὸ λιπαρωτέρα εἶναι; σημεῖον δὲ ὅτι  
 20 λιπαρωτέρα· ἀπὸ γὰρ τῶν ἀλῶν ἔλαιον ἀφαιρεῖται.  
 ἢ καὶ ἥττον δύνανται οἱ πόροι ἀρμόττειν τῷ πυρὶ  
 διὰ τὸ παχύτεροι εἶναι, καὶ μᾶλλον γε δὴ, ἅτε καὶ  
 τῶν ἀλῶν ἐνυπαρχόντων; ὥσπερ οὖν τὸ ξηρόν τοῦ

<sup>a</sup> Presumably Aristotle only means that sea-water burns in the sense that it does not easily extinguish fire.

## PROBLEMS, XXIII. 12-15

Why does the wave break before the wind reaches 12  
it? Is it because the wind which is blowing and  
the rough sea do not stop simultaneously, but the  
sea dies down afterwards? Possibly the wind which  
produced the movement dies down before it is felt.  
So that the wave does not come before the wind, but  
the latter is not noticed, while the former is. Or is  
it true that the wind does not blow simultaneously in  
all places, but that it blows earlier at its point of ori-  
gin? But it blows and ruffles the sea in its neighbour-  
hood at the same time, and this ruffles the sea next  
to it; in this way it would be possible for the wave  
to break in front of the wind. For the movement is due  
to the sea and not to the wind, being the movement  
of the sea which travels faster than that of the air.

Why is it easier to swim in the sea than in rivers? 13  
Is it because the swimmer swims by continually  
supporting himself against the water, and we can  
gain more support in water which contains more solid  
matter? For sea-water contains more solid matter  
than river-water. For it is denser and more capable  
of offering resistance.

Why can one spend longer time in the sea than in 14  
the river? Is it because river-water is rare? Hence  
it penetrates more easily into the body and produces  
suffocation.

Why is it that sea-water burns,<sup>a</sup> whereas river-water 15  
does not? Or does the latter also burn, but the sea  
is less apt to quench the fire because it is oily? We  
have proof that it is more oily; for oil is extracted  
from sea-salt. Or can the passages in sea-water less  
easily adjust themselves to the fire, because they are  
thicker, and all the more is this true because salt is  
present? So just as the dry is less easily quenched

933 a

ὕγρου ἥττον σβεστικόν, καὶ τὸ ξηρὸν μᾶλλον κατὰ  
 λόγον καυστικόν ἐστὶν καὶ ἕτερον ἑτέρου μᾶλλον,  
 25 τῷ ἐγγυτέρῳ τοῦ θερμοῦ εἶναι, τὸ ξηρότερον δὲ τῇ  
 θαλάττῃ· ἄμφω δὲ ταῦτα μᾶλλον ὑπάρχει.

Διὰ τί ἀπὸ μὲν τῆς θαλάττης οὐκ ἀποπνεῖ ἕωθεν 16  
 ψυχρόν, ἀπὸ δὲ τῶν ποταμῶν; ἢ ὅτι ἡ μὲν θά-  
 λαττά ἐστὶν ἐν ἀναπεπταμένοις τόποις, οἱ δὲ  
 30 ποταμοὶ ἐν στενοῖς; ἡ μὲν οὖν ἀπὸ τῆς θαλάττης  
 αὔρα εἰς πολὺν τόπον σκίδνεται, ὥστε εἶναι ἀ-  
 σθενής, ἡ δὲ ἀπὸ τῶν ποταμῶν ἀθρόως φέρεται καὶ  
 μᾶλλον ἰσχύει, διὸ μᾶλλον εἰκότως φαίνεται ψυχρά.  
 ἢ οὐ τοῦτό ἐστὶν αἴτιον, ἀλλ' οἱ μὲν ποταμοὶ ψυχροὶ  
 εἰσιν, ἡ δὲ θάλαττα οὔτε θερμὴ οὔτε ψυχρά; γί-

35 νεται δὲ ἡ αὔρα καὶ ἡ ἀναπνοὴ θερμαινομένων ἢ  
 ψυχομένων τῶν ὑγρῶν· ὁπότερον γὰρ ἂν τούτων  
 πάσχη, ἐξαερούται, ἐξαερουμένου δὲ τοῦ ὕδατος ὁ  
 ἀῆρ ὁ γινόμενος φέρεται, ὃ ἐστὶν αὔρα. τὸ μὲν οὖν  
 ἀπὸ τῶν ψυχρῶν ψυχρὸν εἰκότως ἀποπνεῖ, τὸ δὲ  
 40 ἀπὸ τῶν σφόδρα θερμῶν ἀποπνεόν ψύχεται καὶ  
 γίνεται ψυχρόν. τοὺς μὲν οὖν ποταμοὺς ψυχροὺς

933 b ἀπαντας εὖροι τις ἂν, ἡ δὲ θάλαττα οὔτε ψυχρά  
 οὔτε θερμὴ σφόδρα ἐστίν. οὔτε οὖν τὸ ἀποπνεόν  
 ψυχρὸν ἀπ' αὐτῆς ἐστί, διὰ τὸ μὴ ψυχρὰν εἶναι,  
 οὔτε ψύχεται ταχύ, διὰ τὸ μὴ θερμὴν εἶναι σφόδρα.

5 Διὰ τί ἐν τοῖς μείζοσι πελάγεσι βραδύτερον καθ- 17  
 ἴσταται κύματα ἢ ἐν τοῖς βραχέσιν; ἢ ὅτι ἐκ τῆς  
 πολλῆς κινήσεως βραδύτερον καθίσταται πᾶν ἢ ἐκ  
 τῆς ὀλίγης; ἐν δὲ τοῖς μεγάλοις πελάγεσι πλείων  
 ἢ ἄμπωτις γίνεται ἢ ἐν τοῖς βραχέσιν. οὐθὲν οὖν  
 10 ἄλογον τὸ πλείον βραδύτερον καθίστασθαι.

Διὰ τί τὸ ἀλμυρὸν ὕδωρ ψυχρὸν μὲν οὐ πότιμον, 18

## PROBLEMS, XXIII. 15-18

than the wet, and the dry is more easily burned, so the drier a thing is the more easily it is burned, because it is more allied to the hot, but the drier water is that in the sea ; but both these qualities (heat and dryness) are more present in the sea.

Why is it that the wind blowing from the sea in the morning is not cold, but from the river it is ? Is it because the sea is in exposed places, but rivers are in enclosed country ? Consequently the breeze from the sea is scattered over a wide area, so that it is weak, whereas the breeze from the rivers travels with concentrated force and so is stronger, so that naturally it seems colder. Or is this not the reason, but is it because rivers are cold, whereas the sea is neither hot nor cold ? Now breezes and exhalations arise from wet bodies when these are growing either hot or cold ; whichever of these phenomena is taking place, there is evaporation, and when evaporation of water occurs the air which is caused travels, and this constitutes a breeze. What, then, arises from cold water naturally blows cold, and that from very hot water cools and becomes cold. Now one would find that all rivers are cold, but the sea is neither cold nor very hot. So the breeze blowing from it is not cold because it is not itself cold, nor does it cool quickly because it is not very hot.

Why do the waves subside more slowly in wider, open seas than in shallow ones ? Is it because everything subsides more slowly after violent movement than after slight movement ? So in wide, open seas the tide is greater than it is in shallow seas. There is, therefore, nothing surprising in the fact that the larger mass of water subsides more slowly.

Why is salt water not drinkable when it is cold, 18

933 b

θερμαινόμενον δὲ μᾶλλον γίνεται πότιμον, καὶ θερμὸν δὲ ὄν καὶ ἀποψυχόμενον; ἢ διότι εἰς τὸ ἐναντίον ἀπὸ τοῦ ἐναντίου πέφυκεν μεταβάλλειν; 15 ἔστι δὲ τὸ πότιμον τῷ ἄλμυρῷ ἀντικείμενον· καὶ θερμαινόμενον μὲν ἀφέψεται τὸ ἄλμυρόν, ψυχόμενον δὲ ὑφίσταται.

Διὰ τί τὰ πρὸς τῇ θαλάττῃ ὡς ἐπὶ τὸ πολὺ 1 ὕδατα γλυκέα [ὕδατα] ἀλλ' οὐχ ἄλμυρά; ἢ διὰ τὸ ποτιμώτερα διηθούμενα γίνεσθαι; διηθεῖται δὲ τὸ 20 ἐγγύτερον τῆς θαλάττης μᾶλλον.

Διὰ τί τὸ ἄλμυρόν ὕδωρ οὐκ ἀπόρρυτόν ἐστιν; 2 ἢ διότι τὸ μὲν βαρὺ στάσιμον; τὸ δὲ ἄλμυρόν βαρὺ· διὸ καὶ τὰ θερμὰ μόνα τῶν ἄλμυρῶν ὑδάτων ἀπόρρυτά ἐστιν. ἔχει γὰρ κουφότητα 25 ἐν αὐτοῖς, ἢ κρατεῖ τῆς κατὰ τὴν ἄλμυρίδα βαρύτητος· τὸ γὰρ θερμὸν κουφότερόν ἐστιν. ἔτι τὰ μὲν ἀπόρρυτα διηθεῖται διὰ τῆς γῆς· ἡθουμένων δὲ αἰεὶ μάλιστα ὑφίσταται τὸ παχύ-  
τατον καὶ βαρύτατον, ἐκκρίνεται δὲ τὸ κοῦφον καὶ καθαρὸν· ἔστι γὰρ τὸ μὲν ἄλμυρόν βαρὺ, τὸ δὲ γλυκὺ κοῦφον. διόπερ ἐστὶ γλυκέα τὰ ἀπόρ- 30 ρυτα. τὸ δ' αὐτὸ αἰτιὸν ἐστὶ καὶ διὰ τί τὸ ἄλμυρόν ὕδωρ κινούμενον καὶ μεταβάλλον γλυκύτερον γίνεται· κουφότερον γὰρ καὶ ἀσθενέστερον διὰ τὴν κίνησιν γίνεται.

Διὰ τί ἐν τῇ Λιβύῃ ἐὰν ὀρύξῃ τις παρὰ τὴν 35 θάλατταν, τὸ πρῶτον πότιμον, εἰθ' ἄλμυρόν γίνεται ταχύ, ἐν δὲ τοῖς ἄλλοις τόποις ἦττον ποιεῖ τοῦτο; πότερον ὅτι τὸ μὲν πρῶτον τὸ ὑπάρχον ὕδωρ ἐν τῷ τόπῳ καὶ τὸ πεπεμμένον ὑπὸ τῆς γῆς ἐστὶν, ὅταν δὲ χρονισθῇ, ἢ θάλαττα προσδιηθουμένη διὰ τὸ πρόσφατον εἶναι ποιεῖ ἄλμυρώτερον; ἐν δὲ τοῖς

but more drinkable when it is heated, when it is hot and when it is cooling? Is it because it is natural for it to change from one extreme to the other? Now the drinkable is the opposite of the briny; and the brine is boiled out when it is heated, but is precipitated when it grows cold.

Why is it that, generally speaking, water near the sea is sweet and not brackish? Is it because it becomes more drinkable through percolation? And that which is near the sea percolates more.

Why does not salt water flow easily? Is it because what is heavy tends to be stationary? Now salt water is heavy; so that salt water only flows easily when it is hot. For hot things contain a lightness in themselves, which masters the heaviness due to the salt; for what is hot is lighter. Moreover, water which flows easily percolates through the earth; and, as it percolates, the densest and heaviest part remains behind, while the light and pure part is separated. For salt water is heavy and fresh water light. This is why water which flows easily is fresh. The same cause explains why salt water becomes sweeter by moving and changing its position; for it becomes lighter and less strong because of the movement.

Why is it in Libya, if one digs by the seashore, the water one comes to first is drinkable, but soon becomes brackish, whereas in other places it becomes less so? Is it because at first the water is what was there beforehand and has been concocted by the earth, but, as time goes on, the sea percolates and makes it more salt because it is new? But in other



933 b

ἄλλοις ἢ οὐκ ἔχει ἢ πολὺ ὕδωρ διὰ τὸ μὴ ξηραίνει-  
40 σθαι τὸν τόπον.

934 a

Διὰ τί τοὺς ἄλας θᾶπτον τήκει τὸ ἄλμυρὸν ὕδωρ 22  
ἢ τὸ πότιμον; ἢ διότι τὸ μὲν τήκεσθαι ἐστὶ τὸ ὑπὸ  
τοῦ ὑγροῦ ἢ θερμοῦ εἰσιόντος διαιρεῖσθαι, ὥστε  
ὑγρὸν εἶναι; οὐ τήκει δὲ ἢ τὰ ὅλως μὴ δυνάμενα  
5 εἰσιέναι, ἢ τὰ οὕτως ὥστε μὴ θιγγάνειν. μόλις δὲ  
τήκει τὰ ῥαδίως διεξιόντα· τὰ δ' ἐπιόντα βιαζόμενα,  
ταῦτα τάχιστα διαιρεῖ. οὐκ εἰσέρχεται δὲ τὰ λίαν  
μεγαλομερῇ· ὑπερέχει γὰρ τῶν πόρων. τὰ δὲ  
μικρομερέστερα διέρχεται οὐ ψαυόμενα. ἔστι δὲ τὸ  
μὲν πότιμον λεπτόν, τὸ δὲ ἄλμυρὸν παχύτερον, ὥστε  
10 τὸ μὲν ῥαδίως διὰ λεπτότητα διαδύνον μόλις τήκει,  
τὸ δὲ εἰσέρχεται μὲν, ἥττον δὲ διὰ τὸ μεγαλο-  
μερέστερον εἶναι διαρρεῖ,<sup>1</sup> καὶ βιάζεται θᾶπτον.

Διὰ τί τὸ ὕδωρ ἥττον φαίνεται λευκόν, ἐὰν 23  
κινῆται, οἶον καὶ ἡ φρίκη; διὸ καὶ Ὅμηρος  
15 ἀρχομένου φησὶ τοῦ πνεύματος “μελάνει δέ τε  
πόντος ὑπ' αὐτοῦ.” ἢ διὰ δύο αἰτίας, ἐγγύθεν μὲν  
τῆς ὄψεως οὕσης, διὰ τὸ διέναι τὴν ὄψιν μᾶλλον  
ἡρεμοῦντος, κινουμένου δὲ μὴ εὐθυπορεῖν· τὸ δὲ  
διαφανὲς λευκὸν φαίνεται. δι' οὗ γὰρ μὴ διέρχεται  
ἡ ὄψις, μέλαν φησὶν εἶναι. διὸ καὶ ὁ ἀὴρ πόρρωθεν  
20 μέλας φαίνεται, ὁ δὲ ἐγγὺς λευκός, καὶ θαλάττης  
τὸ μὲν ἐγγὺς λευκόν, τὸ δὲ πόρρωθεν κυανοῦν καὶ  
μέλαν. πόρρωθεν δέ, κινουμένης πως τῆς ὄψεως,

<sup>1</sup> διαρρεῖ Forster, διαιρεῖ Ruelle.

<sup>a</sup> This translation is dubious, and the sentence does not seem to be to the point.



places either there is no water or much, because the place is not dried.<sup>a</sup>

Why does salt water dissolve salt more quickly 22 than fresh water? Is it because melting consists of disintegration due to the entrance of either moisture or heat, so that it liquefies? Substances which cannot penetrate at all do not cause melting, nor do those which are such that they cannot touch the substance. Substances which pass through easily scarcely produce any melting; but those which make the most violent attack, produce the most rapid disintegration. Substances with large particles do not penetrate, for they are too big for the passages; those with smaller parts pass through without touching. Now fresh water is rare, but salt water is denser, so that the former passing through easily owing to its lightness melts very little, while the latter can penetrate, but owing to the size of its parts flows through less easily, and so more readily forces its way.

Why does water appear less light in colour, if it is 23 set in motion, as, for instance, a ripple? This is why Homer says when the wind arises "The sea is made black by it."<sup>b</sup> Is it due to two causes; first because, when the sight is near by, it can penetrate more easily when it is at rest, but does not travel on a straight path, when it is moving, and the transparent seems light in colour? That through which the sight does not pass Homer declares to be black. So the air from a distance seems black, but white from near by; the sea also from near by seems white, but dark blue or black from a distance. Secondly, from a distance when the sight is moving in any way,

<sup>b</sup> *Iliad*, vii. 64.

934 a

καὶ τῷ διανακλᾶσθαι ἀθρόον τὴν ὄψιν, ἐὰν ἡρεμῇ, πρὸς τὸ φῶς, κινουμένου δὲ μὴ δύνασθαι.

25 Διὰ τί ἐν τοῖς βαθέσι πελάγεσι τὸ κύμα οὐκ ἐπιγελαῖ, ἀλλ' ἐν τοῖς μικροῖς; πότερον ὅτι τὸ μικρὸν φερόμενον ὕδωρ διαιρεῖται ὑπὸ τοῦ αἰέρος μᾶλλον ἢ τὸ πολὺ; διὸ θραύεται πατάξαν μᾶλλον. ἐν μὲν οὖν τῷ βαθεῖ πολὺ τὸ κινούμενον, ἐν δὲ τῷ βραχεῖ ὀλίγον.

30 Διὰ τί οἱ πρὸς νότον τόποι ἀλυκώτερα τὰ ὕδατα ἔχουσιν; ἢ διὰ τὸ τὴν θάλατταν ὑπὸ νότου ὠθεῖσθαι ὑπὸ τὴν γῆν κεράννυνται;

Διὰ τί τῶν ὑδάτων τὸ ἀλμυρὸν ἐπὶ τῷ γλυκεῖ οἶνῳ μᾶλλον ἐπιπολάζει ἢ ἐπὶ τῷ αὐστηρῷ; 26 πότερον ὅτι μᾶλλον ἔχει γῆν ὁ γλυκύς, ὥσπερ ἡ ἀσταφίς; ἢ ὅτι βαρύτερος καὶ γλισχρότερος ὁ γλυκύς, ὥσθ' ἥττον μίγνυται, μὴ μιγνύμενος δὲ ἐφίσταται.

Διὰ τί ὅλως ἐφίσταται γεῶδες ὄν; ἢ γὰρ οἰκεία 27 φορὰ κάτω. πότερον ὅτι μᾶλλον ἔχει γῆν ὁ γλυκύς; ἢ διὰ τὴν θερμότητα, καθάπερ οἱ ἄλεις; 934 b ὁμοιον γὰρ ἐξανθήματι. ἢ δι' ἄλλην αἰτίαν; εἰ γὰρ οὐ διὰ τοῦτο καὶ ἐπὶ τῷ γλυκεῖ μᾶλλον, οὐκ ἄλογον· θερμότητος γάρ.

Διὰ τί τὰ κύματα πρότερον φοιτᾷ ἐνίοτε τῶν 28 ἀνέμων; ἢ διότι καὶ τελευτᾷ ὕστερον; τὸ γὰρ πρῶτον πνεῦμα ὥσανεῖ προδιαλύεται τοῦ ὠσθέντος κύματος· ἀφικνεῖται δὲ οὐκ αὐτὸ τὸ πρῶτον ὠσθέν, ἀλλ' αἰεὶ ἢ ὥσις γίνεται τοῦ ἐχομένου.

Διὰ τί αἱ κυματωδέστεραι γαῖαι στερραὶ γίνονται 29

<sup>a</sup> Quite out of place here. The sentence must have come from the previous problem.

## PROBLEMS, XXIII. 23-29

the sight is refracted in a mass towards the light if the water is still, but this is impossible when the water is moving.

Why does not the wave make ripples in deep water, 24 while it does in shallow? Is it because when a small body of water is travelling it is more easily broken up by the air than a large body? Consequently as it strikes it more it is broken up. But in deep water the mass moved is large, but in shallow water small.

Why do places which face the south have more 25 brackish water? Is it because the sea is driven beneath the earth by the south wind, and so becomes mixed?

Why does salt water rest on the surface of sweet 26 wine, rather than of dry wine? Is it because sweet wine, such as raisin wine, contains more earth? Or is it because sweet wine is heavier and more viscous, so that the salt does not mix readily, and as it does not mix remains on the surface?

Why, speaking generally, does salt, which is an 27 earthy substance, remain on the surface? For its natural tendency is downwards. (Is it because the sweet contains more earth?)<sup>a</sup> Is it owing to the heat, as in the case of salt? For it is like an efflorescence. Or is it for another reason? It is not unreasonable if this is not the reason why it floats more on sweet wine; for this is the warmest wine.

Why do waves sometimes begin to travel before the 28 wind reaches them? Is it for the same reason that they die down after the wind? For the first wind is, so to speak, dispersed before the wave which it has driven; and it is not the wave which is first driven which comes, but the thrust continually affects the water which is next to it.

Why does ground which is more subject to the 29 breaking of the waves often become solid—as solid as

934 b

- 10 πολλάκις οὕτως σφόδρα ὥσπερ ἡδαφισμένοι; καὶ ἡ μὲν κυματώδης γῆ στερεά, ἡ δὲ ἄπωθεν χαῦνος. ἡ διότι ἡ μικρὰ ἄμμος οὐ πόρρωθεν ἐκβάλλεται ὑπὸ τοῦ κύματος, ἀλλὰ ἡ μείζων μᾶλλον; ὥσπερ καὶ τῇ χειρὶ βάλλειν πόρρω οὐ τὸ ἐλάχιστον μάλιστα  
15 δυνατόν. ἔπειτα πολλῶν κυκωμένων τὰ ἐλάχιστα ἐμπίπτοντα πυκνοῖ. ἡ δὲ τοῦ κύματος λωφώντος κίνησις ἐδαφίζει, κινεῖ δὲ οὐκέτι. διὰ μὲν οὖν τὸ μὴ τὰ μικρότατα πόρρω δύνασθαι πηδᾶν, ἐκ μικρῶν σφόδρα συντέθεται· διὰ δὲ τὸ πολλάκις κινεῖσθαι συνεχῆς γίνεται πιπτούσης ἄμμου, ἕως ἂν συν-  
20 αρμόσῃ· διὰ δὲ τὸ κύμα τὸ τελευταῖον ἐδαφίζεται, καὶ τὸ ἡρέμα ὑγρὸν συγκολλᾷ. ἡ δὲ πόρρω ξηρά τε οὔσα δίσταται, καὶ ἐκ μειζόνων ἐστὶ λιθιδίων καὶ ἀνεδάφιστος.

Διὰ τί τῆς θαλάσσης τὰ ἄνω τῶν ἐν τῷ βάθει 30 ἄλμυρώτερα καὶ θερμότερα; ὁμοίως δὲ καὶ ἐν τοῖς  
25 φρέασι τοῖς ποτίμοις τὸ ἐπιπολῆς ἄλμυρότερον τοῦ εἰς βάθος· καίτοι ἔδει τὸ κατωτέρω· βαρύτερον γὰρ τὸ ἄλμυρόν. ἡ διότι ὁ ἥλιος καὶ ὁ ἀῆρ ἀνάγει αἰεὶ τὸ ἐλαφρότατον ἀπὸ τῶν ὑγρῶν; τὸ δὲ ποτιμώτερον αἰεὶ κουφότερον, μᾶλλον δὲ ἀπάγει ἀπὸ τῶν  
30 ἐγγυτέρων τόπων. ὥστε καὶ τῆς θαλάττης ἀπὸ τῶν ἐπιπολῆς καὶ τῶν ποτίμων ἀνάγκη τὸ λειπόμενον ἄλμυρώτερον εἶναι, ἀφ' ὧν ἀνήκται, ἢ ἀφ' ὧν μὴθὲν ἢ ἔλαττον.<sup>1</sup> διὰ τοῦτο δὲ καὶ θερμότερα τὰ ἄνω· τὸ γὰρ ἄλμυρόν θερμότερον τοῦ ποτίμου. διὸ καὶ φασὶ τινες τῶν ἡρακλειτιζόντων ἐκ μὲν

<sup>1</sup> τὸ γλυκύ Ruelle.

if it were beaten for levelling? And why is ground where the waves break hard, whereas farther away it is spongy? Is it because small grains of sand are not thrown to any distance by the waves, but the larger ones are, just as it is impossible to throw what is very small to any distance with the hand? So when many particles are mixed together the smallest fall through and become solid. Now the movement of the receding wave makes these level, but no longer shifts them. Owing to the fact that the smallest grains cannot leap very far, there is a compact mass of small grains; and because it is in frequent motion, it becomes continuous as the sand falls, until each grain fits into its place; and it is levelled by the last wave, and the slight moisture welds it together. But the ground farther away being dry breaks up, and consists of larger grains and is not flattened out.

Why are the upper parts of the sea more salt and 30 warmer than the parts at the bottom? In the same way in fresh-water wells, the surface is more salt than the water below. Yet the water below ought to be more salt; for salt water is heavier. Is it because the sun and the air are always drawing up the lightest part of the liquid? Now the fresher water is always lighter, and the sun and the air exercise more attraction over parts nearer to them. So that both in the sea and in fresh water that which remains on the surface from which the attraction takes place, must be more salt than that from which little or nothing has been drawn. For the same reason the upper parts must be warmer; for the salt is warmer than the fresh. This is why some of the followers of Heracleitus say that stones and earth

934 b

35 τοῦ ποτίμου ξηραινομένου καὶ πηγνυμένου λίθους  
γίνεσθαι καὶ γῆν, ἐκ δὲ τῆς θαλάττης τὸν ἥλιον  
ἀναθυμιᾶσθαι.

Διὰ τί τῆς θαλάττης τὰ πρὸς τῇ γῇ γλυκύτερά 31  
ἐστίν; ἢ διότι ἐν τῇ κινήσει μᾶλλον ἐστίν; κινού-  
μενον δὲ τὸ ἄλμυρὸν γλυκύτερον γίνεται. ἢ ὅτι  
935 a καὶ ἐν τῷ βάθει ἄλμυρώτερόν ἐστι τὸ ὕδωρ, τὰ δὲ  
πρὸς τῇ γῇ ἥττον ἐστι βαθέα. διὸ καὶ τὰ γχιβαθῇ  
ἄλμυρά ἐστι καὶ οὐχ ὁμοίως γλυκέα. τούτου δ'  
αἴτιον, ὅτι βαρὺ ὃν τὸ ἄλμυρὸν φέρεται μᾶλλον εἰς  
βάθος.

5 Διὰ τί ἡ θάλαττα μόνον τῶν ὑδάτων κάεται, τὰ 32  
δὲ πότιμα καὶ ποτάμια οὐ; πότερον ὅτι γῆν  
πολλὴν ἔχει; δηλοῦσι δὲ οἱ ἅλεις. ἢ διότι λιπαρά;  
δηλοῖ δὲ τὸ ἐν τοῖς ἅλασιν ὑφιστάμενον ἔλαιον.

Διὰ τί ἐν ταῖς λίμναις ἄμμος οὐ γίνεται ἢ ἥττον 33  
10 ἢ ἐν τῇ θαλάττῃ καὶ τοῖς ποταμοῖς; ἢ ὅτι ἐν τῇ  
θαλάττῃ πέτραι γίνονται, καὶ ἡ γῇ ἐκκέκασται  
μάλιστα; ἢ δὲ ἄμμος ἐστὶ πέτρα ἐψηγμένη εἰς  
μικρὰ καὶ ἐλάχιστα μόρια. ψήχεται δὲ διὰ τὴν  
πληγὴν τῶν κυμάτων. ἐν δὲ ταῖς λίμναις οὐ  
γίνονται ὁμοίως πέτραι καθαραί, οὐδὲ θραύονται  
15 ὁμοίως διὰ τὸ μὴ γίνεσθαι κύματα ὁμοίως. ἐν δὲ  
τοῖς ποταμοῖς μᾶλλον, ὅτι τὴν μὲν γῆν κατα-  
φέρουσιν, τὰς δὲ πέτρας τῇ πληγῇ θραύουσιν.

Διὰ τί, ὅταν ἡ λίμνη ἢ κοπάσῃ ἢ ξηρὰ γένηται, 34  
ἀποκάεται ὁ σῖτος ἐν τῷ πεδίῳ μᾶλλον; πότερον  
20 ὅτι τὸ ὑγρὸν τὸ ἐν τῇ λίμνῃ ἀπατμίζον τῇ ἀτμίδι  
θερμαίνει τὸν ἀέρα, ὥστε ἐλάττους καὶ ἀσθενε-  
στέρους ποιεῖ τοὺς πάγους ἢ ἐν τοῖς κοίλοις καὶ  
προσελώδεσι τόποις; ἢ ἐκ τῆς γῆς, ὥσπερ λέ-



are formed by the drying and solidification of fresh water, and that the sun produces evaporation from the sea.

Why are the parts of the sea which are nearer the land sweeter? Is it because they are more in motion? And when the salt element moves it becomes sweeter. Or is it because the water down below is more salt, and that near the land is less deep? So also deep places near the shore are salt and not so sweet. This is due to the fact that the salt element being heavier is carried down to the depths.

<sup>a</sup> Why is sea-water the only kind of water which burns, whereas fresh water and river-water do not? Is it because it contains much earth? Salt proves this. Or is it because it is oily? The sediment of oil which is found in salt proves its existence.

Why is there no sand in lakes or at any rate less than in the sea or in rivers? Is it because there are rocks in the sea, and the earth has been extracted from them by burning? But sand is rock ground into small and tiny particles. It is ground by the striking of the waves. But in lakes there are not bare rocks of this kind, nor are they broken up in the same way, because there are not waves to the same extent. But in rivers there is more sand because they carry down the earth with them, and break up the rocks by striking them.

Why is it that when a lake becomes exhausted or dry the corn in the adjoining plain is more likely to be frost-bitten? Is it because the moisture which evaporates in the lake warms the air by evaporation, so that it makes frosts less and weaker than in hollow and marshy spots? Or does the cold arise, as men

<sup>a</sup> Cf. Problem 15.



935 a

γεται, τὰ ψύχη ἄρχεται καὶ λανθάνει εἰσδυνόμενα;  
 ξηρᾶς οὖν οὐσης τῆς λίμνης, διὰ πλείονος τόπου ἢ  
 25 ψυχρότης πλείων προσπίπτουσα πήγνυσι καὶ ἀπο-  
 κάει μᾶλλον. ἐν δὲ ταῖς τοιαύταις χώραις τὰ ψύχη  
 κάτωθεν γίνεται, ὥσπερ καὶ δοκεῖ. καίτοι ἡ γῆ  
 θερμὴ τοῦ χειμῶνος· ἀλλὰ διὰ τὸ ἔφυγον εἶναι  
 κατέψυκται τὸ ἐπιπολῆς θερμὸν τὸ ἐν τῇ γῇ. τὸ  
 γὰρ ὑγρὸν οὔτε οὕτω πόρρω ἐστὶν ὥστε μὴ ψύχε-  
 30 σθαι, διὰ τὴν ἐνοῦσαν θερμότητα ἐν τοῖς ὑγροῖς,  
 οὔτε οὕτως ὀλίγον ὥστε μὴθὲν ἰσχύειν, διὰ τὸ  
 διάβροχον εἶναι τὴν γῆν. οἷον οὖν διὰ τὴν ψύξιν  
 αὐτοῦ συμβαίνει ἐπὶ κρυστάλλου περιπατεῖν καὶ  
 οἰκεῖν.

Διὰ τί ἡ θάλαττα ἅλμυρά καὶ πικρά ἐστίν; ἢ 35  
 35 ὅτι ἐν τῇ θαλάττῃ πλείους εἰσὶν οἱ χυμοί; καὶ γὰρ  
 τὸ ἅλμυρὸν καὶ τὸ πικρὸν ἅμα φαίνεται.

Διὰ τί τὰ ἐν τῇ θαλάττῃ ὄστρακα καὶ λίθοι 36  
 36 στρογγύλα γίνεται; ἢ ὅτι ὁμοίως περιθραυόμενα  
 935 b τὰ ἔσχατα εἰς τὸ στρογγύλον σχῆμα ἔρχεται;  
 37 τούτου γὰρ τὸ ἔσχατον ὁμοιον, ἡ δὲ θάλαττα πάντα  
 κινουσα ὁμοίως περιθραύει.

Διὰ τί ἐνιαχοῦ, ἐάν τις ὀρύξῃ παρὰ τὴν θάλατταν, 37  
 37 τὸ μὲν πρῶτον πότιμόν ἐστιν ὕδωρ, εἰθ' ἅλμυρὸν  
 5 γίνεται; ἢ ὅτι αὐτῆς ἐστὶν τῆς θαλάττης τῆς  
 διηθούσης ὑπὸ τὴν γῆν τὸ ὕδωρ; εἰκότως οὖν  
 τὸ πρῶτόν ἐστι γλυκὺ· ἐλαφρότερον γὰρ ἐστὶ τὸ  
 γλυκὺ τοῦ ἁλικοῦ, καὶ ἡ θάλαττα ἔχει τι τοῦ  
 γλυκέος, ὃ μὴθὲν τῇ γῇ μᾶλλον ἐπιπολάζει. τὸ  
 δὲ ἅλμυρὸν διὰ τὸ βάρος καὶ διὰ τὸ τμητικὸν εἶναι  
 10 κάτω φέρεται. εἴτε οὖν οὕτως εἴτε κατὰ τὰς  
 φλέβας ἐκ τῆς ἡπείρου ῥεῖ ἐπὶ τὴν θάλατταν τὸ  
 γλυκὺ ὕδωρ, εἰκότως ἂν ἐπιπολῆς εἴη τῆς θαλάττης,  
 36

say, from the earth and penetrate without being noticed? So when the lake is dry, greater cold spreads over a wider area and hardens and freezes more easily. In such places the cold comes from below as is popularly believed. Yet the ground is warm in winter; but owing to the moisture the superficial heat on the ground is chilled. For the moisture is neither far enough away to prevent its becoming cold, owing to the warmth which exists in all liquids, nor is it so slight as to have no effect, because the earth is soaked. For instance it is due to the cold that one can walk and dwell upon ice.

Why is the sea salt and bitter? Is it because there 35  
are more juices in the sea? For saltiness and bitterness go together.

Why do shells and stones become round in the sea? 36  
Is it because their extremities being broken off equally assume a round shape? For this is the only shape in which the outer surface is the same all over and the sea moving objects in every direction breaks off the extremities equally all round.

Why is it that in some places, if one digs near the 37  
sea, the water is at first fresh, and then becomes salt? Is it because the water consists of the sea itself which percolates beneath the earth? Naturally, therefore, the water on top is sweet; for sweet water is lighter than salt water, and the sea contains some element of sweetness, which when mixed with earth comes more to the surface. But the salt element, owing to its weight and because it is easily penetrated, is carried downwards. Either, then, in this way or through the veins (in the earth) the sweet water flows from the land into the sea, so that naturally it would rest on the surface of the sea, which is mingled with it. But

935 b

ἢ μίγνυται αὐτῇ. ἀνοιχθέντων δὲ τῶν πόρων,  
 ὕστερον διὰ πλήθους τὸ ἀλυκὸν κρατοῦν τοιοῦτο πᾶν  
 ποιεῖ. συμβαίνει γὰρ πεφραγμένων τῶν ἄνω πόρων  
 15 ἄλλην ὁδὸν ζητεῖν τὸ ἐπιρρέον, ἀνοιχθέντων δὲ  
 ἐνταῦθα πᾶν φέρεσθαι, καθάπερ ἐπὶ τῶν τοῦ  
 σώματος φλεβῶν.

Διὰ τί ἡ θάλαττα οὔσα βαρυτέρα τοῦ ποτίμου 38  
 ὕδατος μᾶλλον ἐστὶν εὐδίοπτος; πότερον ὅτι  
 λιπαρωτέρα; τὸ δὲ ἔλαιον ἐπιχυθὲν ποιεῖ μᾶλλον  
 20 εὐδίοπτον. ἔχουσα δὲ ἐν αὐτῇ λίπος εἰκότως  
 μᾶλλον εὐδίοπτός ἐστιν. ἢ οὐχ ἅπαν τὸ ἐλαφρό-  
 τερον καὶ εὐδιοπτότερον; αὐτὸ γὰρ τὸ ἔλαιον  
 ἐλαφρότερον τοῦ ὕδατος, εὐδιοπτότερον δὲ οὐ. ἢ  
 οὐκ εὐδιοπτότερόν ἐστιν, ἀλλὰ φαίνεται; τὸ γὰρ  
 πότιμον ὕδωρ ἀπὸ τῆς γῆς ἢ ἀπὸ ρευμάτων ἐστίν,  
 25 ἢ δὲ πηγὴ συναφίησι μετὰ τοῦ ὕδατος καὶ γῆν,  
 ὥστε τῷ μὴ καθαρὰ εἶναι τὰ ρεύματα συγκατάγει  
 τὴν γῆν καὶ ἰλύν. αὕτη οὖν ἐστὶν ἡ αἰτία τοῦ  
 ἥττον εἶναι εὐδίοπτον.

Διὰ τί οἱ νέοντες ἐν τῇ θαλάττῃ λαπαροὶ γίνονται; 39  
 εἰ γὰρ ὅτι πονοῦσι, καὶ οἱ τροχιζόμενοι ἰσχυρόν  
 30 πονοῦσι πόνον καὶ οὐ λαπάττονται. ἢ ὅτι οὐ πᾶς  
 πόνος ποιεῖ λάπαξιν, ἀλλ' ὁ μὴ ποιῶν σύντηξιν; ἢ  
 δὲ ἐν τῇ θαλάττῃ διατριβὴ καὶ ὅλως δοκεῖ βρωτι-  
 κωτέρους ποιεῖν καὶ λαπαρούς· θερμὴ τε γάρ ἐστι  
 καὶ ξηρὰ ἢ ἀπ' αὐτῆς ἀτμίς.

Διὰ τί Παῖσα<sup>1</sup> λίμνη πότιμος οὔσα πλύνει καὶ 40  
 35 ῥύπτει τὰ ἱμάτια; πλύνει μὲν γὰρ τὸ γλυκύ,  
 ῥύπτει δὲ τὸ πικρόν, ἅμα δὲ οὐχ οἷόν τε ἔχειν ταῦτα.

<sup>1</sup> πᾶσα Ruelle: but Th. G. renders Lacus Paesa and the reference below to "this lake" seems to make the alteration certain.

when the passages are opened, later on the salt element owing to its quantity overpowers the other and makes it all salt. For when the upper passages are clogged, the water flowing in must seek another path, but when they are opened, all travels by that channel, as happens with the veins of the body.

Why is the sea, seeing that it is heavier than fresh 38 water, more transparent? Is it because it is more oily? Oil poured on to water makes it more transparent. As, therefore, it has oil in it, the sea-water is naturally more transparent. Or is not everything which is lighter more transparent? For oil is lighter than water, but is not more transparent. Or is sea-water not really more transparent, but only seems to be so? For fresh water comes from the land or from streams, and the source sends out earth together with the water, so that the streams not being pure carry down earth and mud with them. This is the reason why fresh water is less transparent.

Why do those who swim in the sea have their 39 bowels opened? If it were due to exercise, then those who go in for violent running also take violent exercise, but their bowels are not opened. Is it because not every form of exercise opens the bowels, but only that which does not produce wasting? Now time spent in the sea seems to make men hungry as well as to open the bowels; for the evaporation from it is both warm and dry.

Why does Lake Paesa, of which the water is drink- 40 able, wash and scour clothes? For what is sweet washes, and what is bitter scours, and the water cannot possess both qualities at once. Or is it a fact

- 938 a ἢ οὐ τῷ πικρὸν εἶναι οὐθὲν ῥύπτει, ἀλλ' ἢ γλι-  
 σχρότης ῥυπτικόν; διὸ καὶ τὰ ἀκροκώλια καὶ ὅσα  
 μυξώδη τοιαῦτα, ὥστε καὶ τῶν πικρῶν ὅσα τούτου  
 μετέχει. ἐν δὲ τῇ λίμνῃ ταύτῃ συμβέβηκεν τοῦτο,  
 ὥστε τῆς νιτρώδους δυνάμεως τὸ μὲν πικρὸν  
 ἐκκεκαῦσθαι, ἐμμένειν δὲ τὸ λιπαρὸν καὶ γλίσχρον.  
 τούτῳ μὲν οὖν ῥύπτει, πλύνει δὲ τῷ ποτίμῳ αὐτῆς.
- 5 Διὰ τί τὸ γαληνίζον τῆς θαλάττης λευκὸν φαί- 41  
 νεται, τὸ δὲ κατάφορον μέλαν; ἢ ὅτι τὸ ἥττον  
 ὁρώμενον μελάντερον μᾶλλον φαίνεται; ἥττον δὲ  
 φαίνεται τὸ κινούμενον τοῦ ἡρεμοῦντος. ἢ διότι τὸ  
 μὲν διαφαινόμενον λευκόν, τὸ δὲ μὴ διαφαινόμενον  
 10 μέλαν; ἥττον δὲ διαφαίνεται τὸ κινούμενον.

that nothing cleanses by being bitter, but that it is viscosity which is the cleansing quality? Hence it is the hooves and those parts which contain mucus, which are cleansing, so that bitter things which contain this quality are also cleansing. Now it is the case in this lake that the bitter part of the nitrous quality is burned out, and the oily and viscous element remains. By this quality it cleanses, and it washes because it is fresh water.

Why does the sea when calm seem white, while it 41 looks black while it is moving? Is it because that which is less seen always appears darker? Now that which is moving is less visible than that which is at rest. Or is it because the transparent is white, and the opaque black? And what is moving is less transparent.



# ΚΔ

936 a

## ΟΣΑ ΠΕΡΙ ΤΑ ΘΕΡΜΑ ΥΔΑΤΑ

Διὰ τί τὸ θερμὸν ὕδωρ, εἰς ἐπικεχρισμένοι ὡσιν 1  
ἐλαίῳ, ἤττον θερμὸν ἐστὶ καταχεόμενον, τοῦ ἐλαίου  
15 θερμοῦ ὄντος; ἢ διὰ τὸ λεαίνειν ὀλισθαίνει καὶ  
ἤττον ἐνδύνει;

Διὰ τί τὰ ὕδατα ἐν τοῖς φρέασι μετὰ μεσημβρίαν 2  
γίνεται τοῦ θέρους θερμά; ἢ διότι τηνικαῦτα ἤδη  
κεκράτηκεν τὸ θερμὸν τὸν αἶρα; πρὸ μεσημβρίας  
δὲ τὸ θερμὸν λύει τε τὸ ψυχρὸν καὶ παύει· οὐχ ἅμα  
20 δὲ πέπαιται καὶ κρατεῖ. ἀλλ' ὅταν ἐπιχρονίση.

Διὰ τί τὸ ὕδωρ θερμότερον ἐνίοτε τῆς φλογὸς 3  
γινόμενον οὐ κατακάει τὰ ξύλα, ἢ δὲ φλόξ κατα-  
κάει; ἢ ὅτι ἡ μὲν φλόξ λεπτομερές, καὶ τὸ ἀπ'  
αὐτῆς πνεῦμα, τὸ δὲ ὕδωρ μεγαλομερές, ὥστε οὐκ  
25 εἰσδύεται; ἢ δὲ φλόξ καὶ τὸ ἀπὸ τῶν ἀνθράκων  
διὰ λεπτότητα εἰσιὼν διαλύει.

Διὰ τί τὸ μὲν ὕδωρ τὸ ζέον οὐ τήκει, ἢ δὲ κοιλία 4  
τήκει; πότερον ὅτι τὸ μὲν θερμὸν τὸ ἐν τῇ κοιλίᾳ  
εἰσέρχεται διὰ λεπτότητα, τὸ δὲ ὕδωρ οὐκ εἰσ-  
έρχεται διὰ παχύτητα; ἢ διότι καὶ τὰ ἄλλα κωλύει  
42

## BOOK XXIV

### PROBLEMS CONNECTED WITH HOT WATER

WHY is it that if men are smeared with oil, water 1 feels less hot when poured over them, although oil is hot? Is it because owing to the smoothness the water slips down and penetrates less?

Why is it that after midday in summer the water 2 in cisterns becomes hot? Is it because by that time the heat has mastered the air? Before midday the heat is employed in thawing the cold and checking it. But the cold does not cease at the same moment as the heat gains the mastery, but only after some time has elapsed.

Why does not hot water, of which the temperature 3 is sometimes higher than that of flame, scorch wood, whereas the flame does? Is it because flame consists of light parts, and so does the vapour proceeding from it, whereas water consists of large particles, so that it does not penetrate? But flame and the vapour from coals penetrate because of their rarity, and disintegrate the wood.

Why is it that boiling water does not cause melting, 4 whereas the stomach does? Is it because the heat in the stomach penetrates because of its rarity, but water does not penetrate because it is dense? Or is it because the liquid prevents all else from

936 a

30 τήκεσθαι τὸ ὑγρόν; οὐθὲν γὰρ ἐν ὑγρῷ τήκεται.  
ἐν δὲ τῇ κοιλίᾳ τὸ ὑγρὸν εἰς τὴν κύστιν ὑπονοστοῦν  
οὕτω λύει.

Διὰ τί τῶν ἀγγείων ὁ πυθμὴν οὐ κάει ἐνότος 5  
τοῦ ὕδατος καὶ ζέοντος, ἀλλὰ καὶ φέρουσι τοῦ  
πυθμένος ἐχόμενοι, ἐξαιρεθέντος δὲ κάει; ἢ ὅτι  
35 σβέννυται τὸ ἐγγινόμενον θερμὸν ἐν τῷ πυθμένι  
ὑπὸ τοῦ ὕδατος; διὸ καὶ οὐ τήκεται τὰ τηκτά,  
ἂν μὴ ψόφος ἐμπέσῃ.

Διὰ τί οὐχ ὑπερζεῖ τοῦ χειμῶνος ὁμοίως καὶ τοῦ 6  
θέρους τὸ ὕδωρ, οὐ μόνον ὁμοίως θερμαινόμενον  
ἀλλὰ καὶ μᾶλλον, καὶ ὁμοίως θερμὸν ὄν καὶ ἔτι  
936 b μᾶλλον; ἢ διότι ἡ ὑπέρζεσις ἐστὶν ἡ ἀναβολὴ τῶν  
πομφολύγων; τὸ μὲν οὖν ὕδωρ αὐτὸ θερμαίνεται  
τότε οὐθὲν ἥττον ἢ τοῦ θέρους,<sup>1</sup> αἱ δὲ πομφόλυγες  
αἵρεσθαι οὐ δύνανται ὁμοίως διὰ τὸ τὸν περιέχοντα  
5 αἶρα εἶναι ψυχρόν, ἀλλὰ ἐλάττους τε τὰ μεγέθη  
αἴρονται ὑπὸ τοῦ ψύχους θλιβόμεναι, καὶ δια-  
κόπτοντος τοῦ αἵρος ταχὺ διαπίπτουσιν, ὥστε  
ἐλάττους τε τῷ ὄγκῳ καὶ τῷ πλήθει γίνονται τοῦ  
χειμῶνος, τοῦ δὲ θέρους τούναντίον. ἢ δὲ ὑπέρ-  
ζεσις γίνεται διὰ τὸ πλῆθος καὶ τὸ μέγεθος τοῦ  
ἀφροῦ.

10 Διὰ τί τὸ μὲν θερμὸν ὕδωρ ῥυτιδοῖ, τὸ δὲ πῦρ 7  
θερμὸν ὄν οὐ; ἢ ὅτι τὸ μὲν πῦρ ποιεῖ πνεῦμα, ὥστε  
ὀγκοῖ; περιτείνεται γὰρ τὸ δέρμα. ἢ δὲ κάμψις  
ῥυτίς ἐστίν.

Διὰ τί τῶν ἀγγείων οἱ πυθμένες θερμαινόμενον 8  
τοῦ ὕδατος, ἕως ἂν ἡ ψυχρόν τὸ ὕδωρ, θερμότεροί  
15 εἰσιν; ἢ διότι ψυχροῦ μὲν ἔτι ὄντος τοῦ ὕδατος

<sup>1</sup> θέρους Bonitz : ψύχους Ruelle.

<sup>a</sup> The Greek of the last sentence as it stands is untrans-

## PROBLEMS, XXIV. 4-8

melting ? For nothing melts in liquid. But in the stomach the liquid sinks into the bladder, and so allows the melting to take place.

Why does not the bottom of a vessel burn when 5 there is boiling water in it, but one can hold it by the bottom and carry it, but when the water is removed it burns ? Is it because the heat engendered in the bottom is extinguished by the water ? This is why soluble substances do not melt if water is poured over them.<sup>a</sup>

Why does not water boil over in winter as much as 6 it does in summer, not only when it is subjected to heat for as long or even longer, but even when it is equally or more hot ? Is it because boiling over is due to the upward thrust of bubbles ? The water itself gets no less hot in winter than in summer, but the bubbles cannot rise to the same extent because the surrounding air is cold, but are smaller in size because they are compressed by the cold when they rise, and as the air breaks them up they quickly burst, so that they are less both in size and in number in the winter, but in the summer it is just the opposite. Boiling over is due to the extent and size of the froth.

Why does hot water cause wrinkles, but fire which 7 is hot does not ? Is it because fire produces a breath, so that it inflates ? For the outer covering is thus stretched, but it is the creasing of the skin that causes wrinkles.

When water is heated in a vessel why does the 8 bottom of the vessel get hotter, while the water is still cold ? Is it because, the water being still cold, latable. The rendering here given is a translation of the Latin version of Th. G.

936 b

ἐγκατακλείεται τὸ θερμὸν καὶ ἀντιπεριίσταται εἴσω, κωλυόμενον ἐξιέναι, ὅταν δὲ διαθερμανθῇ τὸ ἐνὸν ὕδωρ, οὐκέτι ἀποστέγοντος ἀλλὰ διαπνέοντος καὶ ἐλάττονος γινομένου τοῦ πυρός, ψυχρότερος γίνεται  
 20 ὁ πυθμὴν, ὁμοίως ὥσπερ καὶ τὰ βαλανεῖα· καὶ γὰρ ταῦτα τοῦ χειμῶνος θερμότερα ἢ τοῦ θέρους διὰ τὸ ἐγκατακλείεσθαι τὸ θερμὸν ἐν τῷ χειμῶνι μᾶλλον ἢ ἐν τῷ θέρει ὑπὸ τοῦ περιέχοντος ἀέρος ὄντος ψυχροῦ.

Διὰ τί τὸ μὲν ὕδωρ ζέον οὐκ ἐκπαφλάζει, τὸ δὲ 9  
 ἔτνος καὶ ἡ φακῇ; καίτοι κουφότερον τὸ ὕδωρ  
 25 τούτων, τὰ δὲ κοῦφα ῥᾶον ῥῖψαι πόρρω. ποιεῖ δὲ καὶ τὸ ἀργύριον ταυτό, καὶ τοῦτο καθαιρόμενον· διὸ οἱ ἐν τῷ ἀργυροκοπείῳ καλλύνοντες κερδαίνουσιν· τὸ γὰρ διαρριπτούμενον συγκαλλύνοντες λαμβάνουσι τὰ λείψανα. ἢ διότι ποιεῖ μὲν τὸν ἐκπαφλασμόν τὸ θερμὸν ἐξατμίζον καὶ βιαζόμενον τὰ  
 80 ἀντικρούοντα τῇ κατὰ φύσιν αὐτοῦ φορᾷ; τὸ μὲν οὖν ὕδωρ διὰ κουφότητα καὶ λεπτότητα οὐκ ἀποβιάζεται, ὥστε οὐκ ἀθροίζεται πολὺ θερμόν, ἀλλὰ πρὶν ἀλισθῆναι φθάνει διακόψαν τὸ αἰεὶ προσελθόν. τὰ δὲ ἔχοντα ἐν αὐτοῖς σῶμα, οἷον τὰ ροφήματα ἢ  
 85 ὁ ἄργυρος, διὰ βάρος τὸ σωματοειδὲς ἔχοντα πολὺ, καὶ ἀνταπωθοῦντα διὰ τὸ ἀποβιάζεσθαι βία, ἐξιόντος ἀποσφαιρίζεται ἢ ἂν κρατήσῃ τὸ θερμόν· οὐ γὰρ δίεισι διὰ πυκνότητα, ἀλλὰ κρατεῖ, ἕως ἂν ὑπὸ τοῦ ἐπιρρέοντος θερμοῦ ἀπορριφθῇ. γίνεται δὲ πληγὴ, οὐκ ὥσις, διὰ τὸ ταχὺ φέρεσθαι τὸ θερμόν κάτωθεν ἄνω.

937 a

Διὰ τί τὰ μὲν ὀλίγον χρόνον ἐν τῷ θερμῷ βρεχό- 10  
 μενα ἀνοιδεῖ, τὰ δὲ πολὺν συμπίπτει καὶ γίνεται ῥυσά; ἢ διότι τὸ θερμόν ἐκ πεπηγότος ὑγρὸν

## PROBLEMS, XXIV. 8-10

the heat is enclosed within and compressed, being prevented from escaping, but, when the water within grows hot all through, as the fire no longer holds the heat but escapes and becomes less, the bottom becomes cooler, just as it does in baths? They get hotter in winter than they do in summer because in the winter the heat is more confined than it is in the summer by the surrounding air which is cold.

Why does not boiling water boil over, whereas pea-<sup>9</sup> soup and lentil-soup does? And yet water is lighter than these and it is easier to throw light particles a long distance. Silver acts in the same way, when it is being refined; sweepers in the mint gain from this, for they sweep up what is scattered about and collect what is left. Or is it because the heat vaporizes and causes boiling over by exerting force on what opposes its own natural impetus? Water is not forced out because of its lightness and fineness, so that not much heat is collected, but before it masses together the heat which is continually passing in cuts its way through. But anything which has body, like porridge or silver, having a large solid element owing to its weight, and making a counterthrust because it is always having force applied to it, whenever the heat masters it, forms circular bubbles as it goes out; for owing to its density it cannot escape, but establishes a mastery, until it is cast out by the influx of the heat; so it is not a thrust but a blow, because the heat from below is travelling rapidly upwards.

Why is it that things which are soaked in hot<sup>10</sup> water for a short time swell, while those which are soaked for a long time shrink and grow wrinkled? Is it because the heat produces moisture in place of



937 a

ποιεῖ, ἐκ δὲ ὑγροῦ πνεῦμα, τὰ δὲ πυκνὰ ἀραιοῖ; τὸ  
 5 μὲν οὖν πρῶτον θερμαῖνον τὰ πεπηγότα ὑγρότερα  
 ποιεῖ, καὶ ἐξ ὑγρῶν πνευματοποιοῦν ὀγκηρὰ ποιεῖ  
 διαχέον· ὅταν δὲ μᾶλλον θερμαίνῃ τὸ περίξ, ἀραιὸν  
 ποιεῖ, ὥστε ἀποπνεῖται ἢ ἀτμῖς, καὶ τὸ ὑγρὸν  
 ξηραίνόμενον συμπίπτειν ποιεῖ τοὺς ὄγκους. συμ-  
 πιπτόντων δὲ ῥυσοῦται τὸ περίξ δέρμα πάντων.  
 10 ἥ δὲ ἀνωμάλως, ταύτῃ ῥυσὸν γίνεται.

Διὰ τί ὑπὸ τῶν θερμῶν ὑδάτων μᾶλλον ἢ ὑπὸ 11  
 τῶν ψυχρῶν πηγνυνται λίθοι; πότερον ὅτι τῇ τοῦ  
 ὑγροῦ ἐκλείψει γίνεται λίθος, μᾶλλον δὲ ὑπὸ τοῦ  
 θερμοῦ ἢ τοῦ ψυχροῦ ἐκλείπει τὸ ὑγρὸν, καὶ ἀπο-  
 15 λιθοῦται δὴ διὰ τὸ θερμόν, καθάπερ καὶ Ἐμπεδο-  
 κλῆς φησὶ τὰς τε πέτρας καὶ τοὺς λίθους διὰ<sup>1</sup> τὰ  
 θερμὰ τῶν ὑδάτων γίνεσθαι; ἢ τὸ θερμόν ἀπο-  
 λιθοῖ· καὶ ὑπὸ τοῦ ψυχροῦ δὲ λιθοῦται διὰ τὸ τὴν  
 ὑπερβολὴν τοῦ πάγου τὸ ὑγρὸν ἀναλίσκουσαν σκλη-  
 ρύνειν; δῆλον οὖν ἐκ τῆς ὑπερβολῆς καὶ τὸ ἀπλῶς.  
 20 Διὰ τί ἐν τῷ θερμῷ ὕδατι, εἰς τὸν πόδα ἔχῃ τις, 12  
 ἡρεμοῦντος μὲν ἦσσον δοκεῖ εἶναι θερμόν, εἰς δὲ  
 κινηθῇ, θερμότερον; ἢ ὥσπερ καὶ ἐπὶ τοῦ σώματος,  
 εἰς ἐν τῷ πνεύματι τροχάζῃ τις, αἰεὶ ὁ προῖστάμενος  
 ἀπὸ ψυχρότερος; εἰς δὲ τὸ πορρώτερον αἰεὶ ἰὼν<sup>2</sup>  
 μᾶλλον αἰσθάνεται.

25 Διὰ τί ἐν τῷ ἡλίῳ μᾶλλον ἢ τῇ σκιᾷ τὰ θερμὰ 13  
 ψύχεται; πότερον ὅτι τὸ θερμόν τὸ ἔλαττον ὑπὸ  
 τοῦ πλείονος φθείρεται; ἢ ὅτι ἐν μὲν τῇ σκιᾷ τὸ  
 ψυχρὸν περιεσθηκὸς θλίβει τὸ ἐνὸν θερμόν καὶ οὐκ  
 εἰς ἐπεξιέναι, ὅπερ καὶ τοῖς θνήσκουσι ποιεῖ τὸ  
 30 ψυχρὸν προσχεόμενον; ἐγκατακλείει γὰρ τὸ θερμόν  
 καὶ κωλύει ἐξιέναι· καὶ ὅλως τοῦ χειμῶνος ἅπασι

<sup>1</sup> διὰ Forster : καὶ Ruelle.<sup>2</sup> αἰεὶ ἰὼν Bonitz : εἰσιὼν Ruelle.

## PROBLEMS, XXIV. 10-13

what is solid, and vapour instead of liquid, and refines what is dense? That which causes heat at first makes what is solid wetter, and as it vaporizes what is wet it penetrates and makes it swell, but when it has heated the envelope more, it rarefies it, so that the vapour escapes, and the wet becoming dry causes the swelling to subside. When it subsides, the surrounding skin always becomes wrinkled. Where the subsidence is uneven, there the wrinkles appear.

Why are stones hardened more easily by hot water 11 than by cold? Is it because stones are formed by failure of moisture, and the moisture fails by heat rather than by cold, and the formation of stones is due to heat, just as Empedocles says that rocks and stones are due to hot water? Or does heat produce stones, but stone is also produced by cold because the excess of frost exhausts the moisture and hardens it? Evidently, then, this hardening is simply due to excess.

Why is it that if one holds a foot in hot water, 12 it seems less hot while the foot is still, but hotter if it is moved? Is it similar to the experience of the body, if one runs in the wind, the air which is in contact with it being increasingly colder? The farther one continues to go the more one is conscious of it.

Why do hot things cool more quickly in the sun 13 than in the shade? Is it because the less heat is destroyed by the greater? Or is it because in the shade the surrounding cold compresses the heat within and does not allow it to escape, which also happens with the dying when cold water is poured over them? For the cold water confines the heat, and prevents it from escaping. Generally speaking,

937 a

συμβαίνει τὰ ἔσωθεν θερμότερα· ἐν δὲ τῷ ἡλίῳ οὐδενὸς ἀντιφράττοντος φέρεται καὶ θάττον ἀπολείπει.

- Διὰ τί τὸ ἐν τῷ ἡλίῳ θερμαινόμενον ὕδωρ ὥστε 14  
 935 λούεσθαι οὐκ ἔστιν ὑγιεινότερον; πότερον ὅτι διὰ τὸ ψύχεσθαι; καὶ ἔτι ἐπὶ τῷ σώματι ὄν<sup>1</sup> φρίττειν ποιεῖ. ἢ ποιεῖ μὲν καὶ τοῦτο, ἀλλὰ καὶ πολλάκις λούηται τις, νοσερόν ἐστιν; τὸ μὲν γὰρ θερμὸν ὅλως πεπτικόν ἐστι καὶ ξηραντικόν, τὸ δὲ ψυχρὸν 937 b σταλτικόν, ὥστε ἄμφω ποιεῖ τι ἀγαθόν. διὸ καὶ τὸ ὕδωρ καὶ τὸ ψυχρὸν λουομένοις καὶ τὸ θερμὸν τὸ ὑπὸ τοῦ πυρὸς χρήσιμον· τὸ δὲ ὑπὸ τοῦ ἡλίου διὰ τὴν ἀσθένειαν τῆς θερμότητος οὐδέτερον τούτων ποιεῖ, ἀλλὰ ὑγραίνει ὥσπερ τὸ τῆς σελήνης φῶς.  
 5 Διὰ τί τὸ ἐν τῷ ἡλίῳ θερμανθέν ὕδωρ οὐκ ἀγα- 15 θόν; ἢ ὅτι τὰ ψυχόμενα ῥίγουν ποιεῖ;

- Διὰ τί τὰ ἐν Μαγνησίᾳ καὶ τὰ ἐν Ἀταρνεί θερμὰ 16 πότιμά ἐστιν; ἢ διότι ἐμβάλλει ὕδωρ πλεῖον ἀπορρέοντι τῷ θερμῷ, οὗ ἢ μὲν ἀλμυρότης ἀφανί- 10 ζεται, ἢ δὲ θερμότης διαμένει;

- Διὰ τί ἐν Μαγνησίᾳ τὰ θερμὰ τοῦ μὲν θερμὰ 17 εἶναι ἐπαύσατο, ἀλμυρὸν δὲ ἦν τὸ ὕδωρ; ἢ πλεῖον ἐπεχύθη ἅμα ψυχρὸν ἐπὶ τὰς πηγὰς ἀλλότριον, καὶ ἐναπέσβεσε τὴν θερμότητα; ἢ δὲ γῆ ἀλμυρὰ μὲν 15 ἦν, θερμὴ δὲ οὐ, διὰ τὸ πλῆθος τοῦ ὕδατος τοῦ ἐμβάλλοντος. ὁμοιον οὖν συνέβη τῷ διὰ τῆς τέφρας ὕδατι ἡθουμένῳ· καὶ γὰρ τοῦτο διὰ θερμῆς ἡθού- μενον ἐκείνην μὲν καταψύχει, καὶ αὐτὸ ψυχρὸν γίνεται, ἀλμυρὸν τε καὶ πικρὸν διὰ τὴν τέφραν ἐστίν. ἐπεὶ δὲ τὸ προσιὸν ἡλλοτριωμένον ἐστίν, δι<sup>2</sup>

<sup>1</sup> ἐπὶ τῷ σώματι ὄν Forster : ἐπεὶ τὸ σωματίον Ruelle.

## PROBLEMS, XXIV. 13-17

in winter internal heat is always greater, but in the sun, as there is nothing to oppose it, it moves and soon vanishes.

Why is water heated in the sun not more healthy 14 for washing? Does it, because it is cooling, also cause shivering while it is still on the surface of the body? Does it have this effect and also is liable to produce disease, if one washes in it often? For hot water, generally speaking, readily causes concoction and has a drying effect, but cold water produces contraction, so that each produces a good effect. Hence both cold water and water heated by fire are useful to men bathing, but water heated by the sun owing to the weakness of the heat does no good either way, but merely produces moisture like the light of the moon.

Why is not water heated by the sun good? Is it 15 because that which is cooling produces shivering?

Why is the hot water in Magnesia and Atarneus 16 drinkable? Is it because, as the hot water flows out, more flows into it, so that its salt disappears, but its heat remains?

Why did the hot springs in Magnesia cease to be 17 hot, but yet the water remained brackish? <sup>a</sup> Did more cold water from another source flow into the springs at the same time, and quench the heat? For the earth was salt but not hot, owing to the quantity of water flowing into it. The same thing happens to water which percolates through ashes. For this passing through the hot coal cools it and itself becomes cold, and also brackish and bitter owing to the ashes. But when the water which flows in becomes different in character, the heat which exists

<sup>a</sup> This is an unsatisfactory Problem. Its sense is doubtful and it does not agree with Problem 16.

20 ἄλλην αἰτίαν ἐκράτησεν ἢ θερμότης ἐνούσα ἐν τῇ  
γῇ τῆς ψυχρότητος τοῦ ὕδατος δι' ὀλιγότητα, καὶ  
ἐγένετο πάλιν θερμά.

Διὰ τί τὰ ὅλα τῶν θερμῶν ὑδάτων ἀλμυρά; ἢ 18  
διότι τὰ πολλὰ διὰ γῆς ἡθεῖται στυπτηριώδους  
(δηλοῖ δὲ ἡ ὁσμὴ αὐτῶν) κεκαυμένης δέ; ἢ δὲ  
25 τέφρα πάντων ἀλμυρὰ καὶ θείου ὄζει. διὸ καὶ  
συγκάει οὕτως ὥσπερ ὁ κεραυνός. πολλὰ οὖν  
θερμά ἐστιν ἀπὸ ἐπισημάνσεως κεραυνῶν.

Διὰ τί τὰ θερμὰ λουτρὰ ἱερά; ἢ ὅτι ἀπὸ τῶν 19  
ἱερωτάτων γίνονται, θείου καὶ κεραυνοῦ;

## PROBLEMS, XXIV. 17-19

in the earth for a different reason masters the coldness of the water owing to its small quantity and the water again becomes hot.

Why are hot springs always salt? Is it because 18 they usually percolate through astringent earth (their smell proves this) which has been burned? All ashes are brackish and smell of sulphur. This is why they burn like a thunderbolt. Many hot springs are due to the stroke of thunderbolts.

Why are hot bathing-pools sacred? Is it because 19 they are caused by two very sacred things, sulphur and thunderbolts?



## ΟΣΑ ΠΕΡΙ ΤΟΝ ΑΕΡΑ

Διὰ τί ἐν τοῖς ἀσχοῖς τοῖς πεφύσημένοις ἐν- 1  
 απολαμβανόμενα τὰ μέλη πόνον παρέχει; πότερον  
 διὰ τὴν πίεσιν τοῦ αἵματος; ὥσπερ γὰρ οὐδὲ τοῖς  
 ἔξωθεν πιέζουσι τὸν ἀσκὸν ἐνδίδωσιν ὁ αἷρ, ἀλλ'  
 85 ἀπωθεῖ, οὕτω καὶ τὰ ἐντὸς ἐναπολαμβανόμενα  
 θλίβει ὁ αἷρ. ἢ διότι βία κατέχεται καὶ πεπί-  
 ληται; ἔξω οὖν πάντα ὀρμῶν κατὰ φύσιν προσ-  
 απερείδεται πρὸς τὸ ἐντὸς ἀπειλημμένον σῶμα.

Διὰ τί ἐν τοῖς ἔλεσι τοῖς παρὰ τοὺς ποταμοὺς 2  
 γίνονται οἱ καλούμενοι βούμυκοι, οὓς μυθολογοῦσιν  
 938 a ταύρους ἱεροὺς εἶναι τοῦ θεοῦ; ἔστι δὲ τὸ γινό-  
 μενον ψόφος ὅμοιος φωνῇ ταύρου, ὥστε αἱ βόες  
 οὕτω διατίθενται ἀκούουσαι ὥσπερ ταύρου μυκω-  
 μένου. ἢ ὅτι ὅσοι ποταμοὶ λιμνάζουσιν εἰς ἔλη,  
 [ἢ ὅσα ἔλη λιμνάζονται,] ἢ ὑπὸ θαλάττης ἀντι-  
 5 κρούονται, ἢ τὸ πνεῦμα ἀφιασιν ἀθροώτερον, ἐν  
 τοῖς τοιούτοις γίνεται τοῦτο; αἴτιον δὲ ὅτι αἱ  
 κοιλίαι τῆς γῆς γίνονται. οὕτως οὖν κλυζόμενον  
 τὸ ὕδωρ, διὰ τὸ ἐνεῖναι ῥεῦμα ἐν τῇ τοιαύτῃ  
 λιμνασίᾳ, ἀπωθεῖται τὸν αἶρα διὰ στενοῦ εἰς  
 εὐρύτεραν κοιλίαν, οἷον εἴ τις εἰς ἀμφορέα κενὸν  
 54

## BOOK XXV

### PROBLEMS CONNECTED WITH AIR

WHY is it that limbs suffer pain if they are enclosed <sup>1</sup> in inflated wineskins? Is it due to the pressure of the air? The air does not give way to outside pressure on the wineskin, but repels it; just in the same way the air compresses what is enclosed in it. Or is it because the air is confined by force and compressed? Consequently as the air has a natural impetus in every direction it must exert pressure on the enclosed body.

Why do the so-called "ox bellowings" <sup>a</sup> occur in <sup>2</sup> marshes by the banks of rivers, which are due according to legend to the sacred bulls of the God? The phenomenon is a sound similar to that made by a bull, so that cows are affected by it in the same way as when they hear a bull bellowing. Does this occur in places where the rivers stagnate in marshes, or are repelled by the sea, or give off an unusually large quantity of wind? The reason is that hollows are formed in the earth. So as the water wells up (there is always a flow in marshy ground of this kind) it forces the air through a narrow passage into a wider hollow, just as if one made a sound through the neck

<sup>a</sup> Aristotle explains (*Meteor.* 368 a) that earthquakes are due to the movement of air beneath the earth. When this movement is insufficient to produce earth tremors it causes a sound which men describe as "lowing."

938 a

10 κατὰ τὸ στόμιον ποιοῖ ψόφον, μυκήματι ὅμοιον  
 γίνεται· καὶ γὰρ ἡ μύκησις διὰ τοῦτο γίνεται τὸ  
 σχῆμα τοῖς βουσίν. πολλὰς δὲ καὶ ἀτόπους φωνὰς  
 ποιοῦσι τὰ σχήματα τῶν κοιλιῶν ἀνώμαλα ὄντα,  
 ἐπεὶ καὶ ἀμφορέως τὸν πύνδακα ἐάν τις ἀφελὼν  
 15 διὰ τοῦ πυθμένος τρίβῃ ἔλκων ἔσω καὶ ἔξω,<sup>1</sup> ψόφον  
 ποιεῖ, ὥστε φεύγειν τὰ θηρία, ὅταν οἱ ὀπωροφύλακες  
 κατασκευάσωσιν αὐτό.

Διὰ τί ὁ ἀῆρ οὐχ ὑγρός, ἀπτόμενος τοῦ ὕδατος; 3  
 τῶν γὰρ ἄλλων οὐθὲν ὅ τι οὐχ ὑγρόν, ἂν ᾤσεται.  
 ἢ διότι τὸ ἔσχατον αὐτῶν ἅμα, τὸ δὲ ἐπίπεδον  
 20 ἐκατέρου<sup>2</sup> ἕτερον; τὰ μὲν οὖν ἄλλα βαρύτερα, ὁ  
 δὲ ἀῆρ οὐ ρέπει κατωτέρω τοῦ ἐσχάτου. ἅπτεται  
 μὲν οὖν, ὅτι οὐθὲν μεταξύ, οὐ βρέχεται δέ, ὅτι ἀεὶ  
 ἄνωθεν τοῦ ὕδατος.

Διὰ τί μέσων νυκτῶν καὶ μεσημβρίας μάλιστα 4  
 εὐδία γίνεται; ἢ διότι ἡ νηνεμία ἐστὶν αἶρος  
 25 στάσις, ἔστηκε δὲ μάλιστα ὅταν κρατῇ ἢ κρατῇται,  
 μαχόμενος δὲ κινεῖται; κρατεῖ μὲν οὖν μάλιστα  
 μέσων νυκτῶν, κρατεῖται δὲ μεσημβρίας· τότε μὲν  
 γὰρ ὁ ἥλιος πορρωτάτῳ, τότε δὲ ἐγγυτάτῳ γίνεται.  
 ἔτι ἄρχεται τὰ πνεύματα ἢ περὶ ἔω ἢ περὶ δυσμᾶς,  
 30 λήγει δὲ τὸ μὲν ἔωθεν, ὅταν κρατηθῇ, τὸ δὲ ἀπὸ  
 δυσμῶν, ὅταν παύσῃται κρατῶν. συμβαίνει οὖν  
 τὰ μὲν μεσημβρίας παύεσθαι, τὰ δὲ μέσων νυκτῶν.

Διὰ τί ὑποφασκούς<sup>3</sup> ἔω καὶ ἤδη πρωτὶ μᾶλλον 5  
 ἐστι ψῦχος ἢ τῆς νυκτός, ἐγγυτέρῳ ὄντος τοῦ ἡλίου

<sup>1</sup> The ms. has here the words εἰ τρίβει διὰ τοῦ καταδήματος. It seems better to omit them, as they can add nothing to the sense and κατάδημα is otherwise unknown.

<sup>2</sup> οὐχ add. Ruelle.

into an empty jar, and makes a sound like bellowing ; for it is through a passage of similar shape that the bellowing of bulls is produced. Shapes of hollow spaces which are irregular produce many strange noises. When one takes off the lid of a jar and rubs it over the bottom drawing it in and out, it makes enough noise to frighten animals, when the watchers of the fruit do it.

Why does not the air become moist, when in 3 contact with water ? There is no other substance which does not become moist, if in contact with water. Is it because the limit of each substance meets the other, but the surface of each remains distinct ? So all other substances are heavier, but the air does not sink below the limit of the water. It touches it, then, in the sense that there is nothing between them, but the air does not grow wet because it is always above the water.

Why does a calm most often occur at midnight 4 and midday ? Is it because an absence of wind is due to the stationary position of the air, and it is most stationary when it is either exercising or submitting to most control, but when it is struggling it moves ? Now it exercises most control at midnight, and submits to control most at midday ; for at the former hour the sun is farthest away, and at the latter the sun is nearest. Moreover, the wind rises either at sunrise or at sunset, and the wind which rises at dawn dies down when it passes under control, and that which rises at sunset dies down when it ceases to exercise control. So the former falls at midday and the latter at midnight.

Why is it that, when the day is just dawning and it is 5 still early, the cold is greater than at night, although

938 a

ἡμῶν; ἢ ὅτι πρὸς ἡμέραν δρόσος καὶ πάχνη  
 35 πίπτει, ταῦτα δέ ἐστι ψυχρά· ὥσπερ οὖν ῥανθέντος  
 τοῦ παντὸς τόπου ὑγρῷ ψυχρῷ γίνεται κατάψυξις.

938 b

Διὰ τί ἐν τῷ Πόντῳ καὶ ψύχῃ μάλιστα καὶ 6  
 πνίγῃ; ἢ διὰ τὴν παχύτητα τοῦ αἵρος; τοῦ μὲν  
 γὰρ χειμῶνος οὐ δύναται διαθερμαίνεσθαι, τοῦ  
 7 θέρους δέ, ὅταν θερμανθῇ, κάει διὰ τὴν παχύτητα.  
 ἢ δὲ αὐτὴ αἰτία καὶ διότι τὰ ἐλώδη τοῦ μὲν  
 χειμῶνος ψυχρά, τοῦ δὲ θέρους θερμά. ἢ διὰ τὴν  
 τοῦ ἡλίου φοράν; τοῦ μὲν γὰρ χειμῶνος πόρρω  
 γίνεται, τοῦ δὲ θέρους ἐγγύς.

8 Διὰ τί τῆς νυκτὸς αἰθρία μᾶλλον ἢ μεθ' ἡμέραν; 7  
 ἢ καὶ τοῦ πνεύματος καὶ τῆςαραχῆς ὁ ἥλιος  
 αἴτιος; ταῦτα γὰρ κινήσεώς τινος γενομένης συμ-  
 βαίνει γίνεσθαι. αἴτιον τοίνυν τὸ θερμόν. ὅταν  
 οὖν τοῦτο μὴ παρῇ, ἡρεμεῖ τὸ πᾶν, καὶ αἰρομένου  
 10 τοῦ ἡλίου μᾶλλον ἢ τοῦναντίον· καὶ τὸ “ μήποτ’  
 ἀπ’ ἡπείρου ” τοῦτ’ ἐστίν, ὅτι οὐ πλείστη κίνησις,  
 ἐκεῖ ἥκιστα ἂν τι μένοι καὶ συσταίῃ, μὴ ὁμαλοῦ  
 ὄντος καὶ κρατοῦντος τοῦ συνισταμένου. τοῦ μὲν  
 δὴ χειμῶνος ἢ θάλαττα τοιοῦτον, τοῦ δὲ θέρους  
 ἢ γῆ.

Διὰ τί, ὅταν διαχυθῇ τὸ ὑγρὸν εἰς ἀσκούς, οὐ 8  
 15 μόνον τὸ ὑγρὸν δέχεται ὁ πίθος μετὰ τῶν ἀσκῶν,  
 ἀλλὰ καὶ ἄλλο προσλαμβάνει; ἢ ὅτι ἐν τῷ ὑγρῷ  
 ἐνυπάρχει ὁ ἀήρ; οὗτος οὖν ὅταν μὲν ἐν τῷ  
 πίθῳ ἐνῇ, οὐ δύναται ἐκκρίνεσθαι διὰ τὸ μέγεθος  
 τοῦ πίθου· ἐκ γὰρ τοῦ μείζονος χαλεπώτερον  
 ἐκθλῖψαι ὅτιοῦν καὶ ὑγρὸν καὶ πνεῦμα, ὥσπερ καὶ  
 ἐκ τῶν σπόγγων. ὅταν δὲ μερίζηται εἰς μικρά

## PROBLEMS, XXV. 5-8

the sun is nearer to us at that hour ? Is it because dew and hoar-frost fall towards day, and these are cold ? So when every place is sprinkled with cold moisture chill comes.

Why do both cold and stifling heat occur most 6 commonly in Pontus ? Is it owing to the density of the air ? For in winter it cannot get heated through, and in summer, when it is heated, it burns because of its density. The same cause explains why marshy districts are cold in winter, and hot in summer. Or is it due to the travelling of the sun ? For in the winter it is far away, and in summer near by.

Why is the sky clearer at night than in the day- 7 time ? Is the sun the cause of the wind and of the disturbance ? For these things occur as the result of movement. Heat, then, is the cause. When heat is absent, everything is at rest, and this is more true when the sun is rising than when it is sinking. The proverb " Do not fear a cloud from the mainland in winter " <sup>a</sup> means that where there is most movement there also would be the least static conditions, as that which causes stability is irregular and does not exercise control. In the winter this is the nature of the sea, in summer of the land.

Why is it that when liquid is poured from a jar into 8 wineskins the jar will not merely hold the liquid and the skins, but also has room for more ? Is it because there is air in the liquid ? So when the liquid is in the jar, the air cannot escape owing to the size of the jar, for it is more difficult to drive anything, whether liquid or air, out of a larger vessel, as we can see in the case of sponges. But when it is divided into smaller

<sup>a</sup> Only part of the proverb is given here ; for the whole cf. 947 a 7.



938 b

- 20 ἐκθλίβεται ἐκ τοῦ ἀσκοῦ μετὰ τοῦ ἐνόοντος, ὥσθ' ἢ τοῦ ἀέρος χώρα κενὴ γίνεται, διὸ καὶ τοὺς ἀσκοὺς καὶ ἔτι ἄλλο ὑγρὸν δέχεται ὁ πίθος. καὶ μᾶλλον ἐπὶ τοῦ οἴνου τοῦτο γίνεται, ὅτι πλείων ἀήρ ἐν τῷ οἴνῳ ἔνεστιν ἢ ἐν τῷ ὕδατι. ὅμοιον δὲ
- 25 τούτῳ καὶ τὸ ταῦτ' ἀγγεῖον τήν τε κονίαν καὶ τὸ ὕδωρ χωρεῖν ἅμα, ὅσον ἐκάτερον χωρὶς ἐγχεόμενον. ἔοικεν γὰρ πολλὰ εἶναι τὰ διάκενα τῆς τέφρας. ἅτε οὖν λεπτότερον τὸ ὕδωρ διαδύνει μᾶλλον καὶ συσπάττει ἤδη, ὥστε πυκνοῦσθαι, καὶ διὰ τὸ παρ' ἑκάστον τῶν μερῶν εἶναι τὴν σάξιν (μᾶλλον γὰρ
- 30 σάττεται κατὰ μικρὸν σαττόμενον ἅπαν ἢ ἀθρόον), τούτου δὲ γινομένου ὑποκαταβαίνειν τὴν κονίαν. ἅμα δὲ καὶ ἡ τέφρα εἰς αὐτὴν δέχεται τὸ ὑγρὸν διὰ τὸ ἔχειν κοιλίας. ἡ δὲ βαλλομένη τέφρα εἰς τὸ ὕδωρ θερμὴ οὔσα τέμνει αὐτὸ καὶ ἐξαεροῖ. καὶ
- 35 πρότερον δὲ ὕδατος ἐγχυθέντος καὶ ὕστερον κονίας ἐπιπτώσεως τὸ αὐτὸ γίνεται, ὥστε καὶ τὸ ὕδωρ ἔχει ἂν κοιλίας καὶ διάκενα αὐτὸ ἐν αὐτῷ. ἢ οὐ τὸ ὕδωρ τὸ δεχόμενον τὴν κονίαν, ἀλλ' ἡ κονία τὸ ὕδωρ; τὸ γὰρ λεπτομερέστερον εἰκὸς εἶναι τὸ εἰσιόν. ἔτι καὶ ἐκ τῆς πείρας δῆλον.
- 939 a ὅταν γὰρ ἐπιπάττηται ἡ τέφρα, καθ' ὃν ἂν τόπον ἐπιπάττηται, εἰς τοῦτον συρρεῖ τὸ ἄλλο ὕδωρ. ἔδει δὲ τὸ ἐναντίον, εἴπερ ἦν τὸ ὕδωρ τὸ δεχόμενον. ἢ οὐ συμβαίνει τοῦτο, εἰάν πρότερον ἐγχυθῇ τὸ ὕδωρ καὶ σφόδρα διαμεστώσῃ; ἀλλ' εἰάν ὅτιοῦν
- 5 ἐπιβληθῇ, ὑπερχεῖται. εἰάν δ' ἅπαξ ὑπερχυθῇ καὶ ἐπιπέσῃ ἡ τέφρα, ἤδη συμβαίνει· ἡ γὰρ τέφρα ἦν δεχομένη. ταῦτ' οὖν καὶ ὅτι οἱ βόθυνοι τὴν

## PROBLEMS, XXV. 8

parts, the air is driven out of the skin together with its contents, so that the space previously occupied by air becomes empty ; hence the jar has room both for the skins and for more liquid. This is even more true in the case of wine, because there is more air in wine than in water. Similar to this is the fact that the same vessel can contain as much ashes and water together as it can of each when poured in separately. For there seem to be many empty spaces in ashes. Hence the water being lighter sinks into them and fills them up completely, so that the mass grows dense, and because the filling has taken place with each of the parts (for everything which is filled by degrees becomes more full than if it is done all at once), when this happens the ashes subside ; at the same time the ashes admit the liquid because they have interstices. But ashes which are cast into the water when hot, cleave the water and cause evaporation. When the water is poured in before, and the ashes are introduced afterwards, the same thing happens, so that the water also would have interstices and empty spaces in it. Or is it not the water which absorbs the ashes, but the ashes the water ? For it seems natural that it should be the substance with the lighter parts which penetrates. This also is proved by experiment. For when the ashes are sprinkled over, on whatever part they are sprinkled the rest of the water flows into it ; the opposite ought to happen, if it were the water which admits the ashes. Or does this not occur, if the water is poured in first and fills the vessel up ? If anything further is put in, it overflows. But if once the ashes are poured over and fall into the water, the effect takes place at once, for the ashes are actually the recipient. An illustration of

ἐκβληθεῖσαν ἐξ αὐτῶν γῆν οὐ δέχονται· ἔοικεν γὰρ δὴ ἀῆρ τις προκαταλαμβάνων τὸν τόπον καὶ διὰ τοῦτο μὴ δέχεσθαι.

- 10 Διὰ τί ὁ ἀῆρ παχύτερος ὢν τοῦ φωτὸς διέρχεται 9  
διὰ τῶν στερεῶν; ἢ διότι τὸ μὲν φῶς κατ'  
εὐθείαν φέρεται μόνον, διὸ καὶ διὰ τῶν ἀραιῶν οὐ  
διοραῖ ἢ ὄψις, οἷον κισήριδος; ἐπαλλάττουσιν γὰρ  
οἱ πόροι· ἀλλ' οὐκ ἐν τῇ ὑάλῳ, ὃ δὲ ἀῆρ οὐ κωλύεται  
15 διὰ το μὴ εὐθυπορεῖν οὐ διέρχεται.

- Διὰ τί ὁ ἀῆρ ψυχρὸς μὲν γίνεται διὰ τὸ ἄπτεσθαι 10  
τοῦ ὕδατος, δίνυγρος δὲ οὐ, κἂν σφόδρα τις φυσᾷ εἰς  
τὸ ὕδωρ ὥστε κυμαίνειν, ὅτι δὲ ψυχρὸς, δηλοῖ μεθ-  
ιστάμενος· ψύχει γὰρ <ὁ> ἀπὸ τῶν ὑδάτων; ἢ ὅτι  
20 ψυχρὸς μὲν πέφυκεν εἶναι καὶ θερμὸς, ὥστε μετα-  
βάλλει τῇ ἀφῇ οὐ ἂν τινος ἄπτηται, ὑγρὸς δὲ  
οὐκέτι διὰ τὸ κουφότερος εἶναι; καὶ οὐδέποτε εἰς  
τὸ βάθος τοῦ ὕδατος ἔρχεται, ἀλλ' αἰεὶ τοῦ ἐπιπέδου  
ἄπτεται, κἂν βιάζεται κάτω· καὶ τὸ ὕδωρ ἔτι  
κατωτέρω φέρεται, ὥστε μήποτε εἰς βάθος ἰέναι.  
25 Διὰ τί ὁ ἐκ τῶν πομφολύγων καὶ κάτωθεν ἀνιῶν 11  
οὐ διερὸς ἐξέρχεται; ἢ διότι οὐκ ἐπιμένει τὸ  
ὑγρόν, ἀλλ' ὀλισθαίνει τὸ ὕδωρ; τὸ δ' ἐπὶ τῇ  
πομφόλῳγῃ καὶ ἑλαττόν ἐστιν ἢ ὥστε διερεῖν.

- Διὰ τί ὁ ἀῆρ οὐκ ἀναπίμπλησι, τὸ δὲ ὕδωρ; καὶ 12  
30 εἰς τὸν ἀέρα γὰρ μετατιθέμενον διερόν. ἢ ὅτι  
ὥσπερ οὐδὲ ὁ λίθος; οὐ γὰρ πᾶν ἐστὶν ἀνα-  
πληστικόν, ἀλλὰ τὸ γλίσχρον ἢ ὑγρόν.

<sup>1</sup> <ὁ> added by Bonitz.

<sup>a</sup> This Problem is not very clear, but it seems to mean that if a substance containing air spaces (e.g. ashes) is put into a vessel and water poured in afterwards, the water will replace the air and thus ashes + water will take up no more room than ashes alone. If the water is put in first, and then ashes, the water will overflow because the ashes will carry

## PROBLEMS, XXV. 8-12

the same fact appears in that trenches will not hold all the earth that is thrown out of them, for some air seems to occupy the space and hence the trench will not hold all the earth.<sup>a</sup>

Why does air, which is denser than light, penetrate 9 through solid bodies? Is it because light only travels in straight lines, so that vision cannot see through porous substances, such as pumice-stone? For the channels change direction; but this is not the case with glass, but the air is not obstructed because it does not travel straight through what it penetrates.

Why does air become chilled through contact with 10 water, but not saturated with moisture, even if one blows it into the water violently enough to make waves, but it shows by its change that it becomes cold, for air from water causes cold? Is it because air by nature is both cold and hot, so that it changes by contact with whatever it touches, but it does not become moist because it is too light? It never penetrates into the depth of the water, but only touches the surface, even if it is forced downwards; the water always recedes lower still, so that the air never reaches the depths.

Why is it that the air from bubbles even when it 11 rises from below never comes out wet? Is it because the liquid does not remain in it but the water slides off? The water on a bubble is too little to wet it.

Why does not air soak into another substance, 12 while water does? Water soaks even when transformed into air. Is it for the same reason that a stone does not? For not every substance soaks, but only what is viscous or liquid.

air down with them, but afterwards the air will escape and the whole subside.

939 a

\* \* \* ἢ ὅτι ὁ ἀῆρ ἄνω φέρεται; ὁ γὰρ ἀσκὸς 13  
 ὅταν μὲν κενὸς ἢ κάτω φέρεται, ὅταν δὲ φυσηθῇ,  
 35 ἄνω ἐπιμένει διὰ τὸ τοῦτον ἀναφέρειν. εἰ δὲ ὁ  
 ἀῆρ ἀνακουφίζει καὶ κωλύει κάτω φέρεσθαι, διὰ  
 τί βαρύτεροι γίνονται φυσηθέντες; καὶ πῶς, ὅτε  
 μὲν βαρύτερός ἐστιν, ἐπιμένει, κουφότερος δὲ γενό-  
 μενος καταφέρεται;

Διὰ τί ὁ ἀῆρ \* \* \* οὐκ ἄνω φέρεται; εἰ γὰρ 14  
 939 b τὰ πνεύματα τούτου κινουμένου ὑπὸ τοῦ θερμοῦ  
 γίνεται, πέφυκεν δὲ τὸ πῦρ ἄνω φέρεσθαι, καὶ τὸ  
 πνεῦμα εἰς τὸ ἄνω ἐβάδιζεν, εἴπερ τό τε κινεῖν  
 εἰς τὸ ἄνω θεῖ καὶ τὸ κινούμενον οὕτω πέφυκε  
 φέρεσθαι. νῦν δὲ φαίνεται λοξὴν τὴν φορὰν  
 ποιούμενος.

5 Διὰ τί τὸ ἀφ' ἧς ψυχρότερον ἢ τὸ ἀφ' ἐσπέρας; 15  
 ἢ ὅτι τὸ μὲν ἐγγύτερον μέσων νυκτῶν, τὸ δὲ  
 μεσημβρίας; ἔστι δὲ ἡ μεσημβρία θερμότατον διὰ  
 τὸ εἶναι ἐγγύτατον ἡλίου, αἱ δὲ μέσαι νύκτες  
 ψυχρότεραι διὰ τὸ ἐναντίον.

Διὰ τί αἱ νύκτες τῶν ἡμερῶν ἐν ταῖς ἀλέαις 16  
 10 πνιγνότεραι; ἢ διὰ τὴν ἄπνοιαν; οἱ γὰρ ἐτησῖαι  
 καὶ πρόδρομοι τὰς νύκτας ἤττον πνέουσιν.

Διὰ τί τὰ ἐν τοῖς ἀσκοῖς ἄσηπτα φυσηθεῖσιν, 17  
 καὶ ἐν τοῖς περιπωματιζομένοις; ἢ διότι σήπεται  
 μὲν κινούμενα, ἅπαντα δὲ τὰ πλήρη ἀκίνητα,  
 ταῦτα δὲ πλήρη.

15 Διὰ τί τῆς αἰθρίας μᾶλλον ψυχρὸς γίνεται ἢ ἐπι- 18  
 νεφέλων ὄντων; τὰ δὲ ἄστρα καὶ ὁ οὐρανὸς θερμός.  
 ἢ ὅτι οὐθὲν ἀποστέγει ἐν τῇ αἰθρίᾳ τὴν ἀτμίδα,

<sup>a</sup> This question is supplied from Th. G.

(Why do inflated skins float ?) <sup>a</sup> Is it because air 13 travels upwards ? For the skin when empty travels downwards, but when it is blown up, it remains on the surface, because the air carries it upwards. If, then, the air makes the skin lighter and prevents it from being carried downwards, why are skins heavier when they are blown up ? And how do they remain on the surface when they are heavier, and sink when they are lighter ?

Why does the air not travel upwards ? For if the 14 winds occur when the air is moved by heat, and it is the nature of fire to travel upwards, the wind also should also travel upwards, since the motive power rushes upwards and that which is moved is naturally carried in the same direction. But as it is the air clearly travels sideways.

Why is it colder at dawn than in the evening ? 15 Is it because the former is nearer to midnight, the latter to midday ? But midday is the warmest time because it is nearest to the sun, while midnight is colder for the contrary reason.

Why are the nights more stifling than the days in 16 hot weather ? Is it owing to the absence of breeze ? For the Etesian and the northerly winds blow less strongly at night.

Why do not substances decompose in inflated 17 wineskins and in jars which are closed ? Is it because decomposition takes place when things are moving, but there is no movement when the container is full, and inflated wineskins are full ?

Why is the cold more severe under a clear sky than 18 when it is overcast ? For the stars and heavens are hot. Is it because under a clear sky there is nothing to restrict evaporation, which permeates through ;



939 b

ἀλλὰ διαχεῖται· ἐν δὲ τοῖς ἐπινεφέλοις ἀποστέγεται;  
καὶ βορείων γε ἢ νοτίων διὰ τὸ αὐτό· ὁ μὲν γὰρ  
20 νότος ἄγει τὸ τοιοῦτον, ὁ δὲ ἀπωθεῖ. καὶ ἀτμίζειν  
δὲ φαίνεται βορείοις μᾶλλον ἢ νοτίοις, καὶ χειμῶνος  
ἢ θέρους. ἢ παρὰ τὸ ἀνόμοιον; ἢ ὅτι θερμοῦ  
ψυχομένου ἐστὶν ἡ ἀτμίς;

Διὰ τί ἀὴρ ὁ ἐλάττων θερμότερος τοῦ πλείονος; 19  
αἱ γὰρ στενοχωρίαι ἀλεεινότεραι. ἢ διότι κινεῖται  
25 μᾶλλον ὁ πολὺς, ἢ δὲ κινήσις ποιεῖ ψυχρόν;  
σημεῖον δὲ τούτου, ὅτι κινούμενα ψύχεται τὰ  
θερμά.

Διὰ τί ὕδωρ μὲν καὶ γῇ σήπεται, ἀὴρ δὲ καὶ πῦρ 20  
οὐ σήπεται; ἢ ὅτι θερμότατον γίνεται τὸ σηπό-  
μενον ἅπαν, πυρὸς δὲ οὐδὲν θερμότερον; ἢ ὅτι  
30 ψυχθῆναι δεῖ πρότερον, τὸ δὲ πῦρ αἰεὶ θερμόν, ὁ δὲ  
ἀὴρ πυρὸς πλήρης; σήπεται δὲ οὐδὲν θερμόν, ἀλλὰ  
ψυχθέν· γῇ δὲ καὶ ὕδωρ<sup>1</sup> καὶ θερμά καὶ ψυχρά  
γίνεται.

Διὰ τί τὰ ἐπινέφελα ἀλεεινότερα τῶν αἰθρίων; 21  
πότερον ὡς οἱ ἀρχαῖοι ἔλεγον ὅτι τὰ ἄστρα ψυχρά;  
35 ἢ λίαν τοῦτό γε ἄτοπον, ἀλλὰ διότι ἀτμίζει;  
ἐπισημαντέον δὲ ὅτι ἐν νηνεμία ἢ δρόσος καὶ ἡ  
πάχνη γίνεται. ὅταν μὲν οὖν αἰθρία ᾗ, διαπνεῖ τὸ  
θερμόν, ὑφ' οὗ ἀνάγεται τὸ ὑγρόν, ὥστε ψυχρὸς ὁ  
ἀήρ· διὸ καὶ δροσίζει ἀφιέμενον τὸ ὑγρὸν ἀπὸ τοῦ  
θερμοῦ. ὅταν δὲ ἐπινέφελον ᾗ, ἀποστέγεται, διὸ  
940 a οὐ γίνεται δρόσος οὐδὲ πάχνη ὄντων ἐπινεφέλων.  
περὶ οὖν τὴν γῆν ὑπομένοιν τὸ θερμόν ποιεῖ τὴν  
ἀλέαν.

<sup>1</sup> ὕδωρ καὶ ἀὴρ Ruelle.

but under a cloudy sky it is restricted? For the same reason it is colder with a north than with a south wind. For the south wind attracts, but the north wind repels clouds. There also seems to be more evaporation with a north wind than with a south wind, and also more in winter than in summer. Or is it due to the difference in conditions? Or is it because evaporation takes place when the warm is cooling?

Why is a small quantity of air warmer than a larger quantity? For closely confined places are warmer. Is it because the large quantity moves more, and movement produces cold? This is proved by the fact that hot things cool when they are moved about.

Why do water and earth decompose, but air and fire do not? Is it because everything which decomposes becomes very hot, and there is nothing hotter than fire? Or is it because it must be cooled before it decomposes, and fire is permanently hot, and air is full of fire? So nothing hot decomposes, but only when it has been cooled; now earth and water become both hot and cold.

Why is an overcast sky warmer than a clear one? Is it, as the ancients said, because the stars are cold? Or is this quite an absurd suggestion, and is it due to evaporation? That this takes place is proved by the fact that dew and frost form in calm weather. When, then, the sky is clear, the heat, by which the moisture is taken up, is dispersed so that the air becomes cold; so the moisture given off from the heat causes dew. But when the sky is overcast, the moisture is restricted, so that there is neither dew nor hoar-frost when it is cloudy. So the heat remaining near the earth produces warmth.

940 a

Διὰ τί ἐν τοῖς ὑψηλοῖς τῶν οἴκων ὁ ἀήρ δι- 22  
 ευριπίζει, καὶ μάλιστα ταῖς εὐδαίαις; ἢ διότι ὁ ἀήρ  
 5 πολύκενός τις ἐστὶ τὴν σύγκρισιν. ὅταν οὖν  
 ἄρξῃται εἶσω ῥεῖν, συγχωρεῖ ὁ ἐν τῷ οἰκήματι  
 ἀήρ καὶ συστέλλεται. τούτου δὲ συμπίπτοντος  
 τῷ χρόνῳ πολυκενώτερος γίνεται ὁ ἔξωθεν, καὶ  
 χώραν πολλὴν ἴσχει. εἰς ταύτην οὖν τὴν χώραν  
 πίπτει ὁ ἐκ τοῦ οἰκήματος ἀήρ, ὣν πλησίον, καὶ  
 10 φέρεται εἰς ταύτην τὴν χώραν διὰ τὸ κρέμασθαι  
 καὶ τὴν τοῦ κενοῦ φύσιν μὴ δύνασθαι ἀντιστηρίξειν.  
 κατὰ πολλὰ δὲ αὐτοῦ μέρη τούτου συμβαίνοντος,  
 ἔπεται αὐτῷ ὁ πλησίον διὰ τὴν πρόωσιν<sup>1</sup>. εἴτα  
 πολλοῦ ἔξωθεν φερομένου ὁ μὲν ἔσω τόπος πολύ-  
 κενος γίνεται, ὁ δὲ ἔξω πυκνότερος, καὶ πάλιν  
 15 ἔξωθεν εἶσω φέρεται. καὶ ταῦτα ἀλλάσσονται.

<sup>1</sup> πρόωσιν Sylb. : πρόσοψιν Ruelle.

## PROBLEMS, XXV. 22

Why is it that in lofty rooms the air is constantly 22 ebbing and flowing, and particularly in calm weather? Is it because the air is made up of many empty spaces? So when air begins to flow inwards, the air already in the room contracts and is compressed. When it collects, after a time the outside air becomes more empty and has much space in it. So the air out of the room, being near by, makes for this space and it travels into it because it is in suspense and it is the nature of the void to be unable to resist it. Now when this happens in many different parts, the air near by follows because of the thrust ; so, as much air is travelling from outside, the part inside becomes full of empty spaces but the outside becomes denser, and it rushes again from the outside to the inside. And this change repeats itself.

Διὰ τί ὁ καικίας ὁ μόνος τῶν ἀνέμων ἐφ' ἑαυτὸν 1  
 ἄγει τὰ νέφη; ἢ ὅτι ἀφ' ὑψηλοτέρων τόπων πνεῖ;  
 20 ἔστι γὰρ τὰ πρὸς ἔω ὑψηλότερα τῶν πρὸς ἐσπέραν.  
 σημεῖον δὲ τὸ τῆς πρὸς ἐσπέραν θαλάττης μέγεθος  
 καὶ βάθος. πνέων δὲ ἄνωθεν εἰς τοῦναντίον  
 γραμμὴν ποιεῖ τῇ φορᾷ τὰ κοῖλα πρὸς τὴν γῆν  
 ἔχουσιν. προσπίπτων δέ, ὡς εἴρηται, τοῖς πρὸς  
 ἐσπέραν τῆς γῆς τόποις, καὶ συστέλλων τὰ νέφη  
 25 διὰ τὸ τῆς γραμμῆς σχῆμα, τῇ ἐκείθεν ἀνακλάσει  
 ἐφ' αὐτὸν<sup>1</sup> ὠθεῖ αὐτά. ποιεῖ δὲ ὁ μόνος τοῦτο τῶν  
 λοιπῶν τῶ τοὺς μὲν ὑψηλοτέρους, τοὺς δ' ἐναντίους  
 εἶναι τόπους, πρὸς οὓς τοῦ κάτωθεν ἢ ἐπ' εὐθείας  
 τὴν φορὰν γίνεσθαι συμβαίνει, τὰ κυρτὰ πρὸς τὴν  
 γῆν ἐχούσης, ὥστε ἀνάκλασιν μὴ γίνεσθαι τοῦ  
 30 πνεύματος τῶ μὴ πρὸς τὴν γῆν [ἐχούσης] ἀέρα  
 ἔχειν τὴν τελευτὴν τῆς φορᾶς, ἐν ᾧ οὐδὲ νέφη ἐστὶ  
 περὶ τὴν γῆν· τοῖς δὲ ἥττον κοίλοις καὶ τῶ ἀπ-  
 ηλιώτῃ τῶ μὴ εἶναι ὑγρόν. ὥστε οὐ συνιστὰς

<sup>1</sup> ἐφ' ἑαυτὸν Forster : ἐπ' αὐτὸν Ruelle.

<sup>a</sup> Caecias is really more easterly than the N.E. wind. The whole of this Problem is obscure in meaning and the text more

## BOOK XXVI

### PROBLEMS CONNECTED WITH THE WINDS

WHY does Caecias<sup>a</sup> alone of the winds attract clouds towards itself? Is it because it blows from higher districts? For the eastern parts of the world are higher than the western. The size and depth of the sea towards the west prove this. This wind, then, blowing from higher ground to the lower describes a line in its course which is curved towards the earth. Falling then, as has been said, upon regions of the earth which are towards the west, and collecting the clouds because of the shape of its path, on its return journey it thrusts the clouds towards itself. It is the only one of the winds which does this, because some places are higher and some lower, against which the course of the wind either comes from below or in a straight line, this line being convex in relation to the earth, so that no refraction of the wind takes place because the air does not end its course in relation to the earth at a place where there are no clouds near the earth. The winds which travel on a less curved course such as the east wind collect no clouds because they carry no moisture. So in failing

than doubtful. Considerable use has been made of the Latin translation, but even so the problem is hardly satisfactory.



940 a

ἦττον καταφανής ἐστὶν αὐτοῦ ποιῶν τοῦτο ὃ ποιεῖ.

35 Διὰ τί βορέαι μὲν ἐτήσιοι γίνονται, νότοι δὲ οὐ; 2  
ἢ γίνονται μὲν καὶ νότοι, ἀλλ' οὐ συνεχεῖς, ὅτι  
πόρρω ἡμῶν ἢ ἀρχὴ τοῦ νότου ἐστίν, ὑπὸ δὲ τῷ  
βορέα οἰκοῦμεν; ἔτι οἱ μὲν ἐτησίοι βορέαι καθ-

940 b

εστηκότος τοῦ ἀέρος πνέουσιν (θέρους γὰρ πνέου-  
σιν), οἱ δὲ νότοι ἥρος, ὅθ' ἦττον ἔστηκεν τὰ περὶ  
τὸν ἀέρα. πρὸς δὲ τούτοις ὁ μὲν νότος ὑγρός, τῷ  
δ' ὑγρῷ ὁ ἄνω τόπος ἀλλότριός ἐστι· διὸ ταχὺ  
διαλύεται τὰ ἐν αὐτῷ συνιστάμενα ὑγρά. καὶ τὰ  
5 ὑγρά πλανητικά ἐστίν, ὥστε οὐ μένων ἐν ταύτῳ  
τόπῳ συμμεθίστησι καὶ τὴν τοῦ ἀέρος κίνησιν.  
κινουμένου δὲ μὴ ἐν ταύτῳ πνεύματα ἄλλα συμ-  
βαίνει γίνεσθαι· ἔστι γὰρ πνεῦμα ἀέρος κίνησις.

Διὰ τί νότος πνεῖ μετὰ πάχνην; ἢ διότι ἡ μὲν 3  
πάχνη γίνεται πέψεως γινομένης, μετὰ δὲ τὴν  
10 πέψιν καὶ τὴν ἀποκάθαρσιν ἢ μεταβολὴ εἰς τοῦ-  
ναντίον γίνεται; ἐναντίον δὲ τῷ βορρᾷ νότος ἐστίν.  
διὰ ταῦτό δὲ καὶ μετὰ τὴν χιόνα πνεῖ νότος. ὅλως  
δὲ καὶ ἡ χιών καὶ ἡ χάλαζα καὶ τὸ ὕδωρ καὶ πᾶσα  
ἢ τοιαύτη ἀποκάθαρσις πέψεως σημείον ἐστίν.  
15 διὸ καὶ μετὰ τὸν ὑετὸν καὶ τὰς τοιαύτας χειμασίας  
πίπτει τὰ πνεύματα.

Διὰ τί αἱ τροπαὶ πνέουσιν; ἢ διὰ τὸ αὐτὸ ὃ καὶ 4  
οἱ εὐριποὶ ρέουσιν; μέχρι γὰρ τοῦ ρεῖν καὶ ἡ  
θάλαττα φέρεται καὶ ὁ ἀήρ· εἰθ' ὅταν ἀντιπέσῃ  
καὶ μηκέτι δύνῃται τὰ ἀπόγεια προάγειν διὰ τὸ  
20 μὴ ἰσχυρὰν ἔχειν τὴν ἀρχὴν τῆς κινήσεως καὶ  
φορᾶς, πάλιν ἀνταποδίδωσιν.

Διὰ τί αἱ τροπαὶ ἐκ τῆς θαλάττης εἰσίν; ἢ ὅτι 5

## PROBLEMS, XXVI. 1-5

to collect clouds the east wind is less obvious in doing what it does than the north-east wind.

Why are the north winds periodic, whereas the 2 south winds are not? Or are the south winds also periodic, but not continuous, because the origin of the south wind is far away from us, but we live under the north wind? Again, the periodic north winds blow when the air is still (for they blow in summer), but the south winds blow in the spring, when the atmospheric conditions are less stable. In addition to this, the south wind is wet, but the upper district is unfavourable to the wet; so the moisture which collects there is most rapidly dispersed. But moisture wanders about and so the south wind not remaining in the same place produces movement of the air. As the air when it moves changes its position, other winds arise; for wind is a movement of the air.

Why does the south wind blow after a frost? Is it 3 because frost occurs after concoction has taken place, and after absorption and concoction a change to the contrary occurs? And the south wind is contrary to the north. For the same reason the south wind also blows after snow. Speaking generally, snow and hail and rain and all such purgation are proof of concoction. So after rain and storms of a like nature the winds blow.

Why do variable winds blow? Is it for the same 4 reason as that which makes narrow channels ebb and flow? For both sea and air are set in motion until they flow; then, when opposition occurs and the off-shore wind can no longer drive them because the origin of the movement and impetus is not sufficiently strong, they flow back again.

Why do these variable winds come from the sea? 5

940 b

ἢ θάλαττα πλησίον; ἢ ὅτι ἐναντίον ἐστὶ τῇ ἀπο-  
 γείᾳ ἢ τροπαίᾳ, καὶ ἔστιν ἡ τροπαία οἷον ἀναστροφὴ  
 ἀπογείας; ἡ δὲ ἀπογεία τὸ ἐκ τῆς γῆς πρὸς τὴν  
 25 θάλατταν πνεῦμα γινόμενον, ἡ δὲ τροπαία ἡ τούτου  
 παλίρροια. ὥστε ἀνάγκη ἐκ θάλαττης εἶναι. ἡ<sup>1</sup>  
 διὰ τὸ εἰς τὴν θάλατταν ἀθροισθῆναι τὸν ρυέντα  
 αἶρα; τοῦ δὲ μὴ εἰς τὴν γῆν τοῦτο συνίστασθαι  
 καὶ τοῦ ἀνακάμπτειν ἀπὸν αἷτιον ὅτι ἡ θάλαττα  
 ἐν κοίλῳ ἐστίν· ὁ δὲ ἀήρ, ὥσπερ τὸ ὕδωρ, ρεῖ αἰεὶ  
 εἰς τὸ κοιλώτατον.

80 Διὰ τί οἱ ἐκνεφίαι ὕδατος γενομένου θάττον 6  
 παύονται; ἢ ὅτι αἱ κοιλίαι συμπίπτουσιν τοῦ  
 νέφους, ὕδατος γενομένου, ἐν αἷς ἡ ἀρχὴ τοῦ  
 πνεύματος συνίσταται;

Διὰ τί οὐχ οἱ αὐτοὶ ἄνεμοι πανταχοῦ ὑέτιοί 7  
 εἰσιν; ἢ ὅτι οὐχ οἱ αὐτοὶ πανταχοῦ πρὸς ὄρη ἀντι-  
 85 πνεύουσιν, ἀλλ' ἕτεροι κεῖνται πρὸς ἕτερα ὄρη; οἷον  
 γὰρ πρὸς ἀνάντη μόλις ρεόντων, ἐνταῦθα ὑφίσταται  
 μᾶλλον τὰ νέφη, οὐ ἀδυνατεῖ ἔτι προωθεῖν αὐτὰ  
 ἄνεμος. ὑφιστάμενα δὲ καὶ πιεζόμενα ρήγνυται.

941 a Διὰ τί αἱ μὲν καθαραὶ δύσεις εὐδιεινὸν σημεῖον, 8  
 αἱ δὲ τεταραγμέναι χειμερινόν; ἢ ὅτι χειμῶν  
 γίνεται συνισταμένου καὶ πυκνουμένου τοῦ αἵρος;  
 ὅταν μὲν οὖν κρατῇ ὁ ἥλιος, διακρίνει καὶ αἰθριάζει  
 5 αὐτόν, ὅταν δὲ κρατῇται, ἐπινεφῇ ποιεῖ. ἐὰν μὲν  
 οὖν ἰσχυρὰ ἦ ἡ σύστασις, εὐθύς ἡμέρας γίνεται  
 χειμῶν· ἐὰν δὲ ἀσθενεστέρα, μὴ παντάπασιν δὲ  
 κρατουμένη, τὸ συνιστάμενον ἐξωθεῖται πρὸς τὰς  
 δύσεις. ἐνταῦθα δὲ μένει διὰ τὸ παχύτερον<sup>2</sup> εἶναι  
 τὸν περὶ τὴν γῆν αἶρα τοῦ χειμῶνος. ταχὺ δὲ  
 10 συνίσταται καὶ ὁ ἄλλος διὰ τὸ ἔχειν ἀρχὴν καὶ

<sup>1</sup> ἡ Forster : ἡ θάλαττά ἐστι Ruelle.<sup>2</sup> παχύτερον Forster : παχύτατον Ruelle.

## PROBLEMS, XXVI. 5-8

Is it because the sea is near by ? Or is it because the changing wind is contrary to the offshore wind, and because it is, so to speak, a reversal of the offshore wind ? The land wind is a breeze which blows from the land towards the sea, and the changing wind is the reversal of this, so that it must come from the sea. Or is it because the flowing air has collected on the sea ? The reason why it does not collect on the land and of its curving back as it retreats is that the sea is in a hollow ; and the air, like water, always flows into the deepest hollow.

Why do hurricanes cease more quickly after the 6 rain falls ? Is it because, when the rain falls, the hollow spaces in the cloud in which the wind takes its rise, collapse ?

Why are not the same winds rainy everywhere ? 7 Is it because the same winds do not everywhere blow towards the mountains, but different winds blow against different mountains ? For instance, when winds blow with difficulty against steep mountains, there clouds are more likely to form, where the wind cannot push them further. When they have formed and are subject to pressure, they break.

Why is a clear sunset a sign of fine weather, but a 8 confused sunset a sign of stormy weather ? Is it because a storm occurs when the air is compressed and thick ? So when the sun is in control, it disperses and clears it, but when it is overpowered, it makes it cloudy. If, then, the compression is powerful, a storm arises as soon as it is day ; if the pressure is weaker, but not completely overpowered, the compressed part is driven towards the setting sun. And there it remains, because the air near the earth is denser than the storm. The rest of the air gathers quickly, because it has a place of origin and support

941 a

ἔρεισμα, ὃ δέξεται καὶ ἀθροίσει τὸ προσιόν<sup>1</sup>.  
 ὥσπερ γὰρ ἐν τροπῇ ἐνὸς ἀντιστάντος καὶ οἱ ἄλλοι  
 μενοῦσιν, οὕτω καὶ ἐπὶ τοῦ αἵματος. διὸ ταχὺ καὶ  
 ἐξαίφνης ἐνίοτε γίνεται καὶ ἐπινέφελα. ὅταν οὖν  
 15 αἱ δύσεις τεταραγμέναι ᾧσι, σημεῖόν ἐστιν ἰσχυρὸν  
 ὅτι οὐ κεκράτηκεν ὁ ἥλιος τῆς συστάσεως, πολὺν  
 χρόνον ἐναντιούμενος αὐτῇ, ὥστε εἰκότως ἔστι  
 συστήναι πλέον. καὶ ἦττον δέ ἐστι φοβερὸν, ὅταν  
 προχειμάσαντος ἢ ὅταν ἐξ εὐδίας τοῦτο συμβῇ.  
 ἐκείνως μὲν γὰρ ἔοικεν ὥσπερ ὑπόλειμμά τι εἶναι,  
 οὕτω δὲ ἀρχὴ συστάσεως.

20 Διὰ τί λέγεται “οὐ ποτε νυκτερινὸς βορέας 9  
 τρίτον ἵκετο φέγγος”; ἢ διότι ἀσθενῇ τὰ πνεύ-  
 ματα τὰ ἀπὸ τῆς ἄρκτου, ὅταν ἡ νυκτερινά;  
 σημεῖον γὰρ ὅτι οὐ πολὺς ὁ κινηθεὶς ἀήρ, τὸ  
 τηνικαῦτα πνεῦσαι, ὅτε ὀλίγη θερμότης ὑπῆρχεν.  
 ἢ δὲ ὀλίγη ὀλίγον ἐκίνει αἶρα. τελευτᾷ δὲ ἐν  
 25 τρισὶ πάντα, καὶ τὰ ἐλάχιστα ἐν τῇ πρώτῃ τριάδι,  
 ὥστε καὶ τοῦτο τὸ πνεῦμα.

Διὰ τί ὁ βορέας πυκνότερον πνεῖ ἢ ὁ νότος; ἢ 10  
 ὅτι ὁ μὲν βορέας γειννιῶν τῇ οἰκουμένην οὐ λαν-  
 θάνει ὀλιγοχρόνιος ὢν (ἅμα γὰρ πνεῖ καὶ πάρεστιν),  
 30 ὁ δὲ νότος οὐκ ἀφικνεῖται διὰ τὸ πόρρωθεν πνεῖν;

Διὰ τί ὁ νότος ἦττον μετὰ χειμερινὰς νύκτας 11  
 πνεῖ ἢ μεθ’ ἡμέρας; ἢ ὅτι καὶ τῆς νυκτὸς ὁ ἥλιος  
 ἐγγὺς ἐστι τῇ πρὸς νότον χώρα, καὶ ἀλεεινότεραι  
 αἱ νύκτες ἐκεῖ ἢ πρὸς ἄρκτον αἱ ἡμέραι; ὥστε  
 35 πολὺς κινεῖται ὁ ἀήρ, καὶ οὐθὲν ἐλάττων ἢ μεθ’  
 ἡμέραν· ἀλλ’ αἱ θερμότεραι ἡμέραι κωλύουσι  
 μᾶλλον πνεῖν, ξηραίνουσαι τὰς ὑγρότητας.

<sup>1</sup> Omitting, with Forster, the meaningless καθάπερ ὄρθρος  
 add. Ruelle.

\* Theophrastus, *De Ventis*, § 9.

## PROBLEMS, XXVI. 8-11

which will receive and collect all that reaches it ; for just as in a rout if one man resists the rest will also stand firm, so also with the air. Consequently, it sometimes becomes cloudy quite quickly and suddenly. When, therefore, the sunset is disturbed, it is strong evidence that the sun is not in control of the mass, though opposing it for a considerable time, so that naturally the mass becomes greater. It is less alarming when this occurs after a storm than when it arises out of a calm. For in the former case it seems to be only the remainder of the storm, but in the latter it is the beginning of a massing of cloud.

Why is there a saying " Boreas at night does not 9 survive the third day " ? <sup>a</sup> Is it because the winds blowing from the north are weak when they occur at night ? The proof that the quantity of air moved is not great is the fact that the wind blows from that quarter when there was but little heat ; and a small amount of heat moves a small quantity of air. Now all things end in threes and the weakest in the first triad, and that is what this wind does also.

Why is the north wind more frequent than the 10 south wind ? Is it because the north wind being near the earth is noticed though it lasts only a short time (for it blows and appears at the same moment), but the south wind does not reach us because it blows from a great way off ?

Why does the south wind blow less after stormy 11 nights than after stormy days ? Is it because in the night the sun is near to the south region and the nights there are warmer than days in the north ? So that much air is moved, and no less than in the day-time ; but the warmer days prevent more blowing because they dry the moisture.



941 a

Διὰ τί ἐπὶ κυνὶ ὁ νότος πνεῖ, καὶ τοῦτο ὥσπερ 12  
 τι ἄλλο γίνεται τεταγμένως; ἢ διότι θερμὰ τὰ  
 κάτω, τοῦ ἡλίου <οὐ><sup>1</sup> πόρρω ὄντος, ὥστε πολλή ἡ  
 ἀτμὶς γίνεται; καὶ πολλοὶ δὲ <ἄν><sup>2</sup> ἔπνεον, εἰ μὴ  
 941 b διὰ τοὺς ἑτησίας. νῦν δὲ οὗτοι κωλύουσιν, ἢ ὅτι  
 ἐπὶ πᾶσι μὲν σημαίνει τοῖς ἄστροις δυομένοις ἢ  
 ἐπιτέλλουσιν, οὐχ ἥκιστα δὲ ἐπὶ τούτῳ; δῆλον  
 δὲ ὅτι πνεύματα μάλιστα ἐπὶ τούτῳ καὶ μετ'  
 5 αὐτόν. ἐπεὶ δὲ πνίγει, καὶ πνεύματα εἰκότως  
 ἐπ' αὐτῷ τὰ θερμότερα κινεῖται· ὁ δὲ νότος θερμός  
 ἐστίν. ἐπεὶ δὲ εἴθισται μάλιστα ἐκ τῶν ἐναντίων  
 εἰς τὰ ἐναντία μεταβάλλειν, πρὸ κυνὸς δὲ οἱ πρό-  
 δρομοι πνέουσιν ὄντες βορέαι, εἰκότως μετὰ κύνα  
 νότος πνεῖ, ἐπειδὴ ἐπισημαίνει μὲν, ἐπιτέλλουσι  
 10 δὲ τοῖς ἄστροις τὸ [δὲ] ἐπισημαίνειν ἐστὶν μετα-  
 βολὴν τοῦ ἀέρος ποιεῖν· μεταβάλλει δὲ πάντα εἰς  
 τοὺς ἐναντίους ἢ τοὺς ἐπὶ δεξιὰ ἀνέμους τὰ πνεύ-  
 ματα. ἐπεὶ δὲ βορέας εἰς τοὺς ἐπιδεξιούς <οὐ><sup>3</sup>  
 μεταβάλλει, εἴη ἄν αὐτῷ λοιπὸν εἰς νότον μετα-  
 βάλλειν. ἔστιν δὲ καὶ ἡ μετὰ τὰς χειμερινὰς  
 15 τροπὰς πεντεκαδεκάτη νότιος, διὰ τὸ τὰς μὲν  
 τροπὰς ἀρχὴν τινα εἶναι, κινεῖν δὲ τὸν κατ' αὐτὴν  
 μάλιστα ἀέρα τὸν ἡλίον, εἶναι δὲ ἐν ταύταις ταῖς  
 τροπαῖς πρὸς νότον. καθάπερ οὖν καὶ τὰ ἀπ'  
 ἀνατολῆς κινῶν ἀπηλιώτας ἀνέμους ἡγείρεν, οὕτω  
 καὶ τὰ ἀπὸ μεσημβρίας κινῶν νότους ἐγείρει. οὐκ  
 20 εὐθὺ δὲ ἀπὸ τροπῶν ποιεῖ τοῦτο διὰ τὸ βραχυτάτας  
 ποιεῖσθαι τὰς μεταστάσεις τότε, ἀλλ' ἐν τῇ πεντε-  
 καδεκάτῃ διὰ τὸ τὸν χρόνον τοῦτον συμμέτρως  
 ἔχειν τῇ κατὰ τὴν μετάστασιν πρώτη φαντασίᾳ.

<sup>1</sup> οὐ added by Forster.<sup>2</sup> ἄν added by Forster.<sup>3</sup> οὐ added by Forster from Th. G.

Why does the south wind blow at the time of the 12 Dog-star, and that too just like any other periodic occurrence? Is it because the lower region is hot as the sun is not far away, so that there is considerable evaporation? They would blow often if it were not for the Etesian winds, but, as it is, these prevent them. Or is it because some sign accompanies the setting and rising of all stars, and of the Dog-star as much as any? For it is clear that the winds occur at the time of its rising and after it. But when the weather is stifling, naturally the hottest winds occur at this time; and the south wind is hot. But as it is usual for change to take place between opposites, and as the "precursors," which are northerly winds, blow before the Dog-star, naturally the south wind blows after it, since it is a sign, and at the rising of the stars the sign in question means a change in the air. Now all winds change either to their opposites or to those on their right.<sup>a</sup> Now since the north wind does not change to the winds on the right, its only possible change is to a south wind. Now on the fifteenth day after the winter solstice the wind is in the south, because the solstice marks the beginning of a change, and the sun sets in motion the air which is nearest to it, and at the time of the winter solstice the sun is in the south. Just as it rouses the east winds when it affects the eastern regions, so it rouses the south winds when it affects the southern regions. It does not produce this effect immediately after the solstice, because at the time the change affects a very small area, but it does so on the fifteenth day, because this is the moment which coincides with the first impression produced by the change; for that

<sup>a</sup> Right, *i.e.* according to the compass points: here, therefore, the East.

941 b ὅλου γάρ ἐστι μέρος εὐσημότατον ὁ εἰρημένος χρόνος.

Διὰ τί ἐπὶ Ὠρίωνι γίνονται αἰόλοι μάλιστα αἱ 13  
 25 ἡμέραι καὶ ἀκαιρίαι τῶν πνευμάτων; ἢ ὅτι ἐν μεταβολῇ αἰεὶ πάντα ἀοριστεῖ μάλιστα, ὁ δ' Ὠρίων ἀνατέλλει μὲν ἐν ἀρχῇ ὁπώρας, δύνει δὲ χειμῶνος, ὥστε διὰ τὸ μήπω καθεστάναι μίαν ὥραν, ἀλλὰ τὴν μὲν γίνεσθαι, τὴν δὲ παύεσθαι, διὰ ταῦτα  
 30 ἀνάγκη καὶ τὰ πνεύματα ἀκατάστατα εἶναι διὰ τὸ ἐπαμφοτερίζειν τὰ ἐξ ἐκατέρας. καὶ χαλεπὸς δὴ λέγεται καὶ δύνων καὶ ἀνατέλλων ὁ Ὠρίων διὰ τὴν ἀορισίαν τῆς ὥρας· ἀνάγκη γὰραραχώδῃ εἶναι καὶ ἀνώμαλον.

Διὰ τί ὁ νυκτερινὸς βορέας τριταῖος λήγει; 14  
 35 πότερον ὅτι ἀπὸ μικρᾶς καὶ ἀσθενοῦς ἀρχῆς, ἢ τρίτῃ δὲ κρίσιμος; ἢ ὅτι ἀθρόος ἢ ἔκρυσις, ὥσπερ τῶν ἐκνεφιῶν; ταχεῖα οὖν ἢ παῦλα.

Διὰ τί βορέαι πλείστοι πνέουσι τῶν ἀνέμων; 15  
 ἢ διὰ τὸ πρὸς τούτῳ τὴν οἰκουμένην τῷ τόπῳ  
 942 a ὑποκεῖσθαι ὄντι ὑψηλῷ καὶ ἔξω τροπῶν καὶ πλήρει χιόνος, ἢ οὐδέποτε ἔνια ὄρη λείπει; τὸ πολὺ οὖν ὑγραιομένων τῶν πεπηγότων πολλάκις πνεῦμα γίνεται. τοῦτο δὲ ἐστι βορέας, τὸ ἐκ τῶν ἀπὸ τῆς ἄρκτου τόπων πνεῦμα.

5 Διὰ τί οἱ νότοι πνέουσι μὲν χειμῶνος καὶ ἔαρος 16  
 ἀρχομένου καὶ μετοπώρου λήγοντος, εἰσὶ δὲ κυματοειδεῖς καὶ συνεστραμμένοι, καὶ τοῖς ἐν Λιβύῃ ὁμοίως ψυχροὶ ὥς οἱ βορέαι ἐνταῦθα; ἢ διότι πλησίον τοῦ ἡλίου ὄντος ἀνάγκη κινεῖσθαι τὰ πνεύματα; ὁ δὲ ἥλιος τοῦ χειμῶνος πρὸς  
 10 νότον φέρεται, καὶ τοῦ μὲν ἔαρος ἀρχομένου, τοῦ δὲ μετοπώρου τελευτῶντος ἤδη θερμαίνει, τὸ δὲ

## PROBLEMS, XXVI. 12-16

date is the most significant moment in the whole process.

Why is there more variety in the day and more 13 frequent change of wind at the rising of Orion than at other times? Is it because everything is less fixed in time at the moment of change, and Orion rises at the beginning of autumn, and sets in the winter, so that as one season is not yet established, but one is arriving and another dying, for this reason the winds also must be unsettled because the conditions are intermedial between the two seasons? In fact, Orion is described as an unpleasant season both rising and setting because of the lack of fixity of the season; it must necessarily be a time of confusion and inconsistency.

Why does the nightly north wind cease on the third 14 day? Is it because it arises from a small and weak beginning, and the third day is its critical moment? Or is it because it rushes on all at once, like the hurricane winds? So its cessation is equally swift.

Why are the north winds the commonest of all 15 winds? Is it because the inhabited world lies nearest to the north which is high, outside the range of the solstice and full of snow, which never leaves some mountains? So the mass of frozen matter as it liquefies often produces wind. And this is the north wind, the wind, that is, which comes from the region of the North Pole.

Why do the south winds blow at the beginning of 16 winter and spring and at the end of autumn, and are gusty and move in circles, and are as cold in Libya as the north wind in this country? Is it because the sun being near the winds must be set in motion? Now in winter the sun travels towards the south, and at the beginning of spring and at the end of autumn it is already giving out heat, whereas throughout the

942 a

θέρος πρὸς βορέαν φέρεται, ἐκείνους δὲ ἀπολείπει  
τοὺς τόπους. θερμὸς δὲ ἐστὶ διὰ τὸ μίγνυσθαι  
τὸ πνεῦμα τῷ κατὰ Λιβύην ἀέρι θερμῷ ὄντι· καὶ  
διὰ τοῦτο μεγαλοκύμων νοτίζειν ποιεῖ τὸ θέρος,  
15 ἐμπίπτων εἰς τὴν θάλατταν.

Διὰ τί ὁ νότος δυσώδης; ἢ ὅτι ὑγρὰ καὶ θερμὰ 17  
ποιεῖ τὰ σώματα, ταῦτα δὲ σήπεται μάλιστα; οἱ  
δὲ ἐκ τῆς θαλάττης νότοι ἀγαθοὶ φυτοῖς· ἐκ  
θαλάττης γὰρ αὐτοῖς προσπίπτει. καὶ τῆς Ἀτ-  
20 τικῆς τῷ Θριασίῳ πεδίῳ αἴτιον, διότι ἀπεψυγμένος  
ἀφικνεῖται. αἱ δ' ἐρυσίβαι γίνονται ὑπὸ ὑγρότητος  
θερμῆς μὲν, ἀλλοτρίας δέ.

Διὰ τί ἄνεμος γίνεται πρὸ τῶν ἐκλείψεων ὥς 18  
τὰ πολλά, ἀκρόνυχον μὲν πρὸ τῶν μεσονυκτίων  
ἐκλείψεων, μεσονύκτιον δὲ πρὸ τῶν ἑώων; ἢ  
25 διότι ἀμαυροῦται τὸ θερμὸν τὸ ἀπὸ τῆς σελήνης  
διὰ τὸ πλησίον ἤδη φορὰν εἶναι, ἐν ᾧ γενομένῳ  
ἔσται ἡ ἐκλειψις; ἀνιεμένου οὖν ᾧ κατείχετο ὁ  
ἀῆρ καὶ ἡρέμει, πάλιν κινεῖται καὶ γίνεται πνεῦμα  
τῆς ὀψιαίτερον ἐκλείψεως ὀψιαίτερον.

Διὰ τί ὁ νότος οὐκ ἀρχόμενος, ἀλλὰ λήγων 19  
30 ὑέτιος; πότερον ὅτι πόρρωθεν συνάγει τὸν ἀέρα;  
γίνεται δὲ συνιστάντος τὸ ὕδωρ, συνίσταται δὲ  
ὑστερον ἢ ἀρχεται. ἢ ὅτι ἀρχομένου θερμὸς  
ἐστὶν ὁ ἀῆρ ἔτι διὰ τὸ ἐκ τοιούτου ἐληλυθέναι,  
ἐπιχρονιζόμενος δὲ ψυχθεὶς συνίσταται μᾶλλον εἰς  
ὑδωρ;

Διὰ τί ὁ νότος, ὅταν μὲν ἐλάττων ᾖ, αἰθριὸς 20  
35 ἐστὶν, ὅταν δὲ μέγας, νεφώδης καὶ χρονιώτερος;  
πότερον, ὥσπερ τινὲς λέγουσιν, διὰ τὴν ἀρχήν;  
ἐὰν μὲν γὰρ ἀπ' ἐλάττονος, αἰθριος, ἐὰν δὲ ἀπὸ



## PROBLEMS, XXVI. 16-20

summer it is travelling towards the north, and deserting those quarters. It is hot because the wind mingles with the air in Libya which is hot ; so it is gusty and, by falling on the sea, makes the summer wet.

Why does the south wind produce an unpleasant 17 smell ? Is it because it makes bodies moist and hot, and in this condition they are most liable to decomposition ? But south winds from the sea are good for plants ; for they fall upon them from the sea. This is the case in Attica on the Thriasian Plain, for the south wind arrives cool. Now red blight is due to moisture which is hot, but comes from elsewhere.

Why does wind arise as a rule before an eclipse, at 18 nightfall before an eclipse at midnight, and at midnight before an eclipse at dawn ? Is it because the heat from the moon lessens as its direction is near the earth, which is the condition of an eclipse ? So when that by which the air is controlled and kept at rest slackens off, the wind moves again and comes later when the eclipse is later.

Why does the south wind bring rain, not at the 19 beginning but when it is dying down ? Is it because it collects the air from far off ? Now the rains come when the air collects, and it collects more later on than at the beginning. Or is it because when the wind first rises the air is still hot, having just come from a hot region, but as time goes on it grows cool and collects more into rain ?

Why does the south wind, when it is slight, come 20 with a clear sky, but when it is strong, brings cloud and lasts for a longer time ? Is it due, as some say, to its source ? For if it arises from a weaker source the



942 a

πλείονος ὀρμήσῃ, νεφελώδης. ἢ ὅτι ἐλάττων ἀρχόμενός ἐστιν, ὥστε οὐ πολὺν αέρα ὠθεῖ, ἐπὶ

942 b

τέλει δὲ εἴωθεν γίνεσθαι μέγας; διὸ καὶ παροιμιάζονται “ ἀρχομένου γε νότου καὶ λήγοντος βορέας.”

Διὰ τί προῖεται τοῦ χειμῶνος ἀπὸ τῆς ἕω τὰ 21  
πνεύματα, τοῦ θέρους δὲ καὶ ἀφ’ ἐσπέρας; ἢ ὅτι  
5 ὅταν μηκέτι κρατῇ ὁ ἥλιος, ἀφιέμενος ὁ ἀὴρ ῥεῖ;  
δύνων τε οὖν καταλείπει νέφη, ἀφ’ ὧν οἱ ζέφυροι  
καὶ ὅσον ἂν ἐπαγάγῃ ἐκείνοις τοῖς ἐν τῷ κάτω  
ἡμισφαίριῳ οἰκοῦσιν, ἐωθινὸν πνεῦμα γίνεται.  
τὰναντία δέ, ὅταν δύνῃ ἐν τῷ κάτω μέρει, ἐκείνοις  
10 τε ζεφύρους ποιήσῃ καὶ ἐνταῦθα ἐωθινὸν πνεῦμα  
ἀπὸ τοῦ ἐπομένου αἵρος αὐτῷ. διὰ τοῦτο καὶ  
καταλάβῃ ἄλλον ἄνεμον, μείζων γίνεται αἰρομένου,  
ὅτι προσέθηκεν.

Διὰ τί οἱ κύνες τὰ ἱχθυήματα εὐρίσκουσιν 22  
ζεφύρου πνέοντος; ἢ διότι μάλιστα συγχεῖ διὰ  
15 τὸ συνεχέστατος εἶναι τῶν ἀνέμων καὶ μάλιστα  
ὑπὸ τὴν γῆν πνεῖν;

Διὰ τί, ὅταν ἀστέρες διάττωσιν, ἀνέμου σημεῖον; 23  
ἢ ὅτι ὑπὸ τοῦ πνεύματος φέρονται, καὶ πρότερον  
ἐκεῖ γίνεται πνεῦμα ἢ παρ’ ἡμῖν; διὸ καὶ ἀφ’ οὗ  
ἂν τόπου φέρωνται οἱ ἀστέρες, ἐν τούτῳ καὶ τὸ  
πνεῦμα γίνεται.

20 Διὰ τί μεγίστας νεφέλας τῶν ἀνέμων ὁ ζέφυρος 24  
ἄγει; ἢ διότι ἐκ πελάγους πνεῖ καὶ κατὰ τὴν  
θάλατταν; ἐκ πολλοῦ οὖν καὶ συνάγει.

Διὰ τί οἱ ἐπὶ τέλει ἄνεμοι μέγιστοι; ἢ ὅτι ὅταν 25  
ἀθρόοι ἐκπνεύσωσιν, ὀλίγον τὸ θερμόν;

\* For the whole proverb cf. 945 a 29.

## PROBLEMS, XXVI. 20-25

sky is clear, but if from a larger source the sky is cloudy. Or is it smaller to begin with, so that it does not drive along much air, but it usually becomes strong at the end? Hence they quote the proverb "When the south wind begins and the north wind dies down." <sup>a</sup>

Why do the winds come from the east in the 21 winter, and from the west also in the summer? Is it because, when the sun can no longer exercise control, the air flows free? So, when the sun sets, it leaves clouds behind, from which the west winds blow; and all that the sun takes with it to those who live in the southern hemisphere, produces an east wind with them. On the contrary, when the sun sets in the southern hemisphere, it will produce a west wind for those who dwell there and an east wind here from the air which follows it. For this reason also if it finds another wind blowing it will blow stronger as the sun rises, because it adds to it.

Why are dogs least able to follow scent when the 22 west wind blows? Is it because the scent is most confused because the west is the most constant of all the winds and blows most upon the land?

Why is it a sign of wind when there are shooting 23 stars? Is it because they are carried by the wind, and the wind reaches them before us? So also the wind rises in the quarter from which the stars are travelling.

Why of all the winds does the south wind collect 24 the largest clouds? Is it because it blows from the open sea and over the sea? So it collects clouds over a large range.

Why are winds strongest at the end? Is it be- 25 cause when they expend themselves all at once, the quantity of heat is small?

942 b

25

Διὰ τί, ἐὰν περὶ ἰσημερίαν λῖψ πνεύση, ὕδωρ 26  
 γίνεται; ἢ ὅτι καθ' ὃν ἂν ἦ ὁ ἥλιος τόπον τοῦ  
 κόσμου, τὰ ἐντεῦθεν πνεύματα κινεῖ; διὸ καὶ ἡ  
 τῶν πνευμάτων περίστασις κατὰ τὴν τοῦ ἡλίου  
 φορὰν γίνεται. ἐπεὶ δ' ἡ ἰσημερία μεθόριόν ἐστι  
 30 χειμῶνος καὶ θέρους, ὅταν συμβῇ τὸν ἥλιον κατὰ  
 τὴν ἡμῖν φαινομένην ἰσημερίαν ὑπερβεβληκέναι ἢ  
 ἐκλείπειν τοῦ ἀκριβοῦς ὅρου καὶ εἶναι μᾶλλον ἐν  
 τοῖς χειμερίοις, συμβαίνει τοὺς ἐκ τούτου τοῦ  
 μέρους ἀνέμους πνεῖν, ὧν ἐστὶ πρῶτος λῖψ, ὧν  
 ὑγρὸς φύσει. ὄντος δὲ τοῦ ἡλίου μᾶλλον ἐν τῷ  
 χειμερίῳ μέρει τοῦ κόσμου, καὶ κινουντος τὰ ἐν  
 85 αὐτῷ πνεύματα, τὰ χειμῶνος ἔργα συμβαίνει  
 γίνεσθαι· τούτων δέ ἐστιν ὁ ὄμβρος. ἔτι δὲ  
 ἐπειδὴ ἡ ἰσημερία ἐστὶν καθάπερ χειμῶν καὶ θέρος  
 ἰσοκρατές, ἐὰν ὁποτέρωθεν αὐτῶν τι προστεθῇ,  
 943 a εὐσημον τὴν ῥοπὴν ποιεῖ, καθάπερ ἐπὶ τῶν ἰσα-  
 ζόντων ζυγῶν. ἐπεὶ δὲ ὁ λῖψ ἐκ τε τῆς χειμερίου  
 τάξεώς ἐστιν καὶ ὑγρὸς φύσει, προστεθεὶς ἐν τῇ  
 ἰσημερίᾳ ῥοπὴν χειμῶνος ἐποίησεν καὶ ὄμβρον· ὁ  
 γὰρ ὄμβρος χειμῶν ἐστὶν οἰκειότατος τῷ πνεύματι.  
 5 Διὰ τί ὁ νότος καὶ ὁ εὖρος θερμότεροι ὄντες τῶν 2'  
 ἐναντίων, ὁ μὲν τοῦ βορέου, ὁ δὲ τοῦ ζεφύρου,  
 ὕδατωδέστεροί εἰσιν; καίτοι διὰ ψυχρότητα ὕδωρ  
 ἐξ αἰέρος γίνεται. οὐ γὰρ διὰ τὸ ἀπωθεῖν τὸν  
 βορέαν ἐντεῦθεν γίνεται τὰ νέφη· ὁ γὰρ ζέφυρος  
 10 καὶ ὁ εὖρος ἀπάγουσιν ἄμφω (ὁμοίως γὰρ πλάγιοι),  
 καὶ οἱ ἄλλοι δὲ πάντες, ὅθεν πνέουσιν. πότερον  
 ὅτι ἀντιπερίσταται τὸ ψυχρὸν εἶσω μᾶλλον, ὅταν

Why is it that, if the south-west wind blows at the 26  
time of the equinox, rain follows? Is it because the  
sun drives the wind in that part of the world in which  
it is? So the veering of the winds depends upon the  
course of the sun. But since the time of the equinox  
is the boundary between winter and summer, when  
the sun has passed beyond what appears to us the  
equinox or is short of the precise boundary and is  
more in the wintry quarter, the winds are those  
which blow from that quarter, of which the south-  
west is the first, being naturally a wet wind. But  
when the sun is rather in the wintry quarter of the  
world, and drives the winds in that quarter, wintry  
conditions naturally occur, and one of these is rain.  
Again, since the equinox is a time at which winter  
and summer are equally powerful, if any addition is  
made to either of them, the balance in that direction  
becomes marked, as we also see happens with balan-  
ced scales. But since the south-west wind arises  
from wintry conditions and is naturally wet, when it  
is added at the time of the equinox it produces a  
balance in favour of winter and rain, for rain is the  
wintry condition most closely related to this wind.

Why is it that the south and the south-east wind, 27  
which are warmer than the opposite winds—the  
north and west winds—are more rainy? And yet  
rain comes from the atmosphere owing to cold.  
For it is not due to the north wind thrusting them  
away from our part of the world that the clouds  
form; for the west and south-east winds both drive  
away the clouds (for they equally blow sideways) and  
so do all the other winds drive the clouds from the  
quarters from which they blow. Is it because the cold  
is compressed more within, when the heat without is

943 a

- ἢ ἔξω τὸ θερμὸν μᾶλλον; ἢ ἔστι μὲν τι καὶ διὰ  
τὸ ὄθεν πνέουσιν, αἰθρίους εἶναι; καὶ γὰρ εὖρος  
ἀπ' ἡοῦς ἐστίν. πρὸς δὲ ἐσπέραν κείται ζέφυρος.<sup>1</sup>
- 15 ἀλλὰ καὶ διότι πρότερον θερμαινόμενος ὁ ἀήρ,  
ὥσπερ καὶ τὰ ὕδατα, τάχιστα καὶ μάλιστα ψύχεται.  
φέρεται οὖν ὁ μὲν ἀπὸ τοῦ εὖρου ἀπ' ἀνατολῆς  
ἀήρ θερμός, ὁ δὲ ἀπὸ τοῦ νότου ἀπὸ μεσημβρίας.  
ὅταν οὖν ἔλθωσιν εἰς τὸν ψυχρότερον τόπον, ταχὺ
- 20 πῆγνυνται καὶ συνίστανται εἰς ὕδωρ. καὶ μᾶλλον  
ὁ εὖρος ποιεῖ ὕδωρ, ὅτι ἀπὸ τοῦ ἡλίου μᾶλλον  
φέρει τὸν αέρα, καὶ ὁμοίως θερμόν. ὁ δὲ νότος  
λήγων ὑδατώδης, ὅτι ψυχρὸς ὁ πρῶτος φερόμενος  
ἀήρ ἀπὸ τῆς θαλάττης, ὁ δὲ τελευταῖος διάθερμος  
ὢν ἀπὸ τῆς γῆς κομίζει. ἢ οὐ μόνον τοῦτ' αἴτιον,
- 25 ἀλλ' ὅτι καὶ μείζων λήγων ὁ νότος γίνεται; διὸ  
καὶ ἡ παροιμία εἰς αὐτὸν “ἀρχομένου τε νότου.”  
οἱ δὲ μείζους ψυχρότεροι. ὥστε πηγνύει ὕστερον  
τὰ νέφη. ἢ διὰ τοῦτο ὑδατωδέστερος ἢ ἀρχόμενος;  
Διὰ τί οἱ ἄνεμοι ξηραίνουν ψυχροὶ ὄντες; ἢ 28  
διότι ἀτμίζειν ποιοῦσιν οἱ ψυχρότεροι; διὰ τί
- 30 δὲ μᾶλλον ἢ ὁ ἥλιος; ἢ διότι ἀπάγουσι τὴν  
ἀτμίδα, ὁ δὲ ἥλιος καταλείπει; ὑγραίνει μὲν οὖν  
μᾶλλον, ξηραίνει δὲ ἥττον.

Διὰ τί ὁ καικίας μόνος τῶν ἀνέμων ἐφ' ἑαυτὸν 29  
ἄγει τὰ νέφη, ὥσπερ καὶ ἡ παροιμία λέγει “ἐλκων  
ἐφ' αὐτὸν ὥσπερ καικίας νέφος.” οἱ γὰρ ἄλλοι,

<sup>1</sup> ἦδε δὲ ἡ χώρα πρὸς ἐσπέραν κείται καὶ ζέφυρος ms. The text has been revised according to Th. G.

<sup>a</sup> 945 a 29 for complete proverb.

greater? Or is it due to the direction from which they blow, that they cause clear skies? For the south-east wind blows from an easterly direction; but the west wind lies towards the west. But it is also because air which is previously heated also cools very quickly, just as water does. Now the air which is carried by the south-east wind from the east is warm, and so is the air carried by the south-west from the south. So when they reach a colder district, they quickly condense and form rain. The south-east wind produces rain even more, because it brings the air more from the direction of the sun and this is equally warm. But the south wind is a rainy wind when it is dying down, because the air, when it first comes off the sea, is cold, but that which comes last, when it is warmed through, comes from the land. Perhaps this is not the only reason but it is also due to the fact that the south wind becomes stronger when it is dying down. Hence the proverb, "When the south wind begins." <sup>a</sup> But the stronger winds are colder. So that the south wind masses the clouds later on. Is it for this reason that it is more rainy than at the beginning?

Why do winds which are cold have a drying effect? 28  
Is it because the colder winds produce evaporation? Why do they cause more evaporation than the sun? Is it because they drive off the vapour, but the sun leaves it? So it produces more moisture and less dryness.

Why is the north-easter the only wind which attracts clouds to itself, as the proverb says, "Drawing clouds to itself like the north-easter"? 29  
For the other winds drive (the clouds) from the quarter



943 a ὅθεν ἂν πνέωσιν, ἐνταῦθα ἀναστέλλουσιν. πότερον  
 35 αἷτιον ὅτι ἅμα ὁ ἐναντίος πνεῖ; ἢ οὐκ ἂν ἐλάν-  
 θανεν, ἀλλὰ πέφυκεν τὸ πνεῦμα κύκλου γραμμὴν  
 φέρεσθαι; οἱ μὲν οὖν ἄλλοι περὶ τὴν γῆν πνέουσιν.  
 943 b τοῦτο δὲ τὸ κοῖλον τῆς γραμμῆς πρὸς τὸν οὐρανὸν  
 καὶ οὐκ ἐπὶ τὴν γῆν ἐστίν, ὥστε ἐπὶ τὴν ἀρχὴν  
 πνέων ἐφ' αὐτὸν τὰ νέφη ἄγει.

Διὰ τί ἀπὸ μὲν τῆς θαλάττης οὐκ ἀποπνεῖ ἕωθεν 30  
 ψυχρὸν, ἀπὸ δὲ τῶν ποταμῶν; ἢ ὅτι ἡ μὲν  
 θάλαττά ἐστίν ἐν ἀναπεπταμένοις τόποις, οἱ δὲ  
 ποταμοὶ ἐν στενοῖς; ἢ οὖν ἀπὸ τῆς θαλάττης αὔρα  
 εἰς πολὺν τόπον σκίδνεται, ὥστε εἶναι ἀσθενής, ἡ  
 δὲ ἀπὸ τῶν ποταμῶν ἀθρόως φέρεται καὶ μᾶλλον  
 10 ἰσχύει· διὸ μᾶλλον εἰκότως φαίνεται ψυχρά. ἢ οὐ  
 τοῦτ' ἐστὶν αἷτιον, ἀλλ' οἱ μὲν ποταμοὶ ψυχροὶ  
 εἰσιν, ἡ δὲ θάλαττα οὔτε θερμὴ οὔτε ψυχρά;  
 γίνεται δὲ ἡ αὔρα καὶ ἀποπνοὴ θερμαινομένων  
 ἢ ψυχομένων· ὁπότερον γὰρ ἂν τούτων πάσχη,  
 ἐξαερούται, ἐξαερουμένου δὲ τοῦ ὕδατος ὁ ἀῆρ  
 γινόμενος φέρεται, ὃ ἐστὶν αὔρα. τὸ μὲν οὖν ἀπὸ  
 15 τῶν ψυχρῶν ψυχρὸν εἰκότως ἀποπνεῖ, τὰ δὲ ἀπὸ  
 τῶν σφόδρα θερμῶν ἀποπνέοντα ψύχεται καὶ  
 γίνεται ψυχρά. τοὺς μὲν οὖν ποταμοὺς ψυχροὺς  
 ἅπαντας εὖροι τις ἂν, ἡ δὲ θάλαττα οὔτε ψυχρὰ  
 οὔτε θερμὴ σφόδρα ἐστίν. οὔτε οὖν τὸ ἀποπνέον  
 ψυχρὸν ἀπ' αὐτῆς ἐστίν, διὰ τὸ μὴ ψυχρὰν εἶναι  
 20 σφόδρα, οὔτε ψύχεται ταχύ, διὰ τὸ μὴ θερμὴν  
 εἶναι σφόδρα.

Διὰ τί ὁ ζέφυρος εὐδιεινὸς καὶ ἡδιστος δοκεῖ εἶναι 3  
 τῶν ἀνέμων, καὶ οἶον καὶ Ὅμηρος ἐν τῷ Ἡλυσίῳ  
 πεδίῳ, “ ἀλλ' αἰεὶ ζεφύροιο διαπνέουσιν ἀῆται ”;  
 ἢ πρῶτον μὲν ὅτι ἔχει τὴν τοῦ ἀέρος κράσιν; οὔτε  
 90

from which they blow. Is the reason that the contrary wind blows at the same time? Or would this be obvious, but does the wind naturally travel along the circumference of a circle? The other winds all blow round the earth; but the concave side of this circle faces the heavens and not the earth, so that it blows back in the direction of its starting-point, and it draws the clouds towards itself.

Why does it not blow cold in the morning off the 30 sea, whereas it does off rivers? Is it because the sea lies in wide expanses, but rivers in confined areas? Thus the breeze which blows off the sea is scattered over a wide area, so that it is feeble, but that from the rivers travels in concentrated form and is stronger, so that it naturally seems colder. Or is this not the reason, but are rivers cold, whereas the sea is neither hot nor cold? Now a breeze and an exhalation occur when things are becoming either warm or cold: whichever of these conditions is present, there is evaporation, and when water evaporates the resultant air begins to move and this is a breeze. What, then, blows from cold liquids naturally blows cold, and what blows from very hot liquids cools and grows cold. So one would find that all rivers are cold, but the sea is neither very cold nor very hot. So that which blows from it is not cold, because the sea is not very cold nor does it cool quickly, because it is not very hot.

Why does the south-west wind seem to be calm 31 and the gentlest of all the winds, as Homer describes it in the Elysian Plain,<sup>a</sup> "The winds there ever blow from the south-west"? Is it because in the first place it contains a mixture of air? For it is

<sup>a</sup> *Od.* iv. 567, but it is not the accepted reading.

943 b

25 γὰρ θερμὸς ὥσπερ οἱ ἀπὸ μεσημβρίας καὶ ἔω, οὔτε  
 ψυχρὸς ὥσπερ οἱ ἀπὸ τῆς ἄρκτου, ἀλλ' ἐν μεθορίῳ  
 ἐπὶ τῶν ψυχρῶν καὶ θερμῶν πνευμάτων· γειτνιῶν  
 δὲ ἀμφοῖν τῆς δυνάμεως αὐτῶν κοινωνεῖ, διὸ καὶ  
 εὐκρατὸς ἐστὶ καὶ πνεῖ ἕαρος μάλιστα. ἔτι τὰ  
 πνεύματα περιίσταται ἢ εἰς τὰναντία ἢ ἐπὶ τὰ  
 30 δεξιά. μετὰ οὖν τὸν βορέαν πνέων (ἐπὶ δεξιά γὰρ  
 ὁ τόπος) εὐδοκιμεῖ, ὥσπερ παρὰ χαλεπὸν πρᾶος.  
 καὶ ἅμα ὅταν ἀποχειμάσῃ, εὐδία εἴωθεν γίνεσθαι  
 ὥς ἐπὶ τὸ πολὺ. ὁ δὲ βορέας χειμέριος ἄνεμος.  
 [καὶ ὁ ἀπηλιώτης δὲ ἐν τῷ μέσῳ ὦν τῶν θερμῶν  
 καὶ τῶν ψυχρῶν πνευμάτων ἡττον αὐτοῖς κοινωνεῖ.  
 35 ἀπηλιώτης μὲν γὰρ πνέων τὰ πρὸς νότου πνεύματα  
 κινεῖ (ἐνταῦθα γὰρ ἡ μετάστασις αὐτοῦ ἐστίν),  
 κινῶν δὲ οὐ μίγνυται αὐτοῖς. ὁ δὲ ζέφυρος καὶ  
 944 a κινεῖται ὑπὸ τῶν νοτίων, καὶ πνέων κινεῖ τὰ βόρεια·  
 τελευτᾷ γὰρ ἐνταῦθα ἡ περίοδος τῶν πνευμάτων.  
 διὸ τῶν μὲν τὴν τελευτὴν τῶν δὲ τὴν ἀρχὴν ἔχων  
 ἐν αὐτῷ δικαίως ἡδύς ἐστι καὶ δοκεῖ εἶναι.]

Διὰ τί ἐπὶ κὺνὶ νότος πνεῖ; ἢ ὅτι ἐπὶ πᾶσι μὲν 32  
 5 σημαίνει τοῖς ἄστροις δυομένοις ἢ ἐπιτέλλουσιν,  
 οὐχ ἡκιστα δὲ ἐπὶ τούτῳ; δηλὸν ὅτι πνεύματα  
 μάλιστα ἐπὶ τούτῳ καὶ μετ' αὐτόν. ἐπεὶ δὲ πνίγει,  
 καὶ πνεύματα εἰκότως ἐπ' αὐτῷ τὰ θερμότατα  
 κινεῖται· ὁ δὲ νότος θερμὸς ἐστίν.

10 Διὰ τί ὁ ζέφυρος πρὸς τὴν δειλὴν πνεῖ, πρῶτ' δὲ 33

<sup>a</sup> Cf. Problem 12, note.

<sup>b</sup> This contradicts Problem 12.

neither hot like the wind that blows from the south and east, nor cold like the wind that blows from the north, but it is on the border-line between the cold and the hot winds : being near both these it shares the power of both, so that it is well mixed and blows most in springtime. Winds, moreover, change either to a contrary direction or to their right.<sup>a</sup> As, then, the south-west wind blows after the north (for it is on the right), it is held in good repute and is mild in contrast with the bitter north.<sup>b</sup> And when the wind drops, the weather is usually calm. But the north wind is a wintry wind. [The east wind though it lies between hot and cold winds shares their nature less. For the east wind as it blows stirs the southerly winds (for that is the direction into which it changes), but though it stirs them it does not mingle with them. For the south-west wind is stirred by the south wind, and when it blows it stirs the northerly winds ; for the circuit of the winds ends here. So, as it contains the ends of some winds and the beginning of others, it justly is and is regarded as a pleasant wind.]<sup>c</sup>

Why does the south wind blow at the time of the 32  
Dog-star ? Is it because there are significant signs at the time of the rising and setting of all the stars and this is no less true of the Dog-star ? It is clear that winds blow most at this time and after it. But since it is stifling, the hottest winds naturally blow at this time, and the south wind is hot.<sup>d</sup>

Why does the south-west wind blow towards even- 33

<sup>c</sup> This passage, which seems inappropriate here, is omitted from at least one ms. It is, however, translated by Th. G. It recurs in Problem 55, to which it seems more applicable.

<sup>d</sup> The remainder of this problem is here omitted, being identical with the last part of Problem 12, from ἐπεὶ δέ (941 b 6) to the end.

944 a

οὐ; ἢ αἴτιος μὲν ἐστὶν ὥς ἐπὶ τὸ πολὺ τῶν πνευ-  
μάτων ὁ ἥλιος ἀνατέλλων καὶ δύνων; ὅταν γὰρ  
ὑγρὸν ὄντα τὸν ἀέρα διαθερμαίνων πέττῃ καὶ  
διακρίνῃ, εἰς πνεῦμα διακρίνει· ἐὰν δὲ ἢ πνευ-  
ματώδης ὁ ἀήρ, ἔτι μᾶλλον ἐκπνευματοῦται ὑπὸ  
15 τοῦ ἡλίου. ὅταν μὲν οὖν ἐπ' ἀνατολῇ ἢ ὁ ἥλιος,  
πόρρω ἐστὶ τοῦ ζεφύρου· ἀπὸ γὰρ δυσμῶν πνεῖ.  
ὅταν δὲ περὶ τὸ δύνειν ᾗδῃ, τότε διακεκριμένον ἐστὶ  
τὸ πνεῦμα τελέως. ἀπὸ δὲ μέσου ἡμέρας καὶ πρὸς  
τὴν δείλῃν συμμετρότατα ἔχει πρὸς τὸ διαθερμᾶναι  
καὶ διακρίναι. διὰ ταῦτα δὲ καὶ ὁ ἀπηλιώτης πρῶτ'  
ἄρχεται πνεῖν· τοῦ γὰρ ὑπὲρ γῆς ἀέρος τῆς νυκτὸς  
ἐξυγραινομένου καὶ τῇ γῇ πλησιάσαντος διὰ βάρους,  
ἔωθεν διακρίνων αὐτὸν ὁ ἥλιος τὸν καθ' αὐτὸν κινεῖ  
πρῶτον. τὸ δὲ ἀπὸ τοῦ ἡλίου πνεῦμα ἀνατέλλοντος  
ἐντεῦθεν ἀπηλιώτης καλεῖται.

25 Διὰ τί αἰρομένου τοῦ ἡλίου καὶ αὐξάνεται καὶ 34  
πίπτει τὰ πνεύματα; ἢ ὅτι τὸ πνεῦμά ἐστιν ἥτοι  
τοῦ ἀέρος ἢ τοῦ ἀναχθέντος ὑγροῦ κίνησις; αὕτη  
δὲ ὅταν μὲν ἐλάττων ἢ, ταχὺ καταναλίσκεται ὑπὸ  
τοῦ ἡλίου, ὥστε οὐ γίνεται πνεῦμα· ὅταν δὲ πλείων,  
30 κινεῖται μᾶλλον τοῦ ἡλίου ἀνατείλαντος· ὁ γὰρ  
ἥλιος ἀρχὴ τῶν κινήσεων ἐστίν.

Διὰ τί ὁ ζέφυρος τῆς δείλης πνεῖ; ἢ ἅπαντα τὰ 35  
πνεύματα τοῦ ἡλίου διαχέοντος τὸ ὑγρὸν γίνεται;  
πρότερον γὰρ συνεστηκός, ὅταν ἢ τοῦ θερμοῦ  
δύναμις πλησιάζῃ, ἐξάπτει. ὁ δὲ ζέφυρος ἀφ'  
35 ἐσπέρας πνεῖ. εἰκότως οὖν τῆς δείλης γίνεται· τότε  
γὰρ ὁ ἥλιος εἰς τὸν τόπον αὐτοῦ ἀφικνεῖται. καὶ  
ὁ βορέας καὶ ὁ νότος διὰ τοῦτο πλειστάκις πνέουσιν,



ing and not in the morning ? Is the rising and the setting of the sun usually the cause of winds ? For when the sun, warming the air which is damp, concocts and dissolves it, it dissolves it into wind : if, then, the air is full of breath, it is still further turned into breath by the sun. Now when the sun is in the east, it is far away from the south-west ; for this wind blows from the direction of the setting sun. But when the sun is near to setting, then the breath is completely dissolved. During the period from midday to evening the conditions are best suited for warming and dissolving the air. This is also why the east wind begins to blow in the early morning, for the air over the earth has grown damp during the night and owing to its weight is close to the ground ; then in the early morning the sun dissolves it and sets in motion first the air which is near to it. The breeze, then, that comes from the rising sun is called Apeliotes.<sup>a</sup>

Why as the sun is rising do the winds rise and fall ? 34  
Is it because wind is a movement either of air or of rising moisture ? When this movement is slight, it is quickly exhausted by the sun, so that there is no wind ; but when the movement is greater, it is increased by the rising sun ; for the sun is the origin of all such movements.

Why does the south-west wind blow in the evening ? 35  
Do all winds occur when the sun is dispersing the moisture ? For the moisture having been previously collected is dissolved<sup>b</sup> when the power of the heat gets near to it. Now the south-west wind blows from a westerly direction. So it naturally rises in the evening ; for at that time the sun is reaching that quarter. The reason why the north and south winds

<sup>a</sup> *i.e.* its name is derived from ἀπὸ ἡλίου.

<sup>b</sup> The Greek word ἐξάπτει means nothing ; but Th. G. has *tabescit*, which is here translated.



944 a ὅτι τὸ ἐναντίον ὑπὸ τοῦ ἐναντίου κρατούμενον κατ'  
 εὐθυωρίαν ἤκιστα δύναται διαμένειν, ἀλλὰ μᾶλλον ἐκ  
 944 b τοῦ πλαγίου. ὁ μὲν οὖν νότος καὶ βορέας ἐκ τῶν  
 ἐφ' ἐκάτερα τόπων τῆς τοῦ ἡλίου φορᾶς πνέουσιν,  
 οἱ δὲ ἄλλοι μᾶλλον ἐκ τοῦ κατ' ἀντικρύ.

Πότερον τὸ πνεῦμα ἀπὸ πηγῆς τινὸς φέρεται 36  
 5 ὥσπερ τὸ ὕδωρ, καὶ ταύτης οὐκ ἔστιν ἀνωτέρω  
 αὐτὸ ἐνεχθῆναι, ἢ οὐ; καὶ πότερον ἀπὸ ἐνὸς  
 σημείου ἢ ἀπὸ πλείονος τόπου; ἔνια μὲν οὖν ἔστιν  
 ὁμοία, ἃ καὶ ἐπὶ τῶν ὑδάτων φαίνεται συμβαίνειν·  
 τό τε γὰρ ὕδωρ, ὅταν εἰς τὸ κάταντες φέρηται,  
 θάττον ρεῖ ἢ ὅταν ἐν τῷ ἐπιπέδῳ καὶ ὁμαλοῦ  
 10 λιμνάζῃ. ὁμοίως δὲ καὶ τὰ πνεύματα· ἐπὶ μὲν γὰρ  
 τοῖς ἄκροις καὶ τοῖς ὑψηλοῖς αἰεὶ ἐν κινήσει ὁ ἀήρ,  
 ἐν δὲ τοῖς κοίλοις πολλάκις ἡρεμεῖ καὶ ἄπνοια  
 γίνεται. ἔτι ἐπὶ τοῖς σφόδρα ὑψηλοῖς ὄρεσιν οὐ  
 γίνεται τὰ πνεύματα, οἷον ἐπὶ τῷ Ἄθῳ καὶ τοῖς  
 ἄλλοις τοῖς τοιούτοις. σημεῖον δέ· ἃ γὰρ ἂν κατα-  
 15 λείπωσιν οἱ τῷ προτέρῳ ἔτει θύοντες, εὐρίσκεσθαι  
 φασι διαμένοντα τῷ ὑστέρῳ. δῆλον οὖν ὅτι ὥσπερ  
 ἀπὸ πηγῆς τινὸς καὶ ἡ τοῦ πνεύματος φορὰ γίνεται.  
 εἰς τὸ ἄνω οὖν οὐκέτι δύναται διικνεῖσθαι. διὰ  
 τοῦτο οὖν ἐπὶ τοῖς ὑψηλοῖς τοῦτο συμβαίνει. ὁμοίως  
 δ' ἂν καὶ ἐπὶ τοῦ ὕδατος εἴη· οὔτε γὰρ ὕδωρ λάβρον  
 20 οὔτε πνεῦμα ἐξαίσιον ἐν τοῖς ὑψηλοῖς φαίνεται  
 γίνεσθαι.

Διὰ τί ποτε τοῦ μὲν νότου πνέοντος ἡ θάλαττα 37  
 κυανέα γίνεται, τοῦ δὲ βορέου ζοφώδης; ἢ ὅτι ὁ  
 βορέας ἤττον τὴν θάλατταν ταραττει, τὸ δὲ ἀταρα-  
 κτότερον ἅπαν μέλαν φαίνεται.

25 Διὰ τί οἱ νότοι μικρὰ μὲν πνέοντες οὐ ποιοῦσιν 38  
 ἐπίνειψιν [ἤτοι συνέφειαν], μεγάλοι δὲ γενόμενοι ἐπι-

## PROBLEMS, XXVI. 35-38

are the commonest is that, when one contrary is overpowered by another, it is least able to continue in a straight line, but it is better able to resist a wind blowing across it. So the south and north winds blow from districts which are on either side of the course of the sun, but the others blow in the exactly contrary direction.

Does the wind travel from a source as water does, 36 and can it not travel higher than its source, or is this not so? Again, does the wind arise from a single point, or from a more extended area? There are indeed some similarities to that which appears to happen in the case of water; for water when it is travelling down a steep slope flows more quickly than when it is stagnant in a plain and on the level, and it is somewhat similar with winds; for on peaks and in high places the air is always in motion, but in hollow places it is often calm and there is no wind. Again, on some very high mountains there is no wind—for instance on Mount Athos and in other similar places. We have proof of this; for whatever is left behind by those who sacrifice in one year, is said to be found still remaining the year after. So it is clear that the course of the wind also is derived as it were from some source. So it can never penetrate upwards. This accounts for what happens on high places. It would be similar in the case of water; for water does not seem to flow strongly, nor wind to blow violently in high places.

Why is the sea blue when the south wind blows, 37 but black when the north wind blows? Is it because the north wind disturbs the sea less, and everything which is less disturbed appears black?

Why do the south winds not make the sky overcast, 38 when they blow gently, but when they are violent

944 b

νεφούσιν; ἢ διότι μικροὶ μὲν πνέοντες οὐ δύνανται  
πολλὰ νέφη ποιεῖν; ὀλίγον οὖν τόπον κατίσχουσιν.  
ὅταν δὲ μεγάλοι γένωνται, πολλὰ ἀπωθοῦσι, διό  
καὶ δοκοῦσι μᾶλλον ἐπινεφεῖν.

30 Διὰ τί ὁ μὲν βορέας ἀρχόμενος μέγας, λήγων δὲ 39  
μικρός, ὁ δὲ νότος ἀρχόμενος μὲν μικρός, λήγων δὲ  
μέγας; ἢ ὅτι ὁ μὲν βορέας ἐγγὺς ἡμῶν, ὁ δὲ νότος  
πόρρω; ὁ μὲν οὖν ὅταν ἄρξηται, εὐθὺς παρ' ἡμῖν,  
τοῦ δὲ ἄτε διὰ πολλοῦ χρόνου ἢ ἀρχὴ διασκεδάν-  
35 νυται, καὶ πρὸς ἡμᾶς μικρὸν ἐξικνεῖται αὐτῆς τὸ  
πρῶτον· τῆς δὲ τελευτῆς τοῦ μὲν αἰσθανόμεθα, τοῦ  
δὲ ὅλως οὐκ αἰσθανόμεθα. ὥστε εἰκότως ὁ μὲν  
ἀσθενὴς παυόμενος (ἀσθενὴς γὰρ ἡ τελευτὴ πάν-  
των), ὁ δὲ οὐ· τῆς γὰρ τελευτῆς οὐκέτι αἰσθανόμεθα  
αὐτοῦ.

945 a Διὰ τί οὗ μὲν κόλποι εἰσὶ, τροπαῖαι γίνονται, οὗ 40  
δὲ ἀναπεπταμένα πελάγη, οὐ γίνονται; ἢ διότι εἰς  
μὲν τοὺς κόλπους ῥέον οὐ διασπᾶται τὸ πνεῦμα  
μᾶλλον, ἀλλ' ἀθρόον ἐπὶ τὸ πολὺ φέρεται, ἐν δὲ  
1 τοῖς ἀναπεπταμένοις ἐξ ἀρχῆς τε αἱ ἀπογέαι εὐθὺς  
διασπῶνται μᾶλλον, καὶ ὅταν ῥέωσι, ταῦτ' ὅλον  
σχουσιν διὰ τὸ πολλαχῇ ἐξεῖναι ὀρμῆσαι· ἔστι γὰρ  
ἡ τροπαία ἀπογέας<sup>1</sup> ἀνάκλασις;

Διὰ τί λέγεται “ ἀρχομένου τε νότου καὶ λή- 41  
γοντος βορέας ”; ἢ διότι ὁ μὲν βορέας, διὰ τὸ  
10 ὑποικεῖν ἡμᾶς αὐτῷ καὶ εἶναι τὴν οἴκησιν πρὸς  
ἄρκτον, εὐθὺς μέγα πνεῖ; ἅμα γὰρ ἄρχεται καὶ  
πάρεστι. διὸ παυόμενος ἡδὺ πνεῖ· τότε γὰρ  
ἀσθενὴς πνεῖ. ὁ δὲ νότος διὰ τὸ πόρρωθεν ὕστερον  
μείζων ἀφικνεῖται.

<sup>1</sup> ἀπογέας Ross : ἀπόγεος ms.

they do? Is it because when they blow gently they cannot produce many clouds? So they only affect a small area. But when they grow strong, they drive many clouds before them, and so they seem to make the sky more overcast.

Why is the north wind strong when it begins to 39 blow, but gentle when it is ceasing, whereas the south wind blows gently at first but becomes strong at the end? Is it because the north wind is near to us, but the south wind far away? So the former when it begins is upon us at once, but the beginning of the latter is scattered owing to the long time it takes to reach us, and little of it reaches us at first; so we notice the end of the north wind, but not that of the south wind. So naturally the north wind is weak as it ceases (for the end of everything is weak), but the south wind is not; for we never feel its end at all.

Why do variable winds arise where there are bays, 40 but not where there is open sea? Is it because the wind when it blows into bays is not scattered, but generally travels in a mass, but in open seas land breezes are more quickly scattered from the first, and when they blow, suffer the same effect, because it is possible for them to move in many directions; for the changeable wind is the refraction of the land wind?

What is the origin of the saying "When the south 41 wind begins and the north wind dies"?<sup>a</sup> Is it that the north wind, because we live near it and have our habitation towards the north, blows strongly at once? For no sooner does it begin than it is with us. So it blows gently as it ceases; for then it is weak. But the south wind reaches us with more violence late because it comes from a distance.

<sup>a</sup> For the complete proverb cf. 945 a 29.

945 a

Διὰ τί ἐν τοῖς νοτίοις βαρύτερον ἔχουσι καὶ 42  
 15 ἀδυνατώτερον οἱ ἄνθρωποι; ἢ διότι ἐξ ὀλίγου πολὺ  
 ὑγρὸν γίνεται, διατηκόμενον διὰ τὴν ἀλέαν, καὶ  
 ἐκ πνεύματος κούφου ὑγρὸν βαρὺ· εἴτα ἡ δύναμις  
 ἀτονεῖ.

Διὰ τί ἐν τοῖς βορείοις βρωτικώτεροι ἢ ἐν τοῖς 43  
 νοτίοις; ἢ διότι ψυχρότερα τὰ βόρεια;  
 20 Διὰ τί ὁ νότος οὐ πνεῖ κατ' αὐτὴν τὴν Αἴγυπτον 44  
 τὰ πρὸς θάλατταν, οὐδ' ὅσον ἡμέρας δρόμον καὶ  
 νυκτός· τὰ δὲ ὑπὲρ Μέμφεως καὶ ἀποσχόντι δρόμον  
 ἡμέρας καὶ νυκτός λαμπρός· καὶ πρὸς ἐσπέραν οὐ  
 πνεῖ, ὅσον δύο ἡμερῶν καὶ νυκτῶν δρόμον, τὰ δὲ  
 25 πρὸς ἔω λίβες πνέουσιν; ἢ διότι κοίλη τὰ κάτω ἢ  
 Αἴγυπτός ἐστιν· διὸ ὑπερπίπτει αὐτῆς, ἄνω δὲ καὶ  
 πόρρω ὑψηλότεροι οἱ τόποι.

Διὰ τί ὁ νότος ἀρχόμενος μὲν μικρός ἐστι, λήγων 45  
 δὲ μείζων γίνεται, ὁ δὲ βορέας ἀνάπαλιν, διὸ καὶ ἡ  
 παροιμία λέγεται “ εὖ πλεῖν ἀρχομένου τε νότου  
 30 καὶ λήγοντος βορέας ”; ἢ διότι πρὸς ἄρκτον μᾶλλον  
 ἢ πρὸς μεσημβρίαν οἰκοῦμεν, πνεῖ δὲ ὁ μὲν βορέας  
 ἀπὸ τῆς ἄρκτου, ὁ δὲ νότος ἀπὸ τῆς μεσημβρίας;  
 εἰκότως οὖν ὁ μὲν ἀρχόμενος εὐθύς σφοδρὸς πρόσ-  
 κεται τοῖς πλησίον τόποις μᾶλλον, καὶ μετὰ ταῦτα  
 μεταλλάττει τὸ σφοδρὸν πρὸς ἐκείνους. ὁ δὲ νότος  
 35 τούναντίον ἀρχόμενος μὲν τοῖς πρὸς μεσημβρίαν  
 οἰκοῦσιν ἔγκειται, ἐπειδὰν δὲ παραλλάξῃ, τοῖς πρὸς  
 ἄρκτον λαμπρὸς καταπνεῖ.

Διὰ τί λέγεται “ εἰ δ' ὁ νότος βορέαν προκαλέσ- 46  
 σεται, αὐτίκα χειμών ”; ἢ διότι ὁ νότος τοιοῦτός

## PROBLEMS, XXVI. 42-46

Why are men heavier and more feeble when the 42  
wind is in the south ? Is it because moisture becomes  
abundant instead of scanty, permeating through the  
warmth, and heavy moisture replaces light air ? So  
men's strength is relaxed.

Why are men more inclined to eat when the wind 43  
is in the north than when it is in the south ? Is it  
because the north winds are colder ?

Why does not the south wind blow in Egypt itself, 44  
in the sea districts, nor for a march of a night and a  
day from the coast ? But above Memphis and for  
a march of a night and a day, it is fresh. It does not  
blow towards the west for a march of two days and  
two nights, but towards the east the south-west wind  
blows. Is it because in its lower parts Egypt is  
hollow ? So it blows over it, but higher up and farther  
off the district is higher.

Why is the south wind slight when it begins, but 45  
grows stronger when it is dying down, whereas the  
north wind is just the reverse ? Hence the proverb  
says that " it is good for sailing when the south wind  
is rising and the north wind is dying down." Is it  
because we live towards the north rather than towards  
the south, and the north wind blows from the north,  
but the south wind from the south ? Naturally there-  
fore the north wind when it begins falls more violently  
upon the district nearer to it, and afterwards transfers  
its violence to the other parts. But the south wind  
on the contrary, when it begins, attacks those who live  
in the south, and when it has passed over them blows  
freshly upon those who live towards the north.

Why is it said that " if the south wind summons the 46  
north wind, winter is upon us " ? Is it because it is



945 a

ἔστιν οἶος νεφέλας καὶ ὕδωρ πολὺ συναίρειν; ὅταν

945 b

οὖν τοιαύτης τῆς καταστάσεως οὔσης ἐπιπνεύσῃ ὁ βορέας, πολλῆς αὐτῷ ὕλης ὑπαρχούσης πῆγνυσι καὶ χειμῶνα ποιεῖ. διὸ λέγεται “ εἰ βορρᾶς πηλὸν καταλήψεται, αὐτίκα χειμῶν.” ὁ δὲ πηλὸς καὶ ὅλως τὰ ὕδατα ὑπὸ τοῦ νότου ἢ μάλιστα ἢ πλειστάκις γίνεται.

5 Διὰ τί ἐπὶ μὲν τῷ νότῳ ταχὺς ὁ βορέας, ἐπὶ δὲ 47 τούτῳ ὁ νότος οὐ ταχὺς ἐπιπίπτει; ἢ ὅτι τῷ μὲν ἐγγύθεν, τῷ δὲ πόρρωθεν ἢ ἄφιξις; ἢ γὰρ οἴκησις πρὸς βορέαν ἡμῶν.

Διὰ τί τὰ πνεύματα ψυχρά ἐστίν, ὄντα ἀπὸ τῆς 48 τοῦ θερμοῦ συγκινήσεως; ἢ οὐ πάντως ἢ ὑπὸ τοῦ 10 θερμοῦ κίνησις θερμὴ γίνεται, ἐὰν μὴ τρόπον τινὰ γίνηται; ἀλλ’ ἐὰν μὲν ἀθρώως ἐμπίπτῃ, καίει αὐτὸ τὸ ἀφιέν θερμῇ. ἐὰν δὲ διὰ στενοῦ καὶ κατὰ μικρόν, αὐτὴ μὲν θερμὴ, ὁ δὲ ὑπὸ τούτου κινούμενος ἀήρ, οἶος ἂν ποτε τυγχάνῃ προϋπάρχων, τοιαύτην καὶ τὴν κίνησιν ἀπετέλεσεν, ὥσπερ καὶ ἐπὶ τοῦ 15 σώματος. φασὶ γὰρ ἐκ τοῦ αὐτοῦ θερμὸν καὶ ψυχρὸν ἡμᾶς πνεῖν, τοῦτο δὲ οὐκ ἀληθές, ἀλλὰ τὸ μὲν ἐξίον θερμὸν αἰεὶ. σημεῖον δὲ τὸ ἐγγὺς προσ-αγαγόντι τοιοῦτον φαίνεσθαι. διαφέρει δὲ ἢ ἔκπτωσις αὐτοῦ. ἐὰν μὲν γὰρ διὰ πολλοῦ ἀφίωμεν χανόντες, θερμὸν φαίνεται διὰ τὸ αὐτοῦ αἰσθάνε- 20 σθαι, ἐὰν δὲ διὰ στενοῦ, σφοδρότερον γινόμενον ὠθεῖ τὸν πλησίον ἀέρα, κάκεῖνος τὸν ἐχόμενον. ψυχροῦ δὲ ὄντος τοῦ ἀέρος καὶ ἡ κίνησις αὐτοῦ ψυχρὰ γίνεται. μήποτε δὲ καὶ ἐπὶ τῶν πνευμάτων τὸ αὐτὸ συμβαίνει, καὶ διὰ στενοῦ ἢ πρώτῃ κίνησις.

the nature of the south wind to collect clouds and heavy rain? So when in these conditions the north wind blows as well, as it carries much matter with it, it freezes and produces winter. This is the origin of the saying "If the north wind finds mud winter is upon us." But mud and water generally are produced usually or most commonly by the south wind.

Why does the north wind follow swiftly on the 47 south, but the south wind does not follow swiftly on the north? Is it because the arrival of the former is from near by, but of the latter from a distance? For we live near the north.

Why are winds cold, although they are due to a 48 movement of heat? Or is movement produced by heat not invariably hot, only if it arises in a particular way? If it falls in a concentrated state, it burns by its heat the very thing which sends it forth. But if it passes through a narrow passage and arrives a little at a time, then it is itself hot, but the air which is moved by it accomplishes its movement in the same condition as it was to start with, as is also true in the case of the human body. For they say that we breathe both hot and cold from the same source, but this is untrue, as the breath which comes out is always hot. This is proved by the fact that the breath appears hot to that which is applied to it. The difference lies in the manner of its emission. If we emit the breath from a wide opening as when we yawn, it seems to be hot because we feel it; but if we emit it through a narrow gap, as it travels more violently it pushes on the air near to it, and this again pushes the air next to it. If the air is cold its movement is also cold. Perhaps the same thing happens with the winds, and their initial movement is through a narrow

945 b

εἴτ' ἐκείνον μὲν διήνεγκεν, ἕτερος δὲ ἀὴρ ἐπιρρεῖ.

25 διὸ καὶ τοῦ μὲν θέρους θερμά, τοῦ δὲ χειμῶνος ψυχρὰ τὰ πνεύματα, ὅτι ἐν ἑκατέρῳ τοιοῦτος ὁ ἀὴρ ὁ προϋπάρχων· ἐπεὶ ὅτι γε οὔτε αὐτὸς ὑφ' ἑαυτοῦ κινούμενος ὁ ἀὴρ οὔτε ὑπὸ τοῦ θερμοῦ κρατούμενος φέρεται ταύτην τὴν φοράν, δῆλον οὐ μόνον τούτῳ ὅτι θερμαίνει τὰ πνεύματα πλείονος τοῦ θερμοῦ  
80 ἐνόντος, ἀλλὰ καὶ ἄνω ἐφέρετο. τὸ γὰρ πῦρ τοιοῦτον, τὸ δὲ ψυχρόν κάτω πέφυκεν φέρεσθαι. τὰ δὲ πνεύματα πλάγια εἰκότως· ἐπεὶ γὰρ τὸ μὲν ἄνω, τὸ δὲ κάτω βιάζεται, καὶ οὐδέτερον κρατεῖ, μένειν δὲ οὐχ οἶόν τε, λοξὴν τὴν φοράν εἰκότως γίνεσθαι.

■ Διὰ τί οἱ νότοι ἐν τῇ Λιβύῃ ψυχροί, ὥσπερ παρ' 49 ἡμῖν οἱ βορέαι; ἢ πρῶτον μὲν διὰ τὸ ἐγγυτέρω εἶναι ἡμῖν τε καὶ ἐκείνοις τὰς ἀρχὰς τῶν πνευμάτων; εἰ γάρ, ὥσπερ εἶπομεν, διὰ στενοῦ γίνεται τὰ πνεύματα, τοῖς ἐγγυτέρω ψυχρότερα ἔσται διὰ τὴν  
946 a σφοδρότητα τῆς κινήσεως· εἰς γὰρ τὸ πόρρω προΐουσης διαχεῖται. διὸ καὶ παρ' ἡμῖν οἱ βορέαι ψυχροί, ὅτι ἐγγυτέρω καὶ παντελῶς πρὸς τῇ ἄρκτῳ οἰκοῦμεν.

Διὰ τί οἱ νότοι οἱ ξηροὶ καὶ μὴ ὕδατώδεις 50 πυρετώδεις. ἢ ὅτι ὑγρότητα θερμὴν ἀλλοτρίαν ἐμποιοῦσι τοῖς σώμασιν; εἰσὶ γὰρ ὑγροὶ καὶ θερμοὶ φύσει, τοῦτο δ' ἐστὶ πυρετώδες· ὁ γὰρ πυρετὸς ὑπ' ἀμφοτέρων τούτων ἐστὶν ὑπερβολῆς. ὅταν μὲν οὖν ὑπὸ τοῦ ἡλίου ἄνευ ὕδατος πνέωσιν, ταύτην τὴν διάθεσιν<sup>1</sup> ποιοῦσι, ὅταν δὲ ἅμα τῷ ὕδατι, τὸ ὕδωρ καταψύχει.

10 Διὰ τί οἱ ἐτησῖαι ταύτην δὴ τὴν ὥραν αἰεὶ καὶ 51

<sup>1</sup> MS. τὴν τάξιν. The reading in the text is supplied by Forster from 862 a 21.

channel ; then it tosses the air aside, and other air flows in. So in the summer the winds are hot and in the winter cold, because in each case the air which was there beforehand was of this character. For, that the air does not follow this path because it is self-moved or overpowered by heat is clear not merely from the fact that it heats the winds when it contains more heat, but also because it was originally travelling upwards. This is the characteristic of fire, but cold is inclined to travel downwards. Naturally the winds move sideways ; for since the one is forced upwards and the other downwards, and neither can achieve the mastery, and yet they cannot remain stationary, the direction must naturally be sideways.

Why are the south winds cold in Libya, as the 49 north winds are with us ? Is it in the first place because the origins of the two winds are respectively nearer to us and to them ? For if, as we have said, the winds blow first through a narrow channel, they will be colder to those nearer to them owing to the violence of the movement. For as the movement proceeds farther the wind is dispersed. So the north winds are cold with us, because we live nearer to them and, speaking generally, near to the north pole.

Why are the south winds which are dry and not 50 rainy liable to produce fever ? Is it because they produce in the body an unnatural warm moisture ? For these winds are naturally moist and warm, and this produces fever. For fever is due to an excess of these two things. So when the winds blow under the influence of the sun without bringing rain they produce this condition in us, but when they come in conjunction with rain, the water cools us.

Why do the Etesian winds always blow in their 51

946 a

τοσοῦτοι πνέουσιν; καὶ διὰ τί ληγούσης τῆς  
 ἡμέρας λήγουσι καὶ τῆς νυκτὸς οὐ πνέουσιν; ἢ  
 τοῦτο μὲν διὰ τὸ τὴν χιόνα τηκομένην παύεσθαι  
 ὑπὸ τοῦ ἡλίου πρὸς ἐσπέραν καὶ τὴν νύκτα; ὅλως  
 δὲ πνέουσιν, ὅταν ὁ ἥλιος κρατεῖν καὶ λύειν ἄρξηται  
 15 τὸν πρὸς βορέαν πάγον. ἀρχομένου μὲν οὖν οἱ  
 πρόδρομοι, ἤδη δὲ λυομένου οἱ ἐτησίαι.

Διὰ τί ὁ ζέφυρος λειότατός τε τῶν ἀνέμων καὶ 52  
 ψυχρός, καὶ δύο ὥρας πνεῖ μάλιστα, ἕαρ τε καὶ  
 μετόπωρον, καὶ πρὸς ἐσπέραν τῆς ἡμέρας, καὶ ἐπὶ  
 20 τὴν γῆν μάλιστα; ἢ ψυχρὸς μὲν διὰ τὸ πνεῖν ἀπὸ  
 τῆς θαλάττης καὶ πεδίων ἀναπεπταμένων; ἦττον  
 μὲν οὖν ψυχρὸς τοῦ βορέου διὰ τὸ ἀφ' ὕδατος  
 πνευματουμένου καὶ μὴ χιόνος πνεῖν· ψυχρὸς δὲ διὰ  
 τὸ μετὰ χειμῶνα, ἄρτι τοῦ ἡλίου κρατοῦντος, πνεῖν  
 καὶ μετοπώρου, ὅτε οὐκέτι κρατεῖ ὁ ἥλιος. οὐ γὰρ  
 25 ὥσπερ ἐν γῇ ὑπομένει τὴν εἰλην, ἀλλὰ πλανᾶται  
 διὰ τὸ ἐφ' ὑγροῦ βεβηκέναι. καὶ ὁμαλὸς διὰ τὸ  
 αὐτό· οὐ γὰρ ἀπὸ ὀρέων πνεῖ, οὐδὲ βία τηκομένου,  
 ἀλλὰ ῥαδίως ὥσπερ δι' αὐλῶνος ῥέων. τὰ μὲν γὰρ  
 πρὸς βορέαν καὶ νότον ὀρεινά· πρὸς ἐσπέραν δὲ  
 οὔτε ὄρος οὔτε γῆ ἐστίν, ἀλλὰ τὸ Ἀτλαντικὸν  
 30 πέλαγος, ὥστε ἐπὶ τῆς γῆς φέρεται. καὶ πρὸς  
 ἐσπέραν δὲ τῆς ἡμέρας πνεῖ διὰ τὸν τόπον· τότε γὰρ  
 ὁ ἥλιος πλησιάζει τῷ τόπῳ. καὶ τῆς νυκτὸς  
 παύεται διὰ τὸ ἐκλείπειν τὴν τοῦ ἡλίου κίνησιν.

Διὰ τί, ὅταν ὁ εὖρος πνεῖ, μείζω φαίνεται τὰ 53  
 πάντα; ἢ ὅτι ζοφωδέστατον τὸν ἀέρα ποιεῖ;

35 Διὰ τί τὸν μὲν χειμῶνα πρωτὶ ἀπὸ τῆς ἑω τὰ 54

season and with such strength? And why do they cease at close of day and do not blow at night? Is this because the melting of the snow by the sun ceases at eventide and the beginning of night? As a rule they blow when the sun begins to master and dissolve the ice in the north. When this begins, the "precursor" winds blow, and when it is melting, the Etesian.

Why is the south-west wind the gentlest of the 52 winds and yet cold, and why does it blow most often at two seasons, spring and late autumn, and towards the evening of the day, and mostly towards the land? Is it cold because it blows off the sea and the wide open plains? It is less cold than the north wind because it blows from evaporated water and not from snow; but it is cold because it blows after the winter, when the sun is only just becoming powerful, and in late autumn, when the sun is powerful no longer. For it does not wait for the sun's heat, as it would if it were a land wind, but it wanders freely because it has come over the water. For the same reason it is a steady wind; for it does not blow from the mountains, nor from what is forcibly melted, but flows easily as through a pipe. For the districts to the north and south are both mountainous; but to the west there is neither mountain nor land, but only the Atlantic Ocean, so that it travels towards the land. It blows towards evening owing to its position; for at that time the sun is approaching its quarter. It ceases during the night because the movement caused by the sun fails.

Why, when the east wind blows, do all the things 53 seem larger? Is it because it makes the air very gloomy?

Why is it that during the winter the winds blow early 54



946 a

πνεύματα πνεῖ, τὸ δὲ θέρος δείλης καὶ ἀπὸ δυσμῶν ἡλίου; ἢ ὅτι ἂ ἡμῖν συμβαίνει τοῦ θέρους, ταῦτα τοῦ χειμῶνος τοῖς τὸ ἐναντίον τῆς γῆς ἡμισφαίριον οἰκοῦσιν, ἡμῖν δὲ τοῦ χειμῶνος πρῶτ' καὶ ἀφ' ἑω

946 b

τὰ πνεύματα πνεῖ διὰ τὸ τὸν ἀέρα κάθυγρον ἐν τῇ νυκτὶ διακρίνεσθαι καὶ κινεῖσθαι τὸ πρῶτ' ὑπὸ τοῦ ἡλίου, καὶ πρῶτον τὸν ἔγγιστα τοῦ ἡλίου; ποιεῖ δὲ τοῦτο ὁ ἥλιος καὶ πρὸ ἀνατολῆς· διὸ αὖραι οὐχ ἦττον πρὸ ἀνατολῆς πνέουσιν. ἐπειδὴ οὖν καὶ ἐφ'

a

ἑαυτὸν ἔλκει ὁ ἥλιος τὰ ὑγρά καὶ κινεῖ πρὸ ἀνατολῆς τοῦ χειμῶνος ὑγρὸν ὄντα τὸν παρ' ἡμῖν ἀέρα, δῆλον ὡς καὶ ἐφ' αὐτὸν ἂν ἔλκοι, ὣν ἐν τῷ κάτω ἡμισφαιρίῳ, καὶ δείλη ἐκείνοις ὁ ἡμῖν ἐστὶν ὄρθρος. ὥστε συμβαίνοι ἂν τὸν ὑπὸ τοῦ ἡλίου πρὸ ἀνατολῆς παρ' ἡμῶν ἐφ' αὐτὸν ἐλκόμενον ἀέρα, τοῦτον τοῖς

10

κάτω γενέσθαι ζέφυρον καὶ δείλης πνεῖν. ὁ δὲ ἐν τῷ παρ' ἡμῖν χειμῶνι, τῆς ἑω ἐκείνοις συμβαίνει, ὁ δὲ ἐν τῷ θέρει, τῆς δείλης ἡμῖν. ὅτε γὰρ παρ' ἡμῖν θέρος, ἐκεῖ χειμῶν ἐστι, καὶ ἡ ἡμετέρα δείλη ἐκείνοις ὄρθρος, καθ' ἣν ἐκείνοις μὲν αὔρας ἐξ ἐώας συμβαίνει πνεῖν, ἡμῖν δὲ ζεφύρους διὰ ταῦτα

15

τοῖς προειρημένοις. τοῦ δὲ θέρους καὶ ἐῷαι μὲν οὐ πνέουσιν, ὅτι εἰς ξηρότερον ἔτι τὸν παρ' ἡμῖν ἀέρα ὁ ἥλιος ἀνατέλλει διὰ τὸ ὀλίγον αὐτοῦ χρόνον ἀπογεγονέναι· ζέφυροι δὲ οὐ πνέουσιν δείλης τοῦ χειμῶνος, ὅτι οὐδ' ἐν τῷ κάτω ἡμισφαιρίῳ ἐῷοι ταύτην τὴν ὥραν διὰ τὰ προειρημένα, ὅθεν ὁ ἥλιος ἐφ' ἑαυτὸν ἔλκων τὰ ὑγρά τὸν παρ' ἡμῖν ζέφυρον ποιεῖ.

20

Διὰ τί ὁ ζέφυρος εὐδιεινὸς καὶ ἡδιστος δοκεῖ εἶναι 55

in the morning and from the east, while in summer they blow in the evening and from the setting sun ? Is it because the conditions which obtain with us in the summer are present in the winter to those who live in the opposite hemisphere ? With us in the winter the winds blow early in the morning and from the east because the moist night air is dissolved and set in motion at dawn by the sun, and first of all the air nearest to the sun. The sun produces this effect even before it rises, so the breezes blow just as much before sunrise. Since then the sun draws the moisture to itself and before sunrise during the winter moves the air near to us which is damp, it would also obviously draw it towards itself in the southern hemisphere, and their evening would be our morning. So it would happen that the air drawn towards itself by the sun before dawn with us would become a west wind with them and blow in the evening. But what happens in our winter, happens with them at dawn, and what happens in our summer happens to them in the evening. For when it is summer with us it is winter there, and our evening is their dawn, at which time the breezes blow with them from the east and with us from the west for the reasons that we have already stated. But in the summer the winds do not blow from the east, because the sun when it rises finds the air with us too dry, because it has only been away for a short time ; but west winds do not blow in the evening during the winter, because east winds do not blow in the southern hemisphere at this season for the reasons we have given, for which reasons the sun, drawing the moisture to itself, produces a west wind with us.

Why does the west wind seem to bring fine weather 55

946 b

τῶν ἀνέμων; ἢ ὅτι ἐν μεθορίῳ ἐστὶ τῶν θερμῶν  
καὶ ψυχρῶν πνευμάτων, γειτνιῶν δὲ ἀμφοῖν τῆς  
δυνάμεως αὐτῶν κοινωνεῖ· διὸ εὐκρατός ἐστιν. ὁ  
25 δὲ ἀπηλιώτης ἦττον κοινωνεῖ, ὢν ἐν τῷ μέσῳ τῶν  
αὐτῶν. ἀπηλιώτης μὲν γὰρ πνέων τὰ πρὸς νότον  
πνεύματα κινεῖ (ἐνταῦθα γὰρ ἡ μετάστασις αὐτοῦ  
ἐστίν), κινῶν δὲ οὐ μίγνυται αὐτοῖς. ὁ δὲ ζέφυρος  
καὶ κινεῖται ὑπὸ τῶν νότων καὶ πνέων κινεῖ τὰ  
βόρεια· τελευτᾷ γὰρ ἐνταῦθα ἡ περίοδος τῶν  
30 πνευμάτων. διὸ τῶν μὲν τὴν τελευτήν, τῶν δὲ  
τὴν ἀρχὴν ἔχων ἐν ἑαυτῷ δικαίως ἡδύς ἐστι καὶ  
δοκεῖ εἶναι.

Διὰ τί ἄλλοις ἄλλοι τῶν ἀνέμων ὑέτιοι, οἷον ἐν 56  
μὲν τῇ Ἀττικῇ καὶ ταῖς νήσοις ὁ Ἑλλησποντίας, ἐν  
Ἑλλησπόντῳ δὲ ὁ βορέας καὶ ἐν Κυρήνῃ, περὶ  
35 Λέσβον δὲ νότος; ἢ ὅπου ἂν ἄθροισις νεφῶν,  
ἐνταῦθα ὕδωρ; ἐνταῦθα γὰρ ἡ πύκνωσις ἀθροί-  
ζεται, ὅπου ἂν προκαθίζεσθαι ἔχῃ. διὸ καὶ ἐν τοῖς  
ὄρεσι μᾶλλον ὕει ἢ ὅπου ἂν τὸ πλῆθος ὑπεξάγειν  
δύνηται· περικαταλαμβανόμενον γὰρ πυκνοῦται· δεῖ  
δὲ τοῦτο γενέσθαι. καὶ ἐν ταῖς εὐδαίαις μᾶλλον ὕει.  
947 a ἐν Ἑλλησπόντῳ μὲν οὖν ἄνωθεν ὁ βορέας πολλὰ  
συνωθεῖ νέφη, πρὸς δὲ τὴν Ἀττικὴν καὶ τὰς νήσους  
ὁ Ἑλλησποντίας, ὥσπερ ὕλην ἔχων· καὶ γὰρ περι-  
ίσταται τὰ πολλὰ ἐκ τοῦ βορέου. περὶ δὲ Λέσβον  
5 ὁ εὖρος καὶ ὁ νότος ἐκ τοῦ πελάγους φέροντες  
πολλὰ νέφη προσβάλλει τῇ χώρᾳ. τὸν αὐτὸν  
τρόπον καὶ ἐπὶ τῶν ἄλλων.

Διὰ τί λέγεται “ μή ποτ’ ἀπ’ ἡπείρου δείσης 57

and to be the pleasantest of all the winds? Is it because it is on the border-line between the hot and the cold winds, and being a neighbour to both shares their characteristics: so it is a good mixture? The east wind shares these dual characteristics less, though it is also between the same extremes. For the east wind when it blows sets in motion the winds towards the south (for that is the direction in which it changes), but though it sets them in motion it does not mingle with them. But the west wind is set in motion by the south winds, and when it blows it sets in motion the north winds; for at this point the succession of the winds ceases. So, containing in itself the end of some winds and the beginning of others, it justly is and is generally regarded as a pleasant wind.

Why do different winds bring rain in different 56 places? For instance, in Attica and the islands the east wind is rainy, in the Hellespont and in Cyrene it is the north wind, and round Lesbos the south wind. Is it because rain occurs wherever there is a concentration of clouds? For a density collects at any place where it is able to settle. So it rains more in the mountains than where the mass of clouds can move along; for it condenses if it is confined; and this must be the case. Also there is more rain in calm weather. So in the Hellespont the north wind coming from above collects many clouds, and the east winds drive them towards Attica and the islands, being thus provided with material; for most of the clouds come round from the north. But near Lesbos the south-east and south winds bring many clouds from the sea and drive them up against the land. And conditions are similar with the other winds.

What is the meaning of the saying "Never fear 57 the cloud which comes from mainland in winter,

847 a

νέφος ἀλλ' ἀπὸ πόντου χειμῶνος, θέρεος δὲ ἀπ' ἡπείροιο μελαίνης''; ἢ διότι τοῦ μὲν χειμῶνος ἡ  
 10 θάλαττα θερμότερα, ὥστε εἴ τι συνέστη, δῆλον ὅτι ἀπ' ἀρχῆς ἰσχυρᾶς συνέστηκεν· ἐλύθη γὰρ ἂν διὰ τὸ ἀλεινὸν εἶναι τὸν τόπον. τοῦ δὲ θέρους ἡ μὲν θάλαττα ψυχρά, καὶ τὰ πόντια πνεύματα, ἡ δὲ γῆ θερμή, ὥστε εἴ τι ἀπὸ τῆς γῆς φέρεται, διὰ μείζονος ἀρχῆς συνέστη· διελύθη γὰρ ἂν, εἰ ἀσθενὲς ἦν.

Διὰ τί ἐν τῇ Ἀρκαδία ὑψηλῇ οὖση τὰ μὲν πνεύ- 58  
 ματα οὐθὲν ψυχρότερα τῶν παρὰ τοῖς ἄλλοις, ὅταν δὲ νηνεμία ἦ καὶ ἐπινέφελα, ψυχρά, ὥσπερ ἐν τοῖς ὀμαλέσιν τοῖς ἐλώδεσιν; ἢ ὅτι καὶ ἡ Ἀρκαδία ὁμοία γίνεται τοῖς ἐλώδεσιν· οὐ γὰρ ἔχει ἐξόδους  
 20 τοῖς ὕδασιν εἰς θάλατταν, διὸ καὶ βάραθρα πολλὰ αὐτόθι ἐστίν. ὅταν μὲν οὖν ἦ ἄνεμος, ἀπορριπίζει τὴν ἐκ τῆς γῆς ἀναθυμίασιν, οὖσαν ψυχράν, αὐτὰ δὲ τὰ πνεύματα οὐ ψυχρά διὰ τὸ ἀπὸ τῆς θαλάττης προσβάλλειν· ἐν δὲ ταῖς νηνεμίαις ἀνιούσα ἡ ἀτμὶς ἀπὸ τοῦ ἐμμένοντος ὕδατος ποιεῖ τὸ ψῦχος.

25 Διὰ τί, ἂν ἔωθεν πνεῖν ἄρξῃται, διημερεύει 59  
 μᾶλλον; ἢ διότι ἀρχομένου τοῦ ἡλίου σφοδροτάτῃ ἢ φορά, διὸ ἐκτείνεται τοιαύτη οὖσα; σημεῖον δὲ ὅτι ἰσχυρὰ ἡ σύστασις.

Διὰ τί βορέας τὴν ἡμέραν μὲν λαμπρός, τὴν δὲ 60  
 νύκτα πίπτει; ἢ διότι γίνεται ἀπὸ πεπηγότος  
 30 ὕετοῦ, ὅταν ἀναθυμιᾶται διὰ τὸν ἥλιον; πίπτει δὲ νυκτός, ὅτι οὐχ ἡ αὐτὴ γένεσις, ἀλλὰ τοῦναντίον ποιεῖ· τὰς γὰρ νύκτας ἐκπνεῖ, τὰς δὲ ἡμέρας ἤττον.

Διὰ τί τὰ ἀράχνια τὰ πολλὰ ὅταν φέρῃται, πνεύ- 61



but beware of the cloud from the sea ; and in the summer from the dark mainland " ? Is it due to the fact that in winter the sea is warmer, so that if any cloud gathers, it has evidently gathered from a strong source ? For otherwise it would have dispersed because the region is warm. But in summer the sea is cold, and so are winds from the sea, while the land is warm, so that if any cloud travels from the land, it has gathered from a more powerful source ; for if it were weak, it would have dispersed.

Why is it that in Arcadia, which is high, the winds 58 are not at all cooler than in other districts, but when it is calm and cloudy, the winds are cold, just as they are in flat marshy districts ? Is it because Arcadia resembles the marshy districts ? For there are no exits for the water to the sea, so that there are many chasms there. When, then, there is a wind, it blows away the evaporation from the land, which is cold, but the winds themselves are not cold because they approach from the sea ; but in calm weather the vapour rising from the stationary water makes it cold.

Why, if the wind begins at dawn, is it more likely 59 to last through the day ? Is it because, when the sun begins, the wind travels with considerable force, and so continues in the same character ? This is proved by the fact that the mass it forms is strong.

Why is the north wind fresh during the day, but 60 subsides at night ? Is it because it springs from frozen rain, when it is evaporated by the sun ? It subsides at night because its origin is not the same, but is produced by a contrary cause. For during the night the wind blows itself out, but it is less apt to do so during the day.

Why is it that when many spiders' webs blow about 61



947 a

ματός ἐστι σημεία; πότερον ὅτι ἐργάζεται ὁ  
 85 ἀράχνης ἐν ταῖς εὐδαίαις, φέρεται δὲ διὰ τὸ ψυχό-  
 μενον τὸν αέρα συνιέναι πρὸς τὴν γῆν, τὸ δὲ  
 ψύχεσθαι ἀρχὴ χειμῶνος; σημεῖον οὖν ἢ φορὰ  
 τῶν ἀραχνίων. ἢ ὅτι μετὰ τὰ ὕδατα καὶ τοὺς  
 χειμῶνας γίνεται τῶν ἀραχνῶν<sup>1</sup> ἀθρόα ἢ φορά, ἐν  
 ταῖς εὐδαίαις ἐργαζομένων, διὰ τὸ ἐν τῷ χειμῶνι μὴ  
 947 b φαίνεσθαι; δύσριγον γὰρ τόδε. καὶ φερόμενοι ὑπὸ  
 τοῦ πνεύματος πολὺ ἐκπηνίζονται. μετὰ δὲ  
 τὰ ὕδατα εἴθθεν πνεύματα γίνεσθαι ὡς τὰ πολλά.

Διὰ τί οἱ βορέαι μεγάλοι τοῦ χειμῶνος ἐν τοῖς 62  
 5 ψυχροῖς τόποις ἐπινέφελαι, ἔξω δὲ αἶθριοι; ἢ ὅτι  
 ἅμα ψυχροὶ εἰσι καὶ μεγάλοι, ἐγγὺς δὲ μᾶλλον  
 ψυχροί, ὥστε φθάνουσι πηγνύντες πρὶν ἀπῶσαι τὰ  
 νέφη; ὅταν δὲ παγῇ, μένουσι διὰ βάρος. ἔξω  
 δὲ τῷ μεγέθει ἐργάζονται μᾶλλον ἢ τῷ ψυχρῷ.

<sup>1</sup> ἀραχνῶν Forster : ἀραχνίων MS.

## PROBLEMS, XXVI. 61-62

it is a sign of wind ? Is it because the spider works in the calm weather, but the webs travel because the air as it cools collects on the ground, and this cooling is the beginning of winter ? So the blowing about of the spiders' webs is a sign of winter. Or is it because after the rain and storm the movement of spiders is considerable, as they work in the calm weather because they do not appear in winter ? For this (insect) cannot bear the cold. So when they are blown about by the wind they spin a long thread. And it is after rain that winds generally come.

Why do strong north winds in winter bring clouds 62 in cold places, but a clear sky in others ? Is it because they are both cold and strong, and colder when they are nearer, so that they freeze the clouds before they can drive them away ? But once they are frozen, they remain stationary because of their weight. But in other places their effect is due rather to their size than to their coldness.

## ΟΣΑ ΠΕΡΙ ΦΟΒΟΝ ΚΑΙ ΑΝΔΡΕΙΑΝ

Διὰ τί οἱ φοβούμενοι τρέμουσιν; ἢ διὰ τὴν 1  
κατάψυξιν; ἐκλείπει γὰρ τὸ θερμόν καὶ συστέλ-  
λεται· διὸ καὶ αἱ κοιλίαι λύονται τοῖς πολλοῖς.

15 Διὰ τί οὖν καὶ διψῶσιν ἔνιοι, καθάπερ οἱ μέλ- 2  
λοντες κολάζεσθαι; οὐ γὰρ ἔδει καταψυχομένων.  
ἢ οὐκ ἐν ταύτῳ τόπῳ ἢ κατάψυξις καὶ ἡ θερμότης,  
ἀλλ' ἡ μὲν ἐν τῷ ἐπιπολῆς, ἔνθεν ἐκλείπει τὸ  
θερμόν, ἡ δὲ ἐν τῷ ἐντός, ὥστε ἐκθερμαίνει;  
20 σημεῖον δὲ καὶ τὸ λύεσθαι τὰς κοιλίας. ἀναξηραι-  
νομένου δὴ τοῦ κυρίου τόπου τὸ δύψος. ὅμοιον δὲ  
ἔοικεν ὥσπερ τοῖς ἡπιαλοῦσιν, οἳ ἅμα τῷ ρίγουν  
διψῶσιν· οὐδὲ γὰρ ὁ αὐτὸς οὐδ' ἐκεῖ τόπος ψύχεται  
καὶ θερμαίνεται.

Διὰ τί ἐν μὲν τοῖς θυμοῖς εἰς τὸ ἐντός ἀθροίζο- 3  
μένου τοῦ θερμοῦ διάθερμοι καὶ θαρραλέοι, ἐν δὲ  
25 τοῖς φόβοις ἀνάπαλιν; ἢ οὐκ εἰς τὸν αὐτὸν τόπον,  
ἀλλὰ τοῖς μὲν ὀργιζομένοις περὶ τὴν καρδίαν, διὸ  
καὶ θαρρητικοὶ καὶ ἐν ἐρυθήματι καὶ πνεύματος  
πλήρεις, ἄνω τῆς φορᾶς οὔσης, τοῖς δὲ φοβουμένοις  
κάτω συμφευγόντων τοῦ αἵματος καὶ τοῦ θερμοῦ,

## BOOK XXVII

### PROBLEMS CONNECTED WITH FEAR AND COURAGE

WHY do the frightened tremble? Is it owing to 1  
their being chilled? For the heat leaves them and  
is contracted; this is also why the bowels become  
loose with many people.

Why are the frightened sometimes thirsty, as, for 2  
instance, those who are about to be punished? They  
ought not to be, seeing that they are being chilled.  
Or are the chilling and warmth in different parts, the  
former being on the surface, which the heat has left,  
while the latter is inside, so that it warms this part?  
The loosening of the bowels is evidence of this.  
But when the controlling part becomes dry, thirst  
follows. It is the same with those with ague, who are  
thirsty and shiver at the same time; for in that case  
also it is not the same part which is both chilled and  
warmed.

Why is it that in a state of anger, when the heat 3  
collects within, men become heated and bold, but in  
a state of fear they are in the opposite condition?  
Or is not the same part affected? In the case of the  
angry it is the heart which is affected, which is the  
reason why they are courageous, flushed and full of  
breath, as the direction of the heat is upwards, but in  
the case of the frightened the blood and the heat

947 b

διὸ καὶ ἡ λύσις τῶν κοιλιῶν· ἐπεὶ καὶ ἡ τῆς καρδίας  
 80 πῆδησις οὐχ ὁμοία, ἀλλὰ τοῖς μὲν ὥς ἂν διὰ τὴν  
 ἔκλειψιν πυκνὴ καὶ νυγματώδης, τοῖς δὲ ὥς ἂν  
 ἀθροιζομένου πλείονος θερμοῦ· διὸ καὶ τὸ ἀναζεῖν  
 καὶ τὸ ὀρίνεσθαι τὸν θυμὸν καὶ ταραττεσθαι, καὶ  
 ὅσα τοιαῦτα λέγουσιν οὐ κακῶς, ἀλλ' οἰκείως. ἄρ'  
 85 οὖν καὶ διὰ τοῦτο τὸ δίψος, ἐπεὶ τό γε ξηρὸν πτύειν  
 καὶ ὁ σανσαρισμὸς καὶ τὰ τοιαῦτα γίνεται διὰ τὴν  
 ἀναφορὰν τοῦ πνεύματος ἅμα καὶ θερμοῦ; καὶ τὸ  
 δίψος δὲ δῆλον ὥς ἐκθερμαινομένου τοῦ σώματος.  
 πῶς οὖν ὁ αὐτὸς τόπος ἀναξηραίνεται ἀμφοῖν, ᾧ  
 διψῶμεν, καὶ τῷ φοβουμένῳ καὶ τῷ ὀργιζομένῳ;  
 948 a ὁ δὲ φόβος ὅτι διψητικόν, καὶ οἱ ἐν ταῖς τροπαῖς  
 δηλοῦσιν· οὐδαμοῦ γὰρ οὕτω διψῶσιν. καὶ οἱ  
 ἀγωνιῶντες δὲ σφόδρα· διὸ καὶ διακλύζονται καὶ  
 ἐπιρροφούσιν, καθάπερ Παρμένων ὁ ὑποκριτής. ἡ  
 τούτοις μὲν οὐκ ἔστιν δίψος, ἀλλὰ ξηρότης πεφευ-  
 9 γότος τοῦ αἵματος, ὅθεν καὶ ὠχροί; σημεῖον δὲ  
 τὸ μὴ πίνειν πολὺ, ἀλλὰ καὶ βροχθίσαι. οἱ δ'  
 ἐν ταῖς τροπαῖς μετὰ πόνου. διὸ διψῶσι καὶ οἱ  
 μέλλοντες κολάζεσθαι· καὶ οὐθὲν ἄτοπον. ἐν δὲ  
 τοῖς πολεμικοῖς ἔνιοι καὶ τῶν ἀνδρείων, ὅταν δια-  
 σκευασθῶσιν, καὶ τρέμουνσιν οὐκ ἐξεστηκότες, ἀλλὰ  
 10 θαρροῦντες· ὧν εἰώθασιν μαστιγοῦν τὸ σῶμα πλατεῖ  
 νάρθηκι, εἰ δὲ μή, ταῖς χερσὶν ἀναθερμανθέντες.  
 ἔοικεν δὴ διὰ τὴν ὀξύτητα καὶ τὴν φορὰν τοῦ  
 θερμοῦ ἀνωμαλία τις εἶναι περὶ τὸ σῶμα ταρα-  
 χώδης.

Διὰ τί οἱ ἀνδρεῖοι ὥς ἐπὶ τὸ πολὺ φίλοινοι; ἡ 4

escape downwards, whence comes the loosening of the bowels. The beating of the heart is also different (in the two cases), since with the frightened it is rapid and strongly punctuated as would naturally occur from a failure of heat, whereas in the case of the angry it functions as one would expect if more heat was collecting there ; so the phrases " boil up," " rise," " be disturbed " and similar expressions are not wrongly but quite naturally used of the temper. Is it also for this reason that thirst results, and the drying of saliva, and a paralysis of the tongue and similar symptoms owing to the upward passage of the breath and heat ? The thirst is evidently due to the heating of the body. How is it, then, that the same part of us, that with which we thirst, dries both in fear and in anger ? That fear produces thirst is shown by men in a rout ; for in no other circumstances is thirst so intense. So also those who are under great strain are thirsty ; that is why they wash out their mouths and swallow greedily, as Parmeno the actor used to do. Or is this not really thirst, but is it a dryness due to the draining of blood, which is also why they become pale ? A proof of this is that they do not drink a large quantity but gulp it down. Those who are in a rout combine their fear with exertion. So those also who are expecting punishment are thirsty ; and this is in no way surprising. In war even some brave men, when they are equipped for the fray, tremble, not because they are distraught, but because they are full of courage ; these are accustomed to beat their body with a broad stick, or otherwise to warm it with their hands. It seems that owing to the sharpness and rush of the heat a disturbing inequality of temperature is set up in the body.

Why are brave men usually fond of wine ? Is it 4



ὅτι οἱ ἀνδρεῖοι θερμοί, ἢ δὲ θερμότης περὶ τὰ  
 15 στήθη. ἐνταῦθα γὰρ καὶ ὁ φόβος φαίνεται, γινόμενος  
 κατάψυξις τις. ὥστε<sup>1</sup> περὶ τὴν καρδίαν  
 ἦττον μὲν μένει, τοῖς δὲ πηδᾶ ψυχομένη. ὅσοι  
 οὖν τὸν πνεύμονα ἔχουσιν ἔναιμον, θερμὸν ἔχουσι  
 τοῦτον ὥσπερ οἰνωμένοι, ὥστε οὐ ψύχει ἢ φαν-  
 τασία τοῦ δεινοῦ. οἱ δὲ τοιοῦτοι καὶ φιλοπόται.  
 20 ἢ τε γὰρ τοῦ ποτοῦ ἐπιθυμία διὰ τὴν τούτου τοῦ  
 μορίου θερμότητά ἐστιν (εἴρηται δὲ περὶ αὐτοῦ ἐν  
 ἄλλοις) καὶ τοῦ παυστικοῦ ἢ ἐπιθυμία. ὁ δὲ οἶνος  
 θερμὸς μὲν τὴν φύσιν, παύει δὲ τὴν δίψαν μᾶλλον  
 τοῦ ὕδατος, καὶ μάλιστα τῶν τοιούτων<sup>2</sup>. δι' ἣν  
 αἰτίαν, εἴρηται ἐν ἄλλοις. διὸ καὶ οἱ ἐν τῇ περι-  
 25 πνευμονία καὶ οἱ μαινόμενοι ἀμφοτέροι ἐπιθυμοῦσιν  
 οἶνου· καίτοι τῶν μὲν διὰ τὴν θερμασίαν θερμὸς ὁ  
 πνεύμων, τῶν δὲ διὰ τὴν ταραχήν. ἐπεὶ οὖν οἱ  
 αὐτοὶ ὥς ἐπὶ τὸ πολὺ τῷ γένει διψητικοὶ καὶ  
 ἀνδρεῖοι, οἶνου δὲ οἱ διψητικοὶ ἐπιθυμητικοί, οἱ δὲ  
 τοιοῦτοι φιλοπόται, ἀναγκαῖον ὥς ἐπὶ τὸ πολὺ  
 παρακολουθεῖν ἀλλήλοις τὰς φύσεις. διὸ καὶ οἱ  
 30 οἰνωμένοι ἀνδρειότεροι τῶν μή.

Διὰ τί μάλιστα τὴν ἀνδρείαν τιμῶσιν αἱ πόλεις, 5  
 οὐ βελτίστην οὔσαν τῶν ἀρετῶν; ἢ ὅτι δια-  
 τελοῦσιν ἢ πολεμοῦντες ἢ πολεμούμενοι, αὕτη δὲ  
 ἐν ἀμφοῖν χρησιμωτάτη ἐστίν· τιμῶσι δὲ οὐ τὰ  
 βέλτιστα, ἀλλὰ τὰ αὐτοῖς βέλτιστα.

35 Διὰ τί οἱ φοβούμενοι μάλιστα τρέμουσι τὴν 6  
 φωνὴν καὶ τὰς χεῖρας καὶ τὸ κάτω χεῖλος; ἢ διότι  
 ἔκλειψις ἐστὶ τὸ πάθος θερμοῦ ἐκ τῶν ἄνω τόπων;  
 διὸ καὶ ὠχριῶσιν. διὰ μὲν οὖν τὸ ἐκ τοῦ στήθους

<sup>1</sup> Ruelle inserts τοῖς μὲν after ὥστε without ms. authority.

<sup>2</sup> τῶν τοιούτων Forster: τῶν αὐτῶν ms.

## PROBLEMS, XXVII. 4-6

because brave men are warm, and the warmth lies about the chest? For it is there that fear makes itself felt, in the form of chilling. So that less heat remains about the heart, and with some people the heart palpitates as it cools. Those whose lungs contain much blood have hot lungs like those under the influence of wine, so that the presentiment of fear does not cool them. Men of this character are fond of drink; for the desire of drink is due to the heat of this part (this subject has been discussed elsewhere) and it is a desire for what will stop the heat. But wine is naturally hot, and quenches thirst more than water does, especially with the brave; why this is so has been explained elsewhere. So those who are suffering from pneumonia and the insane both crave for wine; yet the lungs of the former are hot as the result of inflammation, those of the latter owing to their disturbed state. Since, then, the same men are generally thirsty and courageous, the thirsty desiring to drink wine and therefore fond of drinking, it follows that these characteristics generally accompany each other. This is why those who drink wine are more courageous than those who do not.

Why do cities give most honour to courage, which 5 is not the greatest of the virtues? Is it because brave men hold out, whether in aggression or in defence, and in either case courage is most useful to the city? So they honour not what is absolutely best, but what is best for themselves.

Why do the frightened tremble most in voice and 6 in the hands and the lower lip? Is it because this condition involves a draining of heat from the upper parts? This is why they grow pale. It is due to the draining of heat from the breast that the voice

948 a

ἡ φωνὴ τρέμει, ψυχομένου ᾧ κινεῖται. ὁμοίως δὲ καὶ αἱ χεῖρες· ἐκ τοῦ στήθους γὰρ ἤρτηνται. τὸ δὲ

948 b

κάτω χεῖλος, ἀλλ' οὐ τὸ ἄνωθεν <τρέμει, διότι τὸ ἄνωθεν><sup>1</sup> κάτω κρέματα ἢ ῥέπει· τὸ δὲ κάτωθεν ἄνω παρὰ φύσιν, ἀλλ' ὑπὸ τοῦ θερμοῦ ἄνω ἡρεμεῖ· οὗ ὑφαιρουμένου διὰ τὸ ψύχεσθαι τρέμει. καὶ ἐν τοῖς θυμοῖς δὲ διὰ τὸ αὐτὸ ἀποκρεμάννυται τὸ χεῖλος. δῆλον δὲ ἐπὶ τῶν παιδίων· συνθεῖ γὰρ εἰς τὴν καρδίαν τὸ θερμόν.

Διὰ τί οἱ φοβούμενοι τρέμουνσι, καὶ μάλιστα τὴν 7 φωνὴν καὶ τοῦ σώματος τὰς χεῖρας καὶ τὸ κάτω χεῖλος; ἢ διότι ἐκ τούτου τοῦ τόπου ἐκλείπει τὸ θερμόν ἐν ᾧ ἡ φωνή; τὸ δὲ χεῖλος καὶ τὰς χεῖρας, 10 ὅτι εὐκίνητότατα καὶ ἥκιστα ἔναιμα. καὶ προῖενται μὲν τὴν χολήν, συσπῶσι δὲ τὰ αἰδοῖα, προῖενται μὲν διὰ τὸ συντήκειν τὸ καταβαῖνον θερμόν, ἀνασπῶσι δέ, ὅτι ἔξωθεν φόβος· εἰς τοῦναντίον οὖν ἡ φυγή.

Διὰ τί οἱ φοβούμενοι καὶ διψοῦσιν καὶ ῥιγοῦσιν; 8 ταῦτα δὲ ἐναντία τὰ πάθη. ἢ ῥιγοῦσι μὲν ψυχόμενοι, διψῶσι δὲ θερμαινόμενοι. διότι ἐν τῷ 15 φοβεῖσθαι τὸ θερμόν ἐκλείπει καὶ τὸ ὑγρὸν ἐκ τῶν ἄνω τόπων. δηλοῖ δὲ τὸ χρῶμα καὶ αἱ κοιλίαι· τὸ μὲν γὰρ πρόσωπον ὥχρόν, αἱ δὲ κοιλίαι ἐνίοτε λύονται. διὰ μὲν οὖν τὸ ἐκλείπειν τὸ θερμόν ἐκ τῶν ἄνωθεν τὸ ῥίγος γίνεται, διὰ δὲ τὸ ὑγρὸν ἡ δίψα.

20 Διὰ τί τοῦ τε φόβου λύπης τινὸς ὄντος καὶ τῆς 9 ἀλγηδόνης, οἱ μὲν ἀλγοῦντες ἀναβοῶσιν, οἱ δὲ φοβούμενοι σιωπῶσιν; ἢ οἱ μὲν ἀλγοῦντες κατ-

<sup>1</sup> Forster adds *τρέμει . . . ἄνωθεν* from Th. G.'s trans-

trembles, as the part cools by which both the tongue and the hands are moved ; for they depend on the breast. It is the lower lip which trembles not the upper, because the latter hangs down in the direction of its weight ; the lower lip points upwards in an unnatural direction, and remains in this position because of the heat ; so, as the heat is withdrawn, it trembles because it is cooling. In temper the lip hangs down for the same reason. This is clear in the case of children ; for the heat rushes to the heart.

Why do the frightened tremble especially in voice, 7 in the hands and in the lower lip ? Is it because the heat fails from that part in which the voice resides ? In the case of the lip and the hands it is because these parts are most easily moved and contain least blood. Men in this condition emit bile, and suffer contraction of the privates ; the emission is due to the melting caused by the descending heat, and the contraction takes place because fear comes from the outside ; so the flight is in the opposite direction.

Why do the frightened feel thirsty and shiver ? 8 For these are contrary affections. Do men shiver when they are getting chilled, and are they thirsty when growing hot ? It is because in fear heat and moisture leave the upper parts of the body. The colour of the skin and the bowels prove this. For the face grows pale, and the bowels are sometimes loose ; so the shivering is due to the draining of the heat from the upper parts, while the thirst is due to the departure of moisture.

Why is it, seeing that fear is a form of pain and 9 grief, that those in pain cry out, but the frightened are silent ? Is it because those in pain hold the

lation " non superius labrum quatitur quia superius . . . pendet."

948 b

έχουσι τὸ πνεῦμα (διὸ ἀθρόον ἐξιὸν μετὰ βοῆς ἐξέρχεται), τῶν δὲ φοβουμένων κατέψυκται τὸ σῶμα καὶ τὸ θερμὸν κάτω ἐνήνεκται, ὃ ποιεῖ  
 25 πνεύματα; ἥ οὖν ἐνήνεκται μάλιστα, ἐνταῦθα καὶ ποιεῖ αὐτά. διὸ καὶ ἀποψοφοῦσιν οἱ φοβούμενοι. ἥ δὲ φωνή ἐστι φορὰ πνεύματος ἄνω πως καὶ διὰ τινων γινομένη. τοῦ δὲ τοὺς ἀλγοῦντας κατέχειν τὸ πνεῦμα αἴτιον, ὅτι ταῖς ἐνυπαρχούσαις ἡμῖν  
 30 βοηθείαις φύσει εὐθὺς πάντες παθόντες ἄνευ λογισμοῦ χρώμεθα, καθάπερ καὶ τὰ ἄλλα ζῶα· τὰ μὲν γὰρ κέρασι, τὰ δὲ ὀδοῦσι, τὰ δὲ ὄνυξιν ἀμύνεται. πρὸς δὲ τὰ ἀλγήματα πάντα ἢ τὰ πλείστα βοηθεῖ ἢ θερμότης. ὃ ποιεῖ ὁ κατέχων τὸ πνεῦμα· θερμαίνει γὰρ καὶ ἐκπέττει τὸ ἄλγημα, συστέλλων ἐντὸς τὸ θερμὸν τῷ πνεύματι.

35 Διὰ τί τοῖς φοβουμένοις αἱ κοιλίαι λύονται καὶ 10 οὐρητιῶσιν; ἥ τὸ θερμὸν τὸ ἐν ἡμῖν ἐστὶν ὥσπερ ζῶον; τοῦτ' οὖν φεύγει ὃ τι ἂν φοβηθῇ. ἔξωθεν οὖν γινομένων τῶν τε ὑπὸ τῆς ἀγωνίας φόβων καὶ τῶν τοιούτων, καὶ ἐκ τῶν ἄνωθεν εἰς τὰ κάτω καὶ  
 949 a ἐκ τῶν ἐπιπολῆς εἰς τὰ ἐντός, ἐκθερμαινόμενοι δὲ οἱ περὶ τὴν κοιλίαν τόποι καὶ τὴν κύστιν διαλύονται, καὶ ποιοῦσιν αὐτὰς εὐτρεπεῖς. καὶ γὰρ τὰ ἄνηθα καὶ τὰ ἀψίνθια, καὶ ὅσα οὐρητικά, θερμαντικά. ὁμοίως δὲ καὶ τὰ πρὸς τὴν κοιλίαν  
 5 φάρμακα τῶν<sup>1</sup> κάτω θερμαντικά· καὶ τὰ μὲν τῶν εἰσενεχθέντων μόνον<sup>2</sup> λυτικά, τὰ δὲ καὶ ἐτέραν σύντηξιν ποιεῖ, οἷον τὸ σκόροdon εἰς τὸ οὖρον. τὸ αὐτὸ δὲ τοῖς τοιούτοις ἢ ἐκ τῶν ἐπιπολῆς θερμασία εἰς τούτους τοὺς τόπους συνιοῦσα δρᾷ.

Διὰ τί οἱ φοβούμενοι συσπῶσιν τὰ αἰδοῖα; εἰκὸς 11  
 10 γὰρ ἦν τὸ ὑναντίον, τοῦ θερμοῦ εἰς τοῦτον τὸν τόπον



breath (so when it escapes in a mass it escapes with a cry), but in the case of the frightened the body is chilled and the heat travels downwards, and creates breath? It creates most wind in the region to which it is carried. So the frightened break wind. Now voice is due to the rush of the breath upwards in some way and by certain channels. But the reason why those in pain hold the breath is that all men when suffering make use of the natural aids we possess without thinking, just as the other animals do; some defend themselves with their horns, others with their teeth, and others again with their claws. Now in all pains, or most of them, warmth assists. This is what occurs when a man holds his breath; for he heats and concocts the pain, by collecting the heat within by means of the breath.

Why should the frightened have relaxed bowels 10 and desire to pass urine? Is it because the heat within us behaves as if it were alive? This, therefore, flees from what it fears. So, as the causes of fears due to nervousness and the like are external and pass downwards from above and from the surface to the inside, the parts near the stomach and bladder growing hot relax and make the organs ready to function. For aniseed and wormwood, and all other diuretic drugs are heating. In the same way drugs which affect the stomach heat the lower parts: some drugs when introduced only relax, but others produce further melting, as garlic does with the urine. The heat which passes into these regions from the surface has the same effect as these drugs.

Why do the privates of the frightened contract? 11 The opposite effect would be expected, seeing that

<sup>1</sup> τῶν Foster: τὰ MS.

<sup>2</sup> μόνων Ruelle: μόνον several MSS.



949 a

ἀθροιζομένου τῶν φοβουμένων, ἀνίσθαι αὐτά. ἢ οἱ φοβούμενοι σχεδὸν ἅπαντες ὥσπερ ῥιγούντες εἰσιν; ἐκλελοιπότης οὖν ἐκ τῶν ἐπιπολῆς τοῦ θερμοῦ συσπῶσιν. διὸ καὶ βομβυλίζουσιν οἱ δεινῶς δεδιότες. δοκεῖ δὲ συσπᾶν τὸ ἐπιπολῆς καὶ τὸ  
 15 δέρμα τῶν ῥιγούντων, ἅτε τοῦ θερμοῦ ἐκκεκριμένου· διὸ καὶ φρίττουσιν. συσπᾶται δὲ καὶ ἡ ὀσχέα τοῦ αἰδοίου ἄνω, καὶ συνεφέλκονται καὶ οἱ ὄρχεις αὐτῇ συστελλομένη.<sup>1</sup> θᾶπτον δὲ φαίνεται ἐπὶ τῶν ἀφροδισίων· ὁ γὰρ φόβος ἐκκρίνει, καὶ πολλοῖς τῶν ἀγωνιόντων καὶ τῶν περιφόβων  
 20 συμβαίνει<sup>2</sup> τῆς γονῆς πρόεσις.

<sup>1</sup> αὐτοῖς συστελλομένων Ruelle. The reading in the text is taken by Forster from Th. G.

<sup>2</sup> συμβαίνει Platt : συγκινεῖ ἡ Ruelle.

the heat collects in this region when men are frightened—namely that they should relax. Are the frightened almost always in the same condition as the cold? So when the heat has left the surface the privates contract. This is why, when men are very frightened, they have rumblings in the bowels. The surface and skin of the cold seem to contract, because the heat is driven from them; hence they shiver. The scrotum contracts upwards and the testicles are drawn with it as it contracts. This is more obvious at the time of sexual intercourse; for fear causes excretion, and an emission of semen often occurs with the nervous and the very frightened.

## ΚΗ

949 a ΟΣΑ ΠΕΡΙ ΣΩΦΡΟΣΥΝΗΝ ΚΑΙ ΑΚΟΛΑ-  
ΣΙΑΝ, ΚΑΙ ΕΓΚΡΑΤΕΙΑΝ ΚΑΙ ΑΚΡΑΣΙΑΝ

Διὰ τί ἔνιοι κάμνουσιν, ὅταν ἐθισθέντες ἀκο- 1  
25 λάστως ζῆν μὴ ἀκολάστως διαιτῶνται, οἷον Διο-  
νύσιος ὁ τύραννος, ἐπεὶ ἐν τῇ πολιορκίᾳ ἐπαύσατο  
πίνων ὀλίγον τινὰ χρόνον, εὐθὺς ἐφθισίασεν, ἕως  
πάλιν εἰς τὴν μέθην μετέβαλεν; ἢ μέγα μὲν τι  
καὶ τὸ ἔθος ἐστὶν ἐκάστοις· φύσις γὰρ ἤδη γίνεται.  
καθάπερ ἂν ἰχθὺς ἐν ἀέρι ἢ ἄνθρωπος ἐν ὕδατι  
30 διατελῶν φαύλως ἂν ἴσχοι, οὕτω καὶ οἱ τὰ ἔθη  
μεταβάλλοντες χαλεπῶς ἀπαλλάττουσιν, καὶ τὸ  
πάλιν εἰς τὰ εἰωθότα ἐλθεῖν σωτηρία γίνεται αὐτοῖς  
ὥσπερ εἰς φύσεως κατάστασιν. ἔτι δὲ καὶ συν-  
τηκτικοὶ γίνονται, εἰωθότες τροφῇ χρῆσθαι δαψιλεῖ  
τῇ ἰδίᾳ· μὴ λαμβάνοντες γὰρ τὴν εἰωθυῖαν ὥσπερ  
35 ὅλως μὴ λαμβάνοντες διατίθενται. οὐ μὲν ἀλλὰ  
καὶ τὰ περιττώματα τροφῇ μεμιγμένα πολλῇ ἀ-  
φανίζεται, αὐτὰ δὲ ἐπιπολάζει μόνα ὄντα, καὶ φέρε-  
ται εἰς ὄμματα ἢ πνεύμονα· προσενεγκαμένους  
949 b δὲ τροφήν κατακεραννύμενα ὕδαρῇ γίνεται καὶ  
ἀβλαβῇ. γίνεται δὲ τοῖς ἀκολάστως ζῶσιν πλείω τὰ  
περιττώματα ἄχρι τινὸς λήξασι τοῦ εἰωθότος βίου,

## BOOK XXVIII

### PROBLEMS CONNECTED WITH SELF-CONTROL AND LACK OF CONTROL, WITH CONTINENCE AND INCONTINENCE

WHY is it that some men become ill, when, being 1 accustomed to live an intemperate life, they no longer live thus ; for instance, Dionysius the tyrant, when in the siege he ceased drinking wine for a time, immediately became consumptive, until he reverted to his drinking ? Is habit a large factor in every man's life, since it soon becomes second nature ? Just as a fish in air or a man in water would suffer after a time, so those who alter their mode of life suffer from the change, and their only safety lies in returning to their usual life, like a return to nature. Moreover, they waste away, if they are accustomed to enjoy an abundant supply of a special diet ; for if they fail to receive their usual diet their condition is the same as if they received no food at all. In addition to this, when the waste products are mixed with a large quantity of food they disappear, but when undiluted they rise to the surface, and travel to the eyes and the lungs ; but when men are receiving food, being mixed with it these waste products become diluted and so innocuous. Now when those who live intemperate lives abandon their usual manner of living, the waste products grow greater up to a

949 b

διὰ τὸ πολλήν ἀκαταχώριστον ἐν αὐτοῖς ὕλην  
ὑπάρχειν ἐκ τοῦ προτέρου βίου, ἧς τηκομένης ὑπὸ  
5 τοῦ συμφύτου θερμοῦ, καθάπερ χιόνος πολλῆς,  
ρεύματα ἀδρὰ συμβαίνει γίνεσθαι.

Διὰ τί κατὰ δύο μόνας αἰσθήσεις ἀκρατεῖς 2  
λέγομεν, οἷον ἀφῆν καὶ γεῦσιν; ἢ διὰ τὰς ἀπὸ  
τούτων γινομένας ἡδονὰς ἡμῖν καὶ τοῖς ἄλλοις  
ζώοις; ἄτε οὖν κοιναὶ οὔσαι ἀτιμόταταί εἰσι, διὸ  
καὶ μάλιστα ἢ μόναι ἐπονείδιστοί εἰσιν. ὥστε  
10 τὸν ὑπὸ τούτων ἡττώμενον ψέγομεν καὶ ἀκρατῆ  
καὶ ἀκόλαστον εἶναι φαμέν, διὰ τὸ ὑπὸ τῶν χειρί-  
στων ἡδονῶν ἡττᾶσθαι.

Διὰ τί ἀκρατεῖς λέγονται κατὰ τὰς ἐπιθυμίας 3  
μόνον, οὔσης τῆς ἀκρασίας καὶ περὶ τὴν ὀργήν;  
15 ἢ ὅτι ἀκρατῆς μὲν ἐστὶν ὁ παρὰ τὸν λόγον τι πράτ-  
των καὶ ἀκρασία ἡ παρὰ τὸν λόγον ἀγωγή, εἰσὶ  
δὲ αἱ μὲν ἐπιθυμίαι ὥς ἐπίπαν εἰπεῖν παρὰ τὸν  
λόγον, αἱ δὲ ὀργαὶ μετὰ λόγου, οὐχ ὥς κελεύσαντος  
τοῦ λόγου, ἀλλ' ὥς δηλώσαντος τὸν προπηλακισμόν  
ἢ τὴν αἰτίαν;

20 Διὰ τί τὴν μὲν ἐγκράτειαν καὶ σωφροσύνην ἐπὶ 4  
τῶν νέων καὶ πλουσίων μάλιστα ἐξετάζομεν, τὴν  
δὲ δικαιοσύνην ἐπὶ τῶν πενήτων; ἢ ὅτι οὐ  
μάλιστα δεῖται τις, εἰ τούτου ἀπέχεται, μᾶλλον  
θαυμάζοιτ' ἂν ἢ τῶν ἐναντίων; ὁ μὲν οὖν πένης  
εὐπορίας δεῖται, ὁ δὲ νέος καὶ πλούσιος ἀπο-  
25 λαύσεως.

Διὰ τί ἡττον ἀνέχονται διψῶντες ἢ πεινῶντες; 5  
πότερον ὅτι λυπηρότερον; σημεῖον δὲ τοῦ λυπηρο-  
τέρου, ὅτι ἡδιον τὸ διψῶντα πιεῖν ἢ πεινῶντα φαγεῖν.

point, because there is much unseparated matter in them left from their previous mode of living, and when this is dissolved by the natural heat, like a quantity of melted snow, violent fluxes take place.

Why do we describe men as incontinent in respect 2 of two senses only, touch and taste? Is it because the pleasures derived from these two senses are common to us and to the other animals? Because they are common to them they are the least honoured senses, and so they are the only pleasures open to reproach or at any rate more so than others. So we blame the man who is a slave to them and call him incontinent and intemperate, because he is a slave to the worst pleasures.

Why do we call men incontinent only in respect of 3 their desires, although they can also be incontinent in anger? Is it because the incontinent man is he who acts contrary to reason, and incontinence is a way of living which is contrary to reason? Now desires are, speaking generally, contrary to reason, but feelings of anger are combined with reason, not because reason prompts them, but because it is reason which indicates the insult or accusation.

Why are continence and self-control the virtues we 4 most admire among the young and rich, but justice among the poor? Is it because more admiration is given to one who abstains from what he wants most than when he abstains from the opposite? Now the poor man feels the need of well-being, but the young and rich of enjoyment.

Why can men bear thirst less easily than hunger? 5 Is it because it is more painful? The proof of its being more painful lies in the fact that the thirsty man finds more pleasure in drinking than the hungry man



949 b

τὸ δὲ ἐναντίον τῷ ἡδεῖ λυπηρότερον. ἢ διότι  
 30 μᾶλλον δεῖται τοῦ ὑγροῦ τὸ θερμὸν ὥς ζῶμεν<sup>1</sup>; ἢ  
 ὅτι δυοῖν ἢ δίψα ἐπιθυμία, ποτοῦ καὶ τροφῆς, ἢ  
 δὲ πείνα ἐνὸς μόνον, τροφῆς;

Διὰ τί ἤττον καρτεροῦμεν διψῶντες ἢ πεινῶντες; 6  
 ἢ διότι λυπούμεθα μᾶλλον; σημεῖον δὲ τῆς λύπης·  
 ἢ ἡδονὴ σφοδροτέρα. εἴτα ὁ μὲν διψῶν δυοῖν  
 85 ἐνδεής, τροφῆς καὶ καταψύξεως (ἄμφω γὰρ ἔχει  
 τὸ ποτόν), ὁ δὲ πεινῶν θατέρου μόνον.

Διὰ τί οἱ κατὰ τὴν τῆς ἀφῆς ἢ γεύσεως ἡδονήν, 7  
 οὗ ἂν ὑπερβάλλωσιν, ἀκρατεῖς λέγονται; οἷ τε  
 950 α γὰρ περὶ τὰ ἀφροδίσια ἀκόλαστοι, οἷ τε περὶ τὰς  
 τῆς τροφῆς ἀπολαύσεις. τῶν δὲ κατὰ τὴν τροφήν  
 ἀπ' ἐνίων μὲν ἐν τῇ γλώττῃ τὸ ἡδύ, ἀπ' ἐνίων δὲ  
 ἐν τῷ λάρυγγι, διὸ καὶ Φιλόξενος γεράνου φάρυγγα  
 5 εὐχετο ἔχειν. οἱ δὲ κατὰ τὴν ὄψιν καὶ τὴν ἀκοήν  
 οὐκέτι. ἢ διὰ τὸ τὰς ἀπὸ τούτων γινομένας  
 ἡδονὰς κοινὰς εἶναι ἡμῖν καὶ τοῖς ἄλλοις ζώοις;  
 ἅτε οὖν οὔσαι κοινὰ ἀτιμώτατα εἰσι καὶ μάλιστα  
 ἢ μόναι ἐπονείδιστοι, ὥστε τὸν ὑπὸ τούτων  
 ἡττώμενον ψέγομεν καὶ ἀκρατῇ καὶ ἀκόλαστον  
 λέγομεν διὰ τὸ ὑπὸ τῶν χειρίστων ἡδονῶν ἡτ-  
 10 τᾶσθαι. οὐσῶν δὲ τῶν αἰσθήσεων πέντε, τὰ τε  
 ἄλλα ζῶα ἀπὸ δύο μόνων τῶν προειρημένων  
 ἡδεται, κατὰ δὲ τὰς ἄλλας ἢ ὅλως οὐχ ἡδεται ἢ  
 κατὰ συμβεβηκὸς τοῦτο πάσχει. ὁρῶν μὲν γὰρ ὁ  
 λέων<sup>2</sup> ἢ ὁσφραϊνόμενος χαίρει ὅτι ἀπολαύσει<sup>3</sup> καὶ

<sup>1</sup> Text Ross : δεῖται τὸ θερμὸν τοῦ ὑγροῦ ἢ τὸ ξηρὸν ὥς ζῶμεν; Ruelle.

<sup>2</sup> λέων Richards (from *Eth. Nic.* 1118 a 18 ff.): ὁρῶν Ruelle.

<sup>3</sup> ἀπολαύσει Bonitz : ἀπολαύει Ruelle.

<sup>a</sup> Obviously a quotation from *Eudemian Ethics*, 1231,  
 132

in eating. But the opposite to the pleasant is the more painful. Or is it because the warmth by which we live has more need of moisture? Or is it because thirst is a desire for two things, drink and nourishment, but hunger of one only, namely nourishment?

Why do we bear thirst less well than hunger? Is it because we are more distressed by it? The proof of our pain is that the pleasure is greater. Again the thirsty man lacks two things, food and cooling (for drink contains both), but the hungry only one.

Why are men called incontinent whenever they exceed in the pleasures of touch and taste? For those are called undisciplined who exceed in sexual lusts and in the enjoyment of food. Now the enjoyment connected with food is in some cases a pleasure in the tongue, in others in the throat, wherefore Philoxenus<sup>a</sup> prayed to have the throat of a crane. But those whose pleasures lie in sight and hearing are not so described. Is it because we share the pleasures from these (*i.e.* touch and taste) with the other animals? So as they are thus shared they are held in less honour and generally or alone are regarded as subjects of reproach, so that we censure the man who is overcome by them, and call him incontinent and intemperate because he is a slave to the lowest pleasures. Now, though there are five senses, the other animals only derive pleasure from the two we have mentioned, and in respect of the others they either derive no pleasure at all, or are only affected incidentally. For the lion who sees or scents his victim rejoices because he is going to enjoy it; and when he has had his fill, such things

where Polyxenus is called "Son of Eryxis" (?). Possibly the same as in Aristophanes, *Frogs*, 934, but otherwise unknown.

950 a ὅταν πληρωθῇ, οὐδὲ τὰ τοιαῦτα ἡδέα αὐτῷ,  
 15 ὥσπερ οὐδὲ ἡμῖν ἢ τοῦ ταρίχου ὁδμή, ὅταν ἄδην  
 ἔχωμεν τοῦ φαγεῖν· ὅταν δὲ ἐνδεεῖς ὦμεν, ἡδέα.  
 ἢ δὲ τοῦ ῥόδου αἰεὶ ἡδεῖα.

Διὰ τί ἦττον κατέχουσι τὸν γέλωτα παρόντων 8  
 τῶν γνωρίμων; ἢ ὅταν σφόδρα ἐξηρμένον ἦ τι,  
 20 εὐκίνητόν ἐστιν; ἢ δ' εὐνοια ἐξαίρει, ὥστε κινεῖ  
 μᾶλλον τὸ γελοῖον.<sup>1</sup>

<sup>1</sup> Text Forster : ἢ δ' εὐνοια εἰπεῖν μᾶλλον γελοῖον, ὥστε κινεῖ MS.

## PROBLEMS, XXVIII. 7-8

are pleasant to him no longer, just as the smell of smoked fish no longer pleases us when we have eaten sufficient of it ; but when we need the fish, the smell is pleasant. But the scent of the rose is always pleasant.

Why do men restrain laughter less, when their 8 acquaintances are present ? Is it because when anything is violently excited it is easily set in motion, and goodwill excites, so that laughter moves us more ?

# ΚΘ

## 950 a ΟΣΑ ΠΕΡΙ ΔΙΚΑΙΟΣΥΝΗΝ ΚΑΙ ΑΔΙΚΙΑΝ

Διὰ τί μείζονος ὄντος ἀδικήματος, ἐάν τις 1  
βλάβπη εἰς τὸ μείζον ἀγαθόν, τῆς δὲ τιμῆς οὔσης  
μείζονος ἀγαθοῦ, ἢ τῶν χρημάτων ἀδικία μᾶλλον  
25 δοκεῖ, καὶ οἱ ἄδικοι μᾶλλον εἶναι δοκοῦσι περὶ τὰ  
χρήματα; ἢ διότι αἰροῦνται τὰ χρήματα μᾶλλον  
τῆς τιμῆς, καὶ πᾶσιν ἐστι κοινότατον, ἢ δὲ τιμὴ  
ὀλίγοις, καὶ ὀλιγάκις συμβαίνει ἢ χρήσις αὐτῆς;

Διὰ τί παρακαταθήκην δεινότερον ἀποστρεῖν ἢ 2  
δάνειον; ἢ ὅτι αἰσχροὺς ἀδικεῖν φίλον; ὁ μὲν  
30 οὖν τὴν παρακαταθήκην ἀποστερῶν φίλον ἀδικεῖ·  
οὐδεὶς γὰρ παρακατατίθεται μὴ πιστεύων. οὐ δὲ  
τὸ χρέος, οὐ φίλος· οὐ γὰρ δανεῖζει, ἐὰν ἦ φίλος,  
ἀλλὰ δίδωσιν. ἢ ὅτι μείζον τὸ ἀδίκημα; πρὸς  
γὰρ τῇ ζημίᾳ καὶ τὴν πίστιν παραβαίνει, δι' ἣν, εἰ  
καὶ μηδὲν ἕτερον, δεῖ ἀπέχεσθαι τοῦ ἀδικεῖν. ἔτι  
35 τὸ μὴ τοῖς ἴσοις ἀμύνεσθαι φαῦλον· ὁ μὲν οὖν  
ἔδωκεν ὡς φίλῳ, ὁ δὲ ἀπεστέρησεν ὡς ἐχθρόν· ὁ  
δὲ δανείζων οὐχ ὡς φίλος ἔδωκεν. ἔτι τῶν μὲν ἢ  
δόσις φυλακῆς καὶ ἀποδόσεως χάριν, τῶν δὲ καὶ  
ὠφελείας· ἦττον δὲ ἀγανακτοῦμεν ἀποβάλλοντες,

## BOOK XXIX

### PROBLEMS CONNECTED WITH JUSTICE AND INJUSTICE

WHY is it that, although injustice is greater if one 1  
wrong the greater good, and honour is a greater  
good, yet injustice in money matters is thought worse,  
and the unjust in money matters are thought to be  
more unjust? Is it because they prefer money to  
honour, as money is common to all, but honour be-  
longs to the few and the chance of enjoying it does  
not often occur?

Why is it more serious to make away with a deposit 2  
than with a loan? Is it because it is disgraceful to  
commit an act of injustice against a friend? Now  
the man who makes away with a deposit robs a  
friend; for no one makes a deposit except with a  
man whom he trusts. But where a debt is involved,  
there is no friend; for if a man is a friend he does not  
lend but gives. Or is it because the wrong done is  
really greater? For, in addition to the loss involved,  
he has betrayed a trust, for which reason, if for  
no other, he should abstain from the wrongdoing.  
Besides, it is mean not to return like for like; for the  
depositor gave it as to a friend, but the other took it  
away as from an enemy; but the lender did not give  
the money as a friend. Moreover, in the former  
case the gift was made for safe-guarding and return,  
but in the latter for profit. We are less indignant at



950 b εἰ κέρδος θηρεύομεν, οἷον οἱ ἀλιεῖς τὰ δελέατα·  
 προφανὴς γὰρ ὁ κίνδυνος. ἔτι παρακατατίθενται  
 μὲν ὥς ἐπὶ τὸ πολὺ οἱ ἐπιβουλευόμενοι καὶ ἀ-  
 τυχοῦντες, δανείζουσι δὲ οἱ εὐποροῦντες· δεινότερον  
 δέ ἐστι τὸν ἀτυχοῦντα ἢ τὸν εὐτυχοῦντα ἀδικεῖν.

5 Διὰ τί ἐνίοις δικαστηρίοις τοῖς γένεσι μᾶλλον ἢ 3  
 ταῖς διαθήκαις ψηφίζονται<sup>1</sup>; ἢ ὅτι γένους μὲν οὐκ  
 ἔστι καταψεύσασθαι, ἀλλὰ τὸ ὄν ἀποφαίνειν·  
 διαθῆκαι δὲ πολλαὶ ψευδεῖς ἤδη ἐξηλέγχθησαν  
 οὔσαι.

Διὰ τί ἡ πενία παρὰ τοῖς χρηστοῖς τῶν ἀνθρώπων 4  
 10 μᾶλλον ἢ παρὰ τοῖς φαύλοις ἐστίν; ἢ διὰ τὸ ὑπὸ  
 πάντων μισεῖσθαι καὶ ἐξελαύνεσθαι πρὸς τοὺς  
 ἐπιεικεῖς καταφεύγει, οἰομένη μάλιστα παρὰ τού-  
 τοις σωτηρίας τυχεῖν καὶ διαμεῖναι; εἰ δὲ πρὸς  
 πονηροὺς ἔλθοι, οὐκ ἂν διαμεῖναι ἐν τῇ αὐτῇ  
 δυνάμει αὐτοῦς, ἀλλ' ἢ κλέπτειν ἢ ληΐζεσθαι, ὧν  
 11 γινομένων οὐκ ἂν ἔτι εἶναι αὐτὴν παρ' αὐτοῖς. ἢ  
 ὅτι τοὺς ἐπιεικεῖς οἶεται τῶν ἀνθρώπων ἄριστα  
 ἂν αὐτῇ χρῆσθαι, καὶ ἥκιστα ἂν ὑβρισθῆναι ὑπ'  
 αὐτῶν; καθάπερ οὖν τὰς τῶν χρημάτων παρα-  
 καταθήκας πρὸς τοὺς ἐπιεικεῖς τιθέμεθα, οὕτω καὶ  
 αὐτῇ<sup>2</sup> διατάττεται. ἢ ὅτι θήλεια οὔσα ἀπορωτέρα  
 20 ἐστίν, ὥστε τῶν ἐπιεικῶν δεῖται; ἢ ὅτι αὐτὴ  
 κακὸν οὔσα πρὸς τὸ κακὸν οὐκ ἂν ἔλθοι; εἰ γὰρ  
 τὸ κακὸν ἔλοιτο, παντάπασιν ἂν δυσίατον εἴη.

Διὰ τί οὐχ ὁμοίως αἱ ἀδικίαι μείζους περὶ τὰ 5  
 χρήματα<sup>3</sup> καὶ τὰ ἄλλα, οἷον ὁ μικρὸν εἰπὼν οὐκ ἂν  
 25 καὶ τὸ ἀπόρρητον εἴποι, οὐδ'<sup>4</sup> ὁ ἔνα προδοὺς καὶ

<sup>1</sup> ψηφίζονται Bekker : ψηφιοῦνται Ruelle.

<sup>2</sup> αὐτῇ ὑπὲρ αὐτῆς Ruelle. <sup>3</sup> χρήματα γ<sup>α</sup> : ῥήματα Ruelle.

<sup>4</sup> οὐδ' Forster from Th. G. : ἀλλ' Ruelle.

losing, if we are in pursuit of gain, like fishermen when they lose their bait ; for the risk is an obvious one. Once more, men make a deposit mostly when they are intrigued against and unfortunate, but it is the well-to-do who lend ; and it is more terrible to wrong the unfortunate than the fortunate.

Why in some law-courts do the jury give their votes 3 rather in accordance with family connexion than with the terms of the will ? Is it because there is no possibility of falsehood about family connexions, but the true facts can be shown ? But many wills before now have been proved to be forgeries.

Why is it that poverty exists more among the good 4 men than among the bad ? Does poverty, because she is hated and driven away by all men, seek refuge with the good, because she thinks that among them she is most likely to find safety and an abiding place ? If she were to go to the wicked, they would not remain in the same condition, but they would steal or rob, and when this took place she could no longer remain with them. Or is it because she thinks that good men would treat her best, and that she would be least insulted by them ? So just as we place deposits of money with the good, so also poverty of her own accord ranges herself with them. Or is it because, being feminine, she is more helpless, so that she needs the support of good men ? Or is it because, being herself an evil, she cannot go to the evil ? For if she were to choose the evil, her state would be quite beyond cure.

Why is it that wrongs are not so liable to be com- 5 mitted on a large scale as they are in respect of money ? For instance, the man who divulges something of small moment would not necessarily divulge a great secret ; nor would the man who has betrayed one person also betray a whole city, as the man who

950 b

πόλιν, ὥσπερ ὁ ὀβολὸν ἀποστερήσας καὶ τάλαντον;  
ἢ ὅτι [ἀπὸ] μείζονος ἀδικίας ἓνια ἐλάττω ἐστὶ δι'  
ἀδυναμίαν;

Διὰ τί παρακαταθήκην αἰσχίον<sup>1</sup> ἀποστερηῆσαι 6  
μικρὰν ἢ πολὺ δανεισάμενον; ἢ ὅτι ὁ τὴν παρα-  
30 καταθήκην ἀποστερῶν τὸν ὑπολαβόντα εἶναι αὐτὸν  
ἐπιεικῇ ἐξαπατᾶται; ἢ ὅτι ὁ τοῦτο καὶ ἐκείνο  
ποιήσκειν;

Διὰ τί ἄνθρωπος μάλιστα παιδείας μετέχων 7  
ζώων ἀπάντων ἀδικώτατόν ἐστιν; ἢ ὅτι πλείστου  
λογισμοῦ κεκοινώνηκεν; μάλιστα οὖν τὰς ἡδονὰς  
35 καὶ τὴν εὐδαιμονίαν ἐξήτακεν· ταῦτα δ' ἄνευ  
ἀδικίας οὐκ ἔστιν.

Διὰ τί ὁ πλοῦτος ὡς ἐπὶ τὸ πολὺ παρὰ τοῖς 8  
φάυλοις μᾶλλον ἢ τοῖς ἐπιεικέσιν ἐστίν; ἢ διότι,  
τυφλὸς ὢν, τὴν διάνοιαν οὐ δύναται κρίνειν οὐδὲ  
αἰρεῖσθαι τὸ βέλτιστον;

951 a Διὰ τί δικαιότερον εἶναι νενόμισται τοῖς τετελευ- 9  
τηκόσιν ἢ τοῖς ζῶσιν ἐπαμύνειν; ἢ ὅτι οἱ μὲν  
ζῶντες δύναιντ' ἂν ἑαυτοῖς ἐπαρκέσαι, ὁ δὲ  
τετελευτηκὼς οὐκέτι;

Διὰ τί ὑγιαίνουντι μὲν ὁ συνὼν οὐδὲν ὑγιέστερος 10  
5 γίνεται, οὐδὲ ἰσχυρῶ ἢ καλῶ εἰς τὰς ἑξεῖς ἐπι-  
δίδωσιν οὐθέν, δικαίῳ δὲ καὶ σώφρονι καὶ ἀγαθῶ;  
ἢ διότι τὰ μὲν ἀμίμητα, τὰ δὲ μιμητὰ τῇ ψυχῇ;  
ἀγαθὸς δὲ τῇ ψυχῇ, ὑγιὴς δὲ τῷ σώματι· ἐθίζεται  
οὖν χαίρειν ὀρθῶς καὶ λυπεῖσθαι. ὁ δὲ ὑγιεῖ συνὼν  
οὐκέτι· οὐ γὰρ ἐν τῷ τισὶ χαίρειν ἢ μὴ ὁ ὑγιὴς·  
10 οὐθέν γὰρ τούτων ποιεῖ ὑγίειαν.

Διὰ τί δεινότερον γυναιῖκα ἀποκτεῖναι ἢ ἄνδρα; 11

<sup>1</sup> αἰσχίον Bonitz : αἰσχρόν Ruelle.

## PROBLEMS, XXIX. 5-11

has stolen an obol would also steal a talent. Is it because some offences fall short of a greater injustice through lack of power ?

Why is it more discreditable to steal a small deposit 6 than a large loan ? Is it because the man who steals a deposit is deceiving one who believed him to be honest ? Or is it because the man who does the one would do the other also ?

Why is it that man in spite of his education is the 7 most unjust of all creatures ? Is it because he has the largest share of reasoning power ? Hence he has most carefully examined pleasures and happiness, and these are impossible without injustice.

Why does wealth generally exist more often among 8 the bad than among the good ? Is it because wealth being blind can neither judge character nor choose the best ?

Why is it considered more just to defend the dead 9 than the living ? Is it because the living can protect themselves, but the dead can no longer do so ?

Why is it that the man who associates with one who 10 is healthy becomes no healthier, nor does one who associates with the strong and beautiful acquire anything, but he who associates with the just, the temperate and the good does so ? Is it because the former qualities cannot be imitated, but the latter can be imitated by the soul ? For a man's goodness lies in his soul, but his health lies in his body ; so he is accustomed to feel both joy and pain on the right occasions. But he who associates with the healthy man becomes no more healthy ; for health does not consist in enjoying or not enjoying certain things ; for none of these produces health.

Why is it a more terrible thing to kill a woman than 11

- καίτοι βέλτιον τὸ ἄρρεν τοῦ θήλεος φύσει. ἢ  
διότι ἀσθενέστερον, ὥστε ἐλάττω ἀδικεῖ; ἢ ὅτι οὐ  
νεανικὸν τὸ ἰσχυρίζεσθαι πρὸς τὸ πολὺ ἥττον;
- 15 Διὰ τί ποτε τῷ φεύγοντι ἐν τῷ δικαστηρίῳ τὴν 12  
δεξιὰν στάσιν διδόασιν; ἢ ὅτι ἐπανισοῦν βού-  
λονται; πλεονεκτοῦντος οὖν τοῦ διώκοντος τὴν  
στάσιν τῷ φεύγοντι διδόασιν. εἴθ' ὥς ἐπὶ τὸ πολὺ οἱ  
φεύγοντες παραφυλάττονται· ἐπὶ δεξιὰ δὲ ἡ φυλακὴ  
γίνεται, εἰς τὸ φεύγων ἔχη τὴν ἐν δεξιᾷ στάσιν.
- 20 Διὰ τί ποτε, ὅταν καὶ τῷ φεύγοντι καὶ τῷ 13  
διώκοντι φαίνωνται αἱ ψῆφοι ἴσαι, ὁ φεύγων νικᾷ;  
ἢ ὅτι ὁ μὲν φεύγων ἐν τῷ ἀγῶνι μόνον ἀκήκοεν  
αὐτοῦ πρὸς ᾧ δεῖ αὐτὸν ἀπηγορεύεσθαι, καὶ τοὺς  
μάρτυρας παρασχέσθαι πρὸς [τὸ] τὰ κατηγορημένα
- 25 [ἔχεσθαι],<sup>1</sup> εἴ τι μέλλουσιν ὠφελήσειν; οὐ ρᾶδιον  
δὲ τὸ μαντεύσασθαι τινα ὧν δεῖ αὐτὸν παρα-  
σκευάσασθαι ἢ μάρτυρας ἢ ἄλλο τεκμήριον ὅτι  
οὐθὲν ἀδικεῖ. τῷ δὲ διώκοντι ἔστιν ὅπως βούλεται,  
καὶ πρὸ τοῦ τὴν δίκην κλητεῦσασθαι, ἐνστήσασθαι  
τὸ πρᾶγμα, καὶ ἤδη κεκληκότα, πλασάμενον ὅ τι  
βούλεται πιθανόν, κατηγορεῖν αὐτοῦ. ὁρῶν δὲ
- 30 κατὰ πάντα ταῦτα ἐλαττούμενον ὁ νομοθέτης τὸν  
φεύγοντα, προσέθετο τῷ φεύγοντι ὅ τι ἂν οἱ δικασταὶ  
ἀμφιδοξήσωσιν. ἀλλὰ μὴν καὶ τοῦτ' ἂν τις ἴδοι. ἐν  
γὰρ τοῖς φόβοις ὄντες πολλὰ παραλιμπάνουσιν ὧν  
αὐτοὺς ἔδει εἰπεῖν ἢ πρᾶξαι, οἱ δὲ φεύγοντες αἰεὶ
- 35 ἐν μείζοσι κινδύνοις ὥς ἐπὶ τὸ πολὺ τυγχάνουσιν  
ὄντες, ὥστ' εἰ παραλιμπάνουσιν ὧν δεῖ αὐτούς,  
εἴπερ ἐξισοῦνται τοῖς δικαίοις, δῆλον ὅτι εἰ μὴ

<sup>1</sup> Omitting τὸ (inserted by Ruelle) and ἔχεσθαι, which is probably due to the preceding παρασχέσθαι.

a man? And yet the male sex is naturally better than the female. Is it because she is weaker, so that she does less injustice? Or is it because it is unmanly to use force against what is much weaker?

Why do they give the defendant in the law-court a position on the right (of the judge)? Is it because they want to equalize matters? So as the prosecutor has the advantage they give this position to the defendant. Again, defendants are usually guarded; and the guard is on the right, if the defendant has the position on the right.

Why is it that when the votes for the defendant and the prosecutor are shown to be equal, the defendant wins? Is it because during the action the defendant has heard the charges which he must answer only in court and can only provide witnesses on the points on which he is accused, if they are to help his case? And it is not easy to predict the purposes for which he will require witnesses, or any other form of proof that he has done nothing wrong. But the prosecutor can, just as he pleases, both initiate action before getting the summons issued and, even after he has summoned his opponent, he can invent any plausible charge he likes and accuse him of it. So the legislator, recognizing that the defendant is in the weaker position in all these ways, has given the advantage to the defendant in any case in which the jury are divided in opinion. One should also consider another point. When men are in a state of fear they omit many things which they ought to have said or done, and the defendant is generally speaking always liable to the greater risk, so that if they leave something necessary out and still their claims are equal, it is obvious that if they had not left anything out they



- 951 a παρελίμπανον, ἐκράτουν ἄν. ἔτι δὲ ἕκαστος ἡμῶν  
 951 b μᾶλλον ἂν προέλοιτο τοῦ ἀδικοῦντος ἀποψηφί-  
 σασθαι ὥς οὐκ ἀδικεῖ ἢ τοῦ μὴ ἀδικοῦντος κατα-  
 ψηφίσασθαι ὥς ἀδικεῖ, οἷον εἴ τις φεύγει δουλείας  
 ἢ ἀνδροφονίας. τούτων γὰρ ἐκάστου ὄντων ἃ κατ-  
 ηγορεῖ αὐτῶν, μᾶλλον ἂν ἀποψηφίσασθαι ἐλοί-  
 5 μεθα ἢ μὴ ὄντων καταψηφίσασθαι. ἔστι γάρ,  
 ὅταν τις ἀμφοδοξῇ, τὰ ἐλάττω τῶν ἀμαρτημάτων  
 αἰρετέον. δεινὸν γὰρ καὶ τὸ τοῦ δούλου ὥς  
 ἐλεύθερός ἐστι καταγνῶναι· πολὺ δὲ δεινότερον,  
 ὅταν τις τοῦ ἐλευθέρου ὥς δούλου καταψηφίσῃται.  
 ἔτι δὲ ἔαν ὁ μὲν τύχῃ ἐγκαλῶν, ὁ δὲ ἀμφισβητῶν  
 10 ὑπὲρ ὅτου οὖν, οὐκ εὐθὺς οἰόμεθα δεῖν ἀποδοῦναι  
 τῷ ἐγκαλοῦντι, ἀλλὰ νέμεσθαι τὸν κεκτημένον,  
 ἕως ἂν κριθῇ. τὸν αὐτὸν δὲ τρόπον καὶ ἐπὶ τῶν  
 πλειόνων, ὅταν ἰσάζῃ τὸ πλῆθος τῶν τε φασκόντων  
 ἀδικεῖν καὶ τῶν μὴ ὁμολογούντων, ὥσπερ ὅτε ἐξ  
 ἀρχῆς ὁ μὲν ἐνεκάλει, ὁ δὲ ἀπηρνέιτο, οὐκ οἰόμεθα  
 15 δεῖν τὸν νομοθέτην προστιθέναι τῷ ἐγκαλοῦντι,  
 ἀλλὰ τὸν φεύγοντα κύριον εἶναι, ἕως ἂν ὑπεροχὴν  
 τινα ἔχῃ ὁ διώκων.<sup>1</sup> ὁμοίως δὲ καὶ ἐπὶ τῶν κριτῶν,  
 ἐπειδὴ οὐδεμίαν ὑπεροχὴν ἴσασθαι τῶν ψήφων,  
 κατὰ χώραν εἶασεν ὁ νομοθέτης ἔχειν· ἔτι δὲ τῶν  
 μὲν ἀξιολόγων ἀμαρτημάτων μεγάλα καὶ αἰ  
 20 κολάσεις εἰσίν, ὥστε ἀδίκως μὲν καταψηφισαμένοις  
 καὶ μεταγνοῦσιν<sup>2</sup> οὐκ ἔστιν ἐπανορθοῦσθαι καιρὸν  
 λαβόντας· ἀπολύσασι δὲ παρὰ τὸ προσῆκον, εἰ μὲν  
 οὕτως εὐλαβῶς <ζῶν><sup>3</sup> ὥστε μὴθὲν ἔτι ποτὲ ἀμαρ-

<sup>1</sup> διώκων Bonitz : ἀδικῶν Ruelle.

<sup>2</sup> μεταγνοῦσιν Richards : μὴ γνοῦσιν Ruelle.

<sup>3</sup> ζῶν added by Forster.

would have won. Again, every one of us would rather acquit a guilty man as innocent than condemn an innocent man as guilty, in a case where a man was accused of enslaving or murder. For in each of these cases if the charges were true we should prefer to vote for their acquittal on the charges against them, rather than to vote for their condemnation, if the charges were untrue. For when there is any doubt one should choose the lesser of two errors. For it is a serious matter to decide in the case of a slave that he is free ; but it is much more serious to condemn a free man as a slave. Moreover, if one happens to be bringing a charge, and the other to be disputing his claim to something, we do not think it right to hand it over immediately to the prosecutor, but that it should remain in the hands of the possessor until the case is settled. In the same way, in a case involving several persons, when the number of those who say that the accused is wrong and of those who deny it is equal (as when one lays the accusation and the other denies it from the start), we do not consider that the lawgiver should give it to the accuser, but that the defendant should remain in possession, until the prosecutor has established a superiority. Similarly in the case of judges, when the prosecutor has established no superiority because the votes on the two sides are equal, the lawgiver has allowed matters to remain as they are. Again, the penalties for serious offences are heavy, so that if the jury vote unjustly for condemnation and afterwards change their minds, they cannot wait for a suitable opportunity and put matters right ; but supposing they vote for acquittal when they should not, if the defendant afterwards lives so circumspectly as never to commit an offence again, how could

951 b

τεῖν, τί ἂν καὶ μέγα ἡμαρτηκότες οἱ κριταὶ εἶησαν,  
 τοιοῦτον ἄνθρωπον ἀπολύσαντες θανάτου; εἰ δέ  
 25 τι ἐξ ὑστέρου ἁμαρτάνοι, δι' ἀμφοτέρα [ἂν] αὐτὸν  
 νῦν κολάζεσθαι ἀξιοῖ. ἢ ὅτι ἀδικωτέρου μὲν ἐστὶν  
 ἀνδρὸς ταῦτα ἀδικεῖν ἢ ἥττον εἰκὸς ἐστὶν ἀδίκως  
 ἐγκαλεῖσθαι; τὸ μὲν γὰρ ἀδικεῖν καὶ δι' ὀργήν  
 καὶ διὰ φόβον καὶ δι' ἐπιθυμίαν καὶ δι' ἄλλα πολλὰ  
 γίνεται, καὶ οὐ μόνον ἐκ προνοίας· τὸ δὲ ἀδίκως  
 30 ἐγκαλεῖν ὡς τὸ πολὺ ἐκ προνοίας ἐστίν. ὥστε  
 ἐπεὶ ἴσαι αἱ ψῆφοι γεγόνασιν, τὸ δὲ ἀδίκως τὸν  
 ἐγκαλοῦντα ἐγκαλεῖν καὶ τὸν φεύγοντα ἀδικεῖν,  
 φαύλου κριθέντος τοῦ ἀδίκως ἐγκαλοῦντος τὸ  
 νικᾶν τῷ φεύγοντι ὁ νομοθέτης ἀπένειμεν. ἔτι δέ  
 καὶ αὐτοὶ οὕτως ἔχομεν πρὸς τοὺς θεράποντας,  
 35 ὥστε ὅταν ὑποπτεύσωμέν τι αὐτοὺς ἡμαρτηκέναι  
 καὶ μηθὲν ἀκριβὲς ἔχωμεν, ἀλλ' ὅμως αὐτοὺς  
 ὑπολαμβάνωμεν πεπραχέναι, οὐκ εὐθὺς ἐπὶ τὸ  
 952 a κολάζειν ἐρχόμεθα· καὶ ἐὰν μηθὲν μᾶλλον δυνώμεθα  
 ἐξετάσαι, ἀφίεμεν ταύτης τῆς αἰτίας. ἔτι μείζω  
 μὲν ἀδικεῖ ὁ ἐκ προνοίας ἀδικῶν ἢ ὁ μὴ ἐκ προ-  
 νοίας. ὁ μὲν δὴ συκοφαντῶν ἀεὶ ἐκ προνοίας  
 ἀδικεῖ, ὁ δὲ ἕτερόν τι ἀδικῶν τὰ μὲν δι' ἀνάγκην,  
 5 τὰ δὲ δι' ἄγνοιαν, τὰ δὲ ὅπως ἔτυχεν ἀδικεῖν αὐτῷ  
 συμπίπτει. ὅταν δὲ ἴσαι γένωνται αἱ ψῆφοι, ὁ μὲν  
 διώκων κέκριται ὑπὸ τῶν ἡμίσεων ἐκ προνοίας  
 ἀδικεῖν, ὁ δὲ φεύγων ὑπὸ τῶν λοιπῶν αὐτὸ ἀδικεῖν  
 μὲν, οὐ μέντοι γε ἐκ προνοίας, ὥστε ἐπεὶ ἀδικεῖν

<sup>a</sup> Some subject must be supplied for the verb ἀξιοῖ, and ὁ νομοθέτης seems the most probable.

<sup>b</sup> This sentence means little and the Greek text is probably wrong.

the judges be regarded as having erred grievously in acquitting the prisoner of a capital crime ? But if he does commit a crime again at a later date, the lawgiver <sup>a</sup> thinks it right that he should be punished on this occasion for both offences. Or is our reason that it is the mark of the greater criminal to commit offences for which he is not likely to be unjustly accused ? <sup>b</sup> For offences are committed from anger, fear, desire and many other causes, and not only of malice aforethought, but an unjust accusation is usually due to malice aforethought. So when the votes on the two sides are equally divided between those who think that the accuser has brought an unjust charge and those who think that the defendant has committed an offence, because the unjust accuser is judged to be an inferior person the legislator has given the verdict to the defendant. This is how we ourselves deal with our servants, so that when we suspect them of having committed some offence and have no certain evidence to act upon, but we nevertheless suspect them of having done it, we do not immediately proceed to their punishment ; and if we cannot discover any further evidence, we acquit them of the charge. Now the man who does wrong from malice aforethought is more guilty than he who does not. But the informer always does wrong from malice aforethought, whereas he who commits any other offence acts sometimes under compulsion, sometimes through ignorance and sometimes his evil deed is a matter of chance. But when the votes on the two sides are equal, the prosecutor is judged by half the jury to offend by malice aforethought, whereas the defendant is judged by the rest to offend but not of malice aforethought, so that since the prosecutor

μείζω κέκριται ὁ διώκων τοῦ φεύγοντος, εἰκότως  
 10 ὁ νομοθέτης νικᾶν ἔκρινε τὸν τὰ ἐλάττω ἀδικοῦντα.  
 ἔτι δὲ αἰὲν μὲν ἀδικώτερός ἐστιν ὁ μὴ οἰόμενος  
 λανθάνειν ὃν ἀδικεῖ καὶ ὅμως ἀδικῶν, ἢ ὁ οἰόμενος  
 λανθάνειν. ὁ μὲν γὰρ ἀδίκως τινὲ ἐγκαλῶν οὐκ  
 οἶεται λανθάνειν τοῦτον ὃν συκοφαντεῖ, οἱ δ' ἄλλοι  
 τι ἀδικοῦντες ὥς ἐπὶ τὸ πολὺ οἰόμενοι λανθάνειν  
 15 ὃν ἀδικοῦσιν ἐπιχειροῦσιν ἀδικεῖν, ὥστε ἀδικώ-  
 τεροι καὶ ἂν κρίνονται οἱ διώκοντες ἢ οἱ φεύγοντες.  
 Διὰ τί ποτε, εἰ μὲν τις ἐκ βαλανείου κλέψῃ ἢ 14  
 ἐκ παλαιστρας ἢ ἐξ ἀγορᾶς ἢ τῶν τοιούτων τινός,  
 θανάτῳ ζημιούται, εἰ μὲν τις ἐξ οἰκίας, διπλοῦν  
 20 τῆς ἀξίας τοῦ κλέμματος ἀποτίνει; ἢ ὅτι ἐν μὲν  
 ταῖς οἰκίαις φυλάξαι ὅπως οὐκ ἔστιν· καὶ γὰρ ὁ  
 τοῖχος ἰσχυρὸς καὶ κλεῖς ἐστίν, καὶ οἰκέταις τοῖς  
 ἐν τῇ οἰκίᾳ πᾶσιν ἐπιμελές ἐστίν ὅπως σώζηται  
 τὰ ἐνόντα; ἐν δὲ τῷ βαλανείῳ, καὶ ἐν τοῖς οὕτω  
 κοινοῖς οὖσιν ὥσπερ τὸ βαλανεῖον, ῥᾶδιον τῷ  
 25 βουλομένῳ κακοουργεῖν· οὐδὲν γὰρ ἰσχυρὸν ἔχουσι  
 πρὸς τὴν φυλακὴν οἱ τιθέντες ἄλλ' ἢ τὸ αὐτῶν  
 ὄμμα, ὥστε ἂν μόνον τις παραβλέψῃ, ἐπὶ τῷ  
 κλέπτοντι ἤδη γίνεται. διὸ ὁ νομοθέτης οὐχ  
 ἱκανοὺς ὄντας ἡγησάμενος εἶναι φύλακας, τὸν  
 νόμον αὐτοῖς ἐπέστησεν ἀπειλοῦντα σφοδρῶς ὥς  
 30 οὐ βιωσομένοις εἰάν τι σφετερίζωνται τῶν ἄλλο-  
 τρίων. ἔτι δὲ εἰς μὲν τὴν οἰκίαν ἐπὶ τῷ κεκτη-  
 μένῳ ἐστὶν ὃν τινα ἂν βούληται εἰσδέχεσθαι, καὶ  
 ᾧ μὴ πιστεύει εἰσφέρεισθαι· τῷ δὲ ἐν τῷ βαλανείῳ



## PROBLEMS, XXIX. 13-14

has been judged more guilty than the defendant, naturally the legislator has decided that the man who has committed the lesser offence should win. Again, the man who does not expect to be undetected by the man whom he wrongs and yet does the wrong, is more guilty than the man who expects to be undetected. For the man who brings an unjust accusation against another does not expect to be undetected by the man against whom he gives information, but other wrongdoers, as they usually expect to escape detection by the man whom they wrong, deliberately plan an act of injustice, so that the prosecutor in such a case should be judged more guilty than the defendant.

Why is it that, if a man steals from a public bath or 14 a wrestling school or a market or any such place, he is punished by death, but if he steals from a private house his penalty is double the value of the thing stolen? Is it because in private houses it is possible to set a guard of some sort; for the wall is strong and there is a key, and it is the duty of all the servants in the house to safeguard what is in it? But in a public bath, and places which like the bath are open to the general public, it is easy for anyone who wishes to do evil; for those who put down their property have no sure means of protection, except their own eye, so that if one merely looks away, everything is in the power of the thief. So, as the lawgiver has not considered the safeguards adequate, he has established a law with a violent threat that men shall no longer live if they annex the property of others. Again, in a private house it rests with the owner to admit whomsoever he chooses and to allow anyone to enter whom he does not trust; but the



952 a

θεμένῳ τι οὐκ ἔξεστιν οὐθένα κωλύσαι οὔτε  
 εἰσιέναι, οὔτε εἰσελθόντα μὴ παρὰ κλέπτην τὸ  
 αὐτοῦ ἱμάτιον θέσθαι ἀποδύντα [ἄν]. ἀλλ' ὥς οὐ  
 85 βούλεται, ἐν τῷ αὐτῷ ἢ τε τοῦ κλέπτου ἐσθῆς καὶ  
 ἢ τοῦ μέλλοντος ἀπολλύναι ἀναμειγμένα κεῖνται.  
 διὸ ὁ νομοθέτης τῷ μὲν ἐκόντι εἰσδεξαμένῳ τὸν

952 b

κλέπτην καὶ αὐτῷ ἡμαρτηκότι οὐ λίαν μεγάλας  
 τιμωρίαις βεβοήθηκεν, τοῖς δὲ ἐξ ἀνάγκης κοι-  
 νωνοῦσιν τῆς εἰς τὸ βαλανεῖον εἰσόδου καὶ τῆς  
 ἀναμίξεως μεγάλας τιμωρίας φανερός ἐστι καθ-  
 ιστὰς τοῖς κλέπτουσιν. ἔτι δὲ οἱ μὲν ἐν τοῖς οὕτω  
 1 κοινοῖς οὖσι τῷ βουλομένῳ εἰσιέναι κλέπτοντες  
 καταφανεῖς ἅπασι γίνονται ὅτι πονηροί<sup>1</sup> εἰσιν, ὥστε  
 περιγενόμενοι οὐδὲ καρπισμοῦ ἔτι χάριν ἐπιεικεῖς  
 εἶναι δοκεῖν βούλονται, ὥς μάτην αὐτοῖς ὄν πρὸς  
 τοὺς γνόντας πλάττεσθαι ὅτι ἐπιεικεῖς εἰσιν· κατα-  
 φανῶς οὖν ἤδη πονηροὶ διατελοῦσιν ὄντες. οἱ δὲ  
 10 ἐνὶ μόνῳ φανεροὶ γενόμενοι πρὸς τοὺς ἄλλους  
 ἐπιχειροῦσι πείθειν, ἀποτίσαντές τι, ὅπως μὴ  
 καταφανεῖς αὐτοὺς ποιήσῃ· διὸ οὐ παντελῶς ἄν  
 εἶεν πονηροὶ διὰ τέλους, ἀνθ' ὧν ὁ νομοθέτης  
 ἐλάττω αὐτοῖς τὰ ἐπιζήμια ἐποίησεν. ἔτι δὲ τῶν  
 ἁμαρτιῶν μάλιστα αἰσχύνουσιν τὴν πόλιν αἱ ἐν  
 τοῖς κοινοτάτοις συλλόγοις τε καὶ συνόδοις γινό-  
 15 μεναι, ὥσπερ καὶ τιμὴν φέρουσι πολὺ μάλιστα αἱ  
 ἐν τῷ κοινῷ εὐταξίαι· καταφανεῖς γὰρ μάλιστα  
 διὰ τῶν τοιούτων καὶ αὐτοῖς καὶ τοῖς ἄλλοις.  
 συμβαίνει οὖν οὐ μόνον ἰδίᾳ τὸν ἀπολέσαντα  
 βλάπτεσθαι ἐκ τῶν τοιούτων τινός, ἀλλὰ καὶ πρὸς  
 τὴν πόλιν λαιδορίας γίνεσθαι. διὸ καὶ τὸν κλέψαντα  
 20 ταῖς μείζουσι ζημίαις ἐκόλασεν τῶν ἐξ οἰκίας τινός

<sup>1</sup> πονηροί Forster : φανεροί Ruelle.

man who puts his property in a public bath has no authority either to prevent anyone from entering, nor when he has entered can he avoid putting his clothes, when he has taken them off, alongside a thief ; but contrary to his wishes the clothes of the thief and of the man who is destined to be robbed lie mixed up in the same place. So the lawgiver has not given assistance by extremely heavy penalties to the man who has voluntarily admitted the thief and by his own mistake, but in the case of those who necessarily share the entrance to the bath and the mixing of clothes he has evidently set heavy penalties on thieves. Again, those who steal in places such as these which are open to anyone who wishes to enter are evidently bad men, so that even if they continue to live they do not wish to appear respectable for the advantage they would gain from it, as it is quite useless for them to pose as respectable before those who know the facts ; so they will evidently continue to live as bad men. But those whose character is known to one alone try to persuade him by returning what they have stolen not to make them known to the rest of the world ; so they are not likely to be utterly bad to the end, as a result of which the lawgiver has set less heavy penalties on them. Again, offences committed in the most public gatherings and places of meeting discredit the city most, just as orderly behaviour in public brings the city greatest credit ; for it is by such actions that citizens show their character both among themselves and to others. The result is that from thefts of the kind described not only does the actual loser suffer privately, but also abuse is heaped on the city. For this reason (the lawgiver) has punished the man who thieves (from the public) more heavily than him

952 b

ἀφελομένων. ἔτι δὲ καὶ ὁ ἐξ οἰκίας τι ἀπολέσας  
 ἐν τοιούτῳ τόπῳ τυγχάνει ὦν, ὅθεν ῥάδιον μήτε  
 παθόντα μήτε χλευασθέντα ὑπὸ τινων, οἴκοι ὄντα  
 τὸ ἀτύχημα φέρειν. τῷ δ' ἢ τε ἀποχώρησις  
 25 ἐργώδης γεγυμνωμένῳ, προσέτι δὲ χλευάζεσθαι  
 ὑπὸ τινων ὑπάρχει τοῖς πολλοῖς, ὁ πολὺ δυσχερέ-  
 στερόν ἐστι τῆς ἀπωλείας. διὸ καὶ ὁ νομοθέτης  
 μείζους αὐτοῖς ζημίας ἐνέγραψεν. ἔτι δὲ παρα-  
 πλήσια τούτοις πολλὰ φαίνονται νενομοθετηκότες,  
 οἷον καὶ ἔαν μὲν τις ἄρχοντα κακῶς εἴπῃ, μεγάλα  
 30 τὰ ἐπιτίμια, ἔαν δέ τις ἰδιώτην, οὐδέν. καὶ καλῶς  
 οἴεται γὰρ τότε οὐ μόνον εἰς τὸν ἄρχοντα ἐξ-  
 αμαρτάνειν τὸν κακηγοροῦντα, ἀλλὰ καὶ εἰς τὴν  
 πόλιν ὑβρίζειν. τὸν αὐτὸν δὲ τρόπον καὶ τὸν ἐν  
 τῷ λιμένι κλέπτοντα οὐ μόνον τὸν ἰδιώτην βλά-  
 πτειν, ἀλλὰ καὶ τὴν πόλιν αἰσχύνειν. ὁμοίως δὲ καὶ  
 35 ἐν τοῖς ἄλλοις, οὐ κοινῇ που συνερχόμεθα.

Διὰ τί ἐν τοῖς δικαστηρίοις ἔαν ἴσαι γένωνται 15  
 ψῆφοι τοῖς ἀντιδίκοις, ὁ φεύγων νικᾷ; ἢ ὅτι ὁ  
 953 a φεύγων ὑπὸ τοῦ διώκοντος οὐθὲν πέπονθεν, ἀλλ'  
 ἐν τοῖς ἴσοις αὐτῷ ἤδη ἔμελλε νικᾶν;

Διὰ τί ἐπὶ μὲν κλοπῇ θάνατος ἢ ζημία, ἐπὶ δὲ 16  
 ὕβρει, μείζονι οὕσῃ ἀδικία, τίμησις τί χρὴ παθεῖν  
 5 ἢ ἀποτίσαι; ἢ διότι τὸ μὲν ὑβρίζειν ἀνθρώπινόν  
 ἐστι πάθος, καὶ πάντες πλέον ἢ ἔλαττον αὐτοῦ  
 μετέχουσι, τὸ δὲ κλέπτειν οὐ τῶν ἀναγκαίων;  
 καὶ ὅτι ὁ κλέπτειν ἐπιχειρῶν καὶ ὑβρίζειν ἂν  
 προέλοιτο.

who steals from a private house. Again, a man who loses anything from a private house is in a place where it is easy to avoid suffering and being mocked by anyone, as he can bear his misfortune at home. But it is troublesome to retire (from the bath) without any clothes, and besides in most cases he will be laughed at by some, which is much more unpleasant than the actual loss. So for such cases the lawgiver has allotted heavier penalties. Moreover, similar laws to these have been laid down in many cases; for instance, if a man reviles a magistrate the penalties are heavy, but if he reviles a private individual there is no penalty. And this is right; for (the law) considers that the reviler is not merely offending against the magistrate, but is insulting the city as well. In the same way the man who steals in the harbour not only harms the individual, but discredits the city as well. And it is just the same in other places, where we congregate in public.

Why is it that in the courts if an equal number of 15 votes are cast for the two litigants, the defendant wins? Is it because the defendant has not been affected by the prosecutor's action, and would have won if the positions had been equal?

Why is it that in the case of theft the penalty is 16 death, but in one of assault, which is a greater offence, an assessment is made of what the guilty should suffer or pay? Is it because violence is a natural human failing, and all share in it to a greater or lesser degree, but stealing is not a necessary characteristic of man? Also because the man who undertakes to steal would be quite ready also to commit an assault.

# Λ

## 953 a ΟΣΑ ΠΕΡΙ ΦΡΟΝΗΣΙΝ ΚΑΙ ΝΟΥΝ ΚΑΙ ΣΟΦΙΑΝ

- 10 Διὰ τί πάντες ὅσοι περιττοὶ γεγόνασιν ἄνδρες<sup>1</sup>  
ἢ κατὰ φιλοσοφίαν ἢ πολιτικὴν ἢ ποίησιν ἢ τέχνας  
φαίνονται μελαγχολικοὶ ὄντες, καὶ οἱ μὲν οὕτως  
ὥστε καὶ λαμβάνεσθαι τοῖς ἀπὸ μελαίνης χολῆς  
ἀρρωστήμασιν, οἷον λέγεται τῶν τε ἡρώϊκῶν τὰ  
15 περὶ τὸν Ἡρακλέα; καὶ γὰρ ἐκεῖνος ἔοικε γενέσθαι  
ταύτης τῆς φύσεως, διὸ καὶ τὰ ἀρρωστήματα τῶν  
ἐπιληπτικῶν ἀπ' ἐκείνου προσηγόρευον οἱ ἀρχαῖοι  
ἱερὰν νόσον. καὶ ἡ περὶ τοὺς παῖδας ἔκστασις καὶ  
ἡ πρὸ τῆς ἀφανίσεως ἐν Οἴτῃ τῶν ἐλκῶν ἔκφυσις  
γενομένη τοῦτο δηλοῖ. καὶ γὰρ τοῦτο γίνεται  
πολλοῖς ἀπὸ μελαίνης χολῆς. συνέβη δὲ καὶ  
20 Λυσάνδρῳ τῷ Λάκωνι πρὸ τῆς τελευτῆς γενέσθαι  
τὰ ἔλκη ταῦτα. ἔτι δὲ τὰ περὶ Αἴαντα καὶ Βελ-  
λεροφόντην, ὧν ὁ μὲν ἐκστατικὸς ἐγένετο παν-  
τελῶς, ὁ δὲ τὰς ἐρημίας ἐδίωκεν, διὸ οὕτως  
ἐποίησεν Ὅμηρος

- αὐτὰρ ἐπεὶ καὶ κείνος ἀπήχθετο πᾶσι θεοῖσιν,  
ἦτοι ὁ καππεδίον τὸ Ἀλήϊον οἶος ἀλάτο,  
25 ὃν θυμὸν κατέδων, πάτον ἀνθρώπων ἀλεείνων.

## BOOK XXX

### PROBLEMS CONNECTED WITH THOUGHT, INTELLIGENCE AND WISDOM

WHY is it that all men who have become outstanding <sup>1</sup> in philosophy, statesmanship, poetry or the arts are melancholic,<sup>a</sup> and some to such an extent that they are infected by the diseases arising from black bile, as the story of Heracles among the heroes tells? For Heracles seems to have been of this character, so that the ancients called the disease of epilepsy the "Sacred disease" after him. This is proved by his frenzy towards his children and the eruption of sores which occurred before his disappearance on Mount Oeta; for this is a common affection among those who suffer from black bile. Similar sores also appeared on Lysander the Spartan before his death. The same is true of Ajax and Bellerophon; the former went completely insane,<sup>b</sup> and the latter craved for desert places, so that Homer wrote of him:

But when he was hated of all the gods, then he wandered alone on the plain of Aleïum, eating out his heart, and avoiding the track of men.<sup>c</sup>

<sup>a</sup> *i.e.* those in whose temperament there is too much black bile.      <sup>b</sup> Sophocles, *Ajax*.      <sup>c</sup> Homer, *Iliad*, vi. 200.



953 a

καὶ ἄλλοι δὲ πολλοὶ τῶν ἡρώων ὁμοιοπαθεῖς φαίνονται τούτοις. τῶν δὲ ὕστερον Ἐμπεδοκλῆς καὶ Πλάτων καὶ Σωκράτης καὶ ἕτεροι συχνοὶ τῶν γνωρίμων. ἔτι δὲ τῶν περὶ τὴν ποίησιν οἱ πλείστοι. πολλοῖς μὲν γὰρ τῶν τοιούτων γίνεται

80 νοσήματα ἀπὸ τῆς τοιαύτης κράσεως τῷ σώματι, τοῖς δὲ ἢ φύσις δῆλη ῥέπουσα πρὸς τὰ πάθη. πάντες δ' οὖν ὡς εἶπεῖν ἀπλῶς εἰσὶ, καθάπερ ἐλέχθη, τοιοῦτοι τὴν φύσιν. δεῖ δὴ λαβεῖν τὴν αἰτίαν πρῶτον ἐπὶ παραδείγματος οὐκ ἀτόπου ἐκ τοῦ οἴνου<sup>1</sup> προχειρισαμένους. ὁ γὰρ οἶνος ὁ πολὺς μάλιστα φαίνεται παρασκευάζειν τοιούτους

95 οἶους λέγομεν τοὺς μελαγχολικοὺς εἶναι, καὶ πλείστα ἦθη ποιεῖν πινόμενος, οἶον ὀργίλους, φιλανθρώπους, ἐλεήμονας, ἱταμούς· ἀλλ' οὐχὶ τὸ μέλι οὐδὲ τὸ γάλα οὐδὲ τὸ ὕδωρ οὐδ' ἄλλο τῶν τοιούτων οὐδέν. ἴδοι δ' ἂν τις ὅτι παντοδαποὺς ἀπεργάζεται, θεωρῶν ὡς μεταβάλλει τοὺς πίνοντας

958 b ἐκ προσαγωγῆς· παραλαβὼν γὰρ ἀπειψυγμένους ἐν τῷ νήφειν καὶ σιωπηλοὺς μικρῷ μὲν πλείων ποθεῖς λαλιστέρους ποιεῖ, ἔτι δὲ πλείων ῥητορικοὺς καὶ θαρραλέους, προϊόντας δὲ πρὸς τὸ πράττειν ἱταμούς, ἔτι δὲ μᾶλλον πινόμενος ὕβριστάς, ἔπειτα μανικοὺς,

6 λίαν δὲ πολὺς ἐκλύει καὶ ποιεῖ μωρούς, ὥσπερ τοὺς ἐκ παίδων ἐπιλήπτους ἢ καὶ ἐχομένους τοῖς μελαγχολικοῖς ἄγαν. ὥσπερ οὖν ὁ εἰς ἄνθρωπος μεταβάλλει τὸ ἦθος πίνων καὶ χρώμενος τῷ οἴνῳ ποσῶ τινί, οὕτω καθ' ἕκαστον τὸ ἦθος εἰσὶ τινες ἄνθρωποι. οἷος γὰρ οὗτος μεθύων νῦν ἐστίν, ἄλλος  
10 τις τοιοῦτος φύσει ἐστίν, ὁ μὲν ἀλάος, ὁ δὲ κεκινη-

<sup>1</sup> The words οὐκ ἀτόπου ἐκ τοῦ οἴνου are missing in the ms. and supplied from Th. G.

## PROBLEMS, XXX. 1

And many other heroes seem to have suffered in the same way as these. In later times also there have been Empedocles, Plato, Socrates and many other well-known men. The same is true of most of those who have handled poetry. For many such men have suffered from diseases which arise from this mixture in the body, and in others their nature evidently inclines to troubles of this sort. In any case they are all, as has been said, naturally of this character. First of all, we must consider the cause of this, using wine as a natural example. For wine in large quantities seems to produce the characteristics which we ascribe to the melancholic, and when it is drunk produces a variety of qualities, making men ill-tempered, kindly, merciful or reckless ; but neither honey nor milk nor water nor any such thing produces these effects. One can see that wine produces every sort of character, by watching how it gradually changes those who drink it ; for finding them chilled when they are sober and inclined to be silent, when a slightly too great quantity has been drunk it makes them talkative, a still larger quantity makes them eloquent and bold, and as they go on they become reckless ; when still more is drunk, it makes them first arrogant and then mad ; a very large quantity relaxes them and makes them stupid, like those who are epileptic from childhood, and are very near the melancholic. So, just as a single individual changes his character by drinking and using a certain quantity of wine, so there are men corresponding to each character. For just as the one man is for the moment when he is drunk, so is another by nature ; one is talkative, one is emotional, and another prone

958 b

μένος, ὁ δὲ ἀρίδακρυς· ποιεῖ γάρ τινας καὶ τοιού-  
τους, διὸ καὶ Ὅμηρος ἐποίησε

καὶ μέ φησι δακρυπλῶειν βεβαρημένον οἴνῳ.

καὶ γὰρ ἐλεήμονές ποτε γίνονται καὶ ἄγριοι καὶ  
σιωπηλοί· ἔνιοι γὰρ αὖ ἀποσιωπῶσι, καὶ μάλιστα  
15 τῶν μελαγχολικῶν ὅσοι ἐκστατικοί. ποιεῖ δὲ καὶ  
φιλητικούς ὁ οἶνος· σημεῖον δὲ ὅτι προάγεται ὁ  
πίνων καὶ τῷ στόματι φιλεῖν, οὗς νήφων οὐδ' ἂν  
εἰς φιλήσειεν ἢ διὰ τὸ εἶδος ἢ διὰ τὴν ἡλικίαν. ὁ  
μὲν οὖν οἶνος οὐ πολὺν χρόνον ποιεῖ περιττόν, ἀλλ'  
ὀλίγον, ἢ δὲ φύσις αἰεί, ἕως τις ἂν ἦ· οἱ μὲν γὰρ  
20 θρασεῖς, οἱ δὲ σιωπηλοί, οἱ δὲ ἐλεήμονες, οἱ δὲ  
δειλοὶ γίνονται φύσει. ὥστε δῆλον ὅτι διὰ τὸ αὐτὸ  
ποιεῖ ὁ τε οἶνος καὶ ἡ φύσις ἐκάστου τὸ ἦθος·  
πάντα γὰρ κατεργάζεται τῇ θερμότητι ταμιευό-  
μενα. ὁ τε δὴ χυμὸς καὶ ἡ κρᾶσις ἢ τῆς μελαίνης  
χολῆς πνευματικά ἐστίν· διὸ καὶ τὰ πνευματώδη  
25 πάθῃ καὶ τὰ ὑποχονδριακὰ μελαγχολικὰ οἱ ἰατροὶ  
φασιν εἶναι. καὶ ὁ οἶνος δὲ πνευματώδης τὴν  
δύναμιν. διὸ δὴ ἐστὶ τὴν φύσιν ὅμοια ὁ τε οἶνος  
καὶ ἡ κρᾶσις. δηλοῖ δὲ ὅτι πνευματώδης ὁ οἶνός  
ἐστὶν ὁ ἀφρός· τὸ μὲν γὰρ ἔλαιον θερμὸν ὃν οὐ  
ποιεῖ ἀφρόν, ὁ δὲ οἶνος πολὺν, καὶ μᾶλλον ὁ μέλας  
30 τοῦ λευκοῦ, ὅτι θερμότερος καὶ σωματωδέστερος.  
καὶ διὰ τοῦτο ὁ τε οἶνος ἀφροδισιαστικούς ἀπ-  
εργάζεται, καὶ ὀρθῶς Διόνυσος καὶ Ἀφροδίτη  
λέγονται μετ' ἀλλήλων εἶναι, καὶ οἱ μελαγχολικοὶ  
οἱ πλείστοι λάγνοι εἰσίν. ὁ τε γὰρ ἀφροδισιασμὸς  
πνευματώδης. σημεῖον δὲ τὸ αἰδοῖον, ὥς ἐκ  
85 μικροῦ ταχεῖαν ποιεῖται τὴν αὔξησιν διὰ τὸ ἐμ-

## PROBLEMS, XXX. 1

to tears ; for wine produces these characteristics in some, which is the reason why Homer writes :

And he says that my tears flow because I am heavy with wine.<sup>a</sup>

For men sometimes become merciful and savage and silent ; for some maintain complete silence, especially those melancholic persons who are mad. Wine also makes men affectionate ; this is proved by the fact that under the influence of wine a man is induced to kiss one whom no one would kiss, if he were sober, either because of their appearance or their age. Wine endows man with extraordinary qualities, not for long but only for a short time, but nature makes them permanent for so long as the man lives ; for some men are bold, others silent, others merciful and others cowardly by nature. So that it is evident that wine and nature produce each man's characteristic by the same means ; for every function works under the control of heat. Now both the juice of the grape and the atrabilious temperament are full of breath ; this is why physicians say that diseases of the lungs and the chest are due to black bile. And the power of wine is due to air. So wine and the atrabilious temperament are similar in nature. Froth shows the wine contains air ; for oil though it is hot does not produce froth, but wine produces a large quantity, and red wine more than white because it is hotter and more full of body. And for this reason wine makes men inclined to love, and Dionysus and Aphrodite are rightly associated with each other ; and the melancholic are usually lustful. For sexual excitement is due to breath. The penis proves this, as it quickly increases from small to large by inflation.

<sup>a</sup> *Od.* xix. 122. The quotation is not exact.

953 b

φυσᾶσθαι. καὶ ἔτι πρὶν δύνασθαι προῖεσθαι σπέρμα, γίνεται τις ἡδονὴ ἔτι παισὶν οὖσιν, ὅταν ἐγγὺς ὄντες τοῦ ἡβᾶν ξύωνται τὰ αἰδοῖα δι' ἀκολασίαν· γίνεται δὲ δῆλον διὰ τὸ πνεῦμα διεξιέναι διὰ τῶν πόρων, δι' ὧν ὕστερον τὸ ὑγρὸν φέρεται. ἥ τε

954 a

ἔκχυσις τοῦ σπέρματος ἐν ταῖς ὁμιλίαις καὶ ἡ ῥύψις ὑπὸ τοῦ πνεύματος ὠθοῦντος φανερόν γίνεται. ὥστε καὶ τῶν ἐδεσμάτων καὶ ποτῶν εὐλόγως ταῦτ' ἐστὶν ἀφροδισιαστικά, ὅσα πνευματώδη τὸν περὶ τὰ αἰδοῖα ποιεῖ τόπον. διὸ καὶ  
 5 ὁ μέλας οἶνος οὐδενὸς ἤττον τοιούτους ἀπεργάζεται, οἷοι καὶ οἱ μελαγχολικοὶ. δῆλοι δ' εἰσὶν ἐπ' ἐνίων· σκληροὶ γὰρ οἱ πλείους τῶν μελαγχολικῶν, καὶ αἱ φλέβες ἐξέχουσιν· τούτου δ' αἴτιον οὐ τὸ τοῦ αἵματος πλήθος, ἀλλὰ τοῦ πνεύματος,  
 10 διότι δὲ οὐδὲ πάντες οἱ μελαγχολικοὶ σκληροὶ οὐδὲ μέλανες, ἀλλ' οἱ μᾶλλον κακόχυμοι, ἄλλος λόγος· περὶ οὗ δὲ ἐξ ἀρχῆς προειλόμεθα διελθεῖν, ὅτι ἐν τῇ φύσει εὐθύς ὁ τοιοῦτος χυμὸς ὁ μελαγχολικὸς κεράννυται· θερμοῦ γὰρ καὶ ψυχροῦ κρᾶσίς ἐστιν· ἐκ τούτων γὰρ τῶν δυοῖν ἡ φύσις συνέστηκεν.  
 15 διὸ καὶ ἡ μέλαινα χολὴ καὶ θερμότατον καὶ ψυχρότατον γίνεται. τὸ γὰρ αὐτὸ πάσχειν πέφυκε ταῦτ' ἄμφω, οἷον καὶ τὸ ὕδωρ ὃν ψυχρόν, ὅμως ἐὰν ἱκανῶς θερμανθῇ, οἷον τὸ ζέον, τῆς φλογὸς αὐτῆς θερμότερόν ἐστι, καὶ λίθος καὶ σίδηρος διάπυρα γενόμενα μᾶλλον θερμὰ γίνεται ἄνθρακος, ψυχρὰ  
 20 ὄντα φύσει. εἴρηται δὲ σαφέστερον περὶ τούτων ἐν τοῖς περὶ πυρός. καὶ ἡ χολὴ δὲ ἡ μέλαινα φύσει ψυχρὰ καὶ οὐκ ἐπιπολαιῶς οὔσα, ὅταν μὲν οὕτως ἔχῃ ὡς εἴρηται, ἐὰν ὑπερβάλλῃ ἐν τῷ σώματι, ἀποπληξίας ἢ νάρκας ἢ ἀθυμίας ποιεῖ ἢ



## PROBLEMS, XXX. 1

Even before they can emit semen boys, when they are near to the age of puberty, derive pleasure through lust by rubbing the privates ; this pleasure is clearly due to the breath passing through the channels through which the moisture is afterwards conveyed. The emission and ejection of semen in intercourse must be due to the impulse of the breath. So those solid and liquid foods are rightly considered stimulating to sex which produce breath in the region of the private parts. So red wine above all things produces the characteristics found in the melancholic. This is obvious in some cases ; for most melancholic persons are hard and their veins stand out ; the reason for this is the quantity not of blood, but of air ; the reason why not all melancholic persons are hard nor dark, but only those who are full of evil humours, is another question. But to revert to our former discussion, that such melancholic humour is already mixed in nature ; for it is a mixture of hot and cold ; for nature consists of these two elements. So black bile becomes both very hot and very cold. For the same thing can be naturally affected by both these conditions, as for instance water which is cold, but if it is sufficiently heated so as to reach boiling-point it is hotter than the flame itself, and stone and steel when heated in the flame become hotter than the coal, though by nature they are cold. There is a clearer discussion of this subject in the work on *Fire*.<sup>a</sup> Now black bile, which is naturally cold and does not reside on the surface when it is in the condition described, if it is in excessive quantity in the body, produces apoplexy or torpor, or despondency or fear ; but if it becomes

• The reference is unknown.



954 a

25 φόβους, ἐὰν δὲ ὑπερθερμανθῇ, τὰς μετ' ὥδης εὐθυμίας καὶ ἐκστάσεις καὶ ἐκζέσεις ἐλκῶν καὶ ἄλλα τοιαῦτα. τοῖς μὲν οὖν πολλοῖς ἀπὸ τῆς καθ' ἡμέραν τροφῆς ἐγγινομένη οὐδὲν τὸ ἥθος ποιεῖ διαφόρους, ἀλλὰ μόνον νόσημά τι μελαγχολικὸν ἀπειργάσατο. ὅσοις δὲ ἐν τῇ φύσει συνέστη

30 παντοδαποί, ἄλλος κατ' ἄλλην κράσιν· οἷον ὅσοις μὲν πολλή καὶ ψυχρὰ ἐνυπάρχει, νωθροὶ καὶ μωροί, ὅσοις δὲ λίαν πολλή καὶ θερμή, μανικοὶ καὶ εὐφυεῖς καὶ ἐρωτικοὶ καὶ εὐκίνητοι πρὸς τοὺς θυμοὺς καὶ τὰς ἐπιθυμίας, ἔνιοι δὲ καὶ λάλοι μᾶλλον. πολλοὶ δὲ καὶ διὰ τὸ ἐγγὺς εἶναι τοῦ

35 νοεροῦ τόπου τὴν θερμότητα ταύτην νοσήμασιν ἀλίσκονται μανικοῖς ἢ ἐνθουσιαστικοῖς, ὅθεν Σίβυλλαι καὶ Βάκιδες καὶ οἱ ἔνθεοι γίνονται πάντες, ὅταν μὴ νοσήματι γένωνται ἀλλὰ φυσικῇ κράσει. Μαρακὸς δὲ ὁ Συρακούσιος καὶ ἀμείνων ἦν ποιητής, ὅτ' ἐκσταίῃ. ὅσοις δ' ἂν ἐπανεθῇ ἢ ἄγαν θερμό-

954 b

της<sup>1</sup> πρὸς τὸ μέσον, οὗτοι μελαγχολικοὶ μὲν εἰσι, φρονιμώτεροι δέ, καὶ ἥττον μὲν ἔκτοποι, πρὸς πολλὰ δὲ διαφέροντες τῶν ἄλλων, οἱ μὲν πρὸς παιδείαν, οἱ δὲ πρὸς τέχνας, οἱ δὲ πρὸς πολιτείαν.

5 πολλὴν δὲ καὶ εἰς τοὺς κινδύνους ποιεῖ διαφορὰν ἢ τοιαύτη ἕξις τοῦ ἐνίοτε ἀνωμάλους εἶναι μὲν τοῖς φόβοις πολλοὺς τῶν ἀνδρῶν. ὥς γὰρ ἂν τύχωσι τὸ σῶμα ἔχοντες πρὸς τὴν τοιαύτην κράσιν, διαφέρουσιν αὐτοὶ αὐτῶν. ἡ δὲ μελαγχολικὴ κράσις, ὥσπερ καὶ ἐν ταῖς νόσοις ἀνω-

10 μάλους ποιεῖ, οὕτω καὶ αὐτὴ ἀνώμαλός ἐστιν· ὅτε μὲν γὰρ ψυχρὰ ἐστὶν ὥσπερ ὕδωρ, ὅτε δὲ θερμή. ὥστε φοβερόν τι ὅταν εἰσαγγεληθῇ, ἐὰν μὲν ψυχρο-

overheated, it produces cheerfulness with song, and madness, and the breaking out of sores and so forth. In most cases, arising as it does from the daily food, it does not make men any different in character, but only produces a melancholic disease. But those with whom this temperament exists by nature, at once develop various types of character, differing according to their different temperaments; those for instance in whom the bile is considerable and cold become sluggish and stupid, while those with whom it is excessive and hot become mad, clever or amorous and easily moved to passion and desire, and some become more talkative. But many, because this heat is near to the seat of the mind, are affected by the diseases of madness or frenzy, which accounts for the Sibyls, soothsayers, and all inspired persons, when their condition is due not to disease but to a natural mixture. Maracus, the Syracusan, was an even better poet when he was mad. But those with whom the excessive heat has sunk to a moderate amount are melancholic, though more intelligent and less eccentric, but they are superior to the rest of the world in many ways, some in education, some in the arts and others again in statesmanship. This state produces considerable variations in the face of danger because many men are sometimes inconsistent in the face of fear. For they differ at different times according to the relation of their body to this mixture. The melancholic temperament is in itself variable, just as it has different effects on those who suffer from the diseases which it causes; for, like water, sometimes it is cold and sometimes hot. So that when some alarming news is brought, if it happens at a time when the

---

<sup>1</sup> Text Bywater : MS. has ἐπανθῇ τὴν αἶσαν θερμότητα.

954 b

τέρας οὔσης τῆς κράσεως τύχη, δειλὸν ποιεῖ·  
 προωδοπεποίηκε γὰρ τῷ φόβῳ, καὶ ὁ φόβος  
 καταψύχει. δηλοῦσι δὲ οἱ περίφοβοι· τρέμουσι  
 15 γάρ. ἐὰν δὲ μᾶλλον θερμῇ, εἰς τὸ μέτριον κατ-  
 ἔστησεν ὁ φόβος, καὶ ἐν αὐτῷ καὶ ἀπαθῇ. ὁμοίως  
 δὲ καὶ πρὸς τὰς καθ' ἡμέραν ἀθυμίας· πολλάκις  
 γὰρ οὕτως ἔχομεν ὥστε λυπεῖσθαι, ἐφ' ὅτῳ δέ, οὐκ  
 ἂν ἔχοιμεν εἰπεῖν· ὅτε δὲ εὐθύμως, ἐφ' ᾧ δ' οὐ  
 δῆλον. τὰ δὲ τοιαῦτα πάθη καὶ τὰ ἐπιπόλαια<sup>1</sup> λε-  
 20 χθέντα κατὰ μὲν τι μικρὸν πᾶσι γίνεται· πᾶσι γὰρ  
 μέμικταί τι τῆς δυνάμεως· ὅσοις δ' εἰς βάθος,  
 οὗτοι δ' ἤδη ποιοῖ τινές εἰσι τὰ ἤθη. ὥσπερ γὰρ  
 τὸ εἶδος ἕτεροι γίνονται οὐ τῷ πρόσωπον ἔχειν,  
 ἀλλὰ τῷ ποιόν τι τὸ πρόσωπον, οἱ μὲν καλόν, οἱ  
 δὲ αἰσχρόν, οἱ δὲ μηθὲν ἔχοντες περιττόν, οὗτοι  
 25 δὲ μέσοι τὴν φύσιν, οὕτω καὶ οἱ μὲν μικρὰ μετ-  
 ἔχοντες τῆς τοιαύτης κράσεως μέσοι εἰσίν, οἱ δὲ  
 πλήθους ἤδη ἀνόμοιοι τοῖς πολλοῖς. ἐὰν μὲν γὰρ  
 σφόδρα κατακορῆς ἦ ἢ ἔξις, μελαγχολικοὶ εἰσὶ  
 λίαν, ἐὰν δὲ πως κραθῶσι, περιττοί. ῥέπουσι δ',  
 ἂν ἀμελῶσιν, ἐπὶ τὰ μελαγχολικὰ νοσήματα, ἄλλοι  
 80 περὶ ἄλλο μέρος τοῦ σώματος· καὶ τοῖς μὲν ἐπι-  
 ληπτικὰ ἀποσημαίνει, τοῖς δὲ ἀποπληκτικά, ἄλλοις  
 δὲ ἀθυμίαι ἰσχυραὶ ἢ φόβοι, τοῖς δὲ θάρρη λίαν,  
 οἶον καὶ Ἀρχελάῳ συνέβαινε τῷ Μακεδονίας  
 βασιλεῖ. αἴτιον δὲ τῆς τοιαύτης δυνάμεως ἡ  
 κρᾶσις, ὅπως ἂν ἔχη ψύξεώς τε καὶ θερμότητος.  
 85 ψυχροτέρα μὲν γὰρ οὔσα τοῦ καιροῦ δυσθυμίας  
 ποιεῖ ἀλόγους· διὸ αἱ τ' ἀγχόνη μάλιστα τοῖς  
 νέοις, ἐνίοτε δὲ καὶ πρεσβυτέροις. πολλοὶ δὲ  
 καὶ μετὰ τὰς μέθας διαφθείρουσιν ἑαυτούς. ἐνιοι

<sup>1</sup> ἐπιπόλαια Forster : παλαιὰ Ruelle.

mixture is cooler, it makes a man cowardly ; for it has shown the way to fear, and fear has a chilling effect. Those who are terrified prove this ; for they tremble. But if the bile is hot, fear reduces it to the normal and makes a man self-controlled and unmoved. So it is also with daily despondencies ; for often we are in a condition of feeling grief, but we cannot say what we grieve about ; and sometimes we are feeling cheerful, but it is not clear why. Such affections which are called superficial come to everyone to some extent, for some of the force which produces them is mingled in everyone ; but those with whom they go deep are already of this character. For just as men differ in appearance not because they have faces, but because they have a certain type of face, some handsome, some ugly and some again having no outstanding characteristics (these are of normal character), so those who have a small share of this temperament are normal, but those who have much are unlike the majority. If the characteristic is very intense, such men are very melancholic, and if the mixture is of a certain kind, they are abnormal. But if they neglect it, they incline towards melancholic diseases, different people in different parts of the body ; with some the symptoms are epileptic, with others apoplectic, others again are given to deep despondency or to fear, others are over-confident, as was the case with Archelaus, king of Macedonia. The cause of such force is the mixture, how it is related to cold and heat. For when it is colder than the occasion demands it produces unreasonable despondency ; this accounts for the prevalence of suicide by hanging amongst the young and sometimes amongst older men too. But many commit suicide after a bout of drinking. Some

954 b

δὲ τῶν μελαγχολικῶν ἐκ τῶν πότων ἀθύμως δι-  
 άγουσιν· σβέννυσ γὰρ ἢ τοῦ οἴνου θερμότης τὴν

955 a

φυσικὴν θερμότητα. τὸ δὲ θερμὸν τὸ περὶ τὸν  
 τόπον ᾧ φρονοῦμεν καὶ ἐλπίζομεν ποιεῖ εὐθύμους.  
 καὶ διὰ τοῦτο πρὸς τὸ πίνειν εἰς μέθην πάντες  
 ἔχουσι προθύμως, ὅτι πάντας ὁ οἶνος ὁ πολὺς  
 εὐέλπιδας ποιεῖ, καθάπερ ἢ νεότης τοὺς παῖδας·  
 τὸ μὲν γὰρ γῆρας δύσελπί ἐστιν, ἢ δὲ νεότης  
 ἐλπίδος πλήρης. εἰσὶ δὲ τινες ὀλίγοι οὓς πίνοντας  
 δυσθυμῖαι λαμβάνουσι, διὰ τὴν αὐτὴν αἰτίαν δι'  
 ἣν καὶ μετὰ τοὺς πότους ἐνίου. ὅσοις μὲν οὖν  
 μαραινομένου τοῦ θερμοῦ αἱ ἀθυμῖαι γίνονται,  
 μᾶλλον ἀπάγχονται. διὸ καὶ οἱ νέοι [ἦ]<sup>1</sup> καὶ οἱ  
 10 πρεσβῦται μᾶλλον ἀπάγχονται· τὸ μὲν γὰρ γῆρας  
 μαραίνει τὸ θερμὸν, τῶν δὲ τὸ πάθος φυσικὸν ὄν.<sup>2</sup>  
 ὅσοις δὲ σβέννυται<sup>3</sup> ἐξαίφνης, οἱ πλείστοι δια-  
 χρῶνται ἑαυτοὺς, ὥστε θαυμάζειν πάντας διὰ τὸ  
 μηθὲν ποιῆσαι σημεῖον πρότερον. ψυχροτέρα μὲν  
 οὖν γινομένη ἢ κρᾶσις ἢ ἀπὸ τῆς μελαίνης χολῆς,  
 15 ὥσπερ εἴρηται, ποιεῖ ἀθυμίας παντοδαπὰς, θερ-  
 μοτέρα δὲ οὖσα εὐθυμίας. διὸ καὶ οἱ μὲν παῖδες  
 εὐθυμότεροι, οἱ δὲ γέροντες δυσθυμότεροι. οἱ μὲν  
 γὰρ θερμοί, οἱ δὲ ψυχροί· τὸ γὰρ γῆρας κατάψυξις  
 τις. συμβαίνει δὲ σβέννυσθαι ἐξαίφνης ὑπὸ τε  
 20 τῶν ἐκτὸς αἰτιῶν, ὥς καὶ παρὰ φύσιν τὰ πυρω-  
 θέντα, οἷον ἄνθρακα ὕδατος ἐπιχυθέντος. διὸ καὶ  
 ἐκ μέθης ἐνιοι ἑαυτοὺς διαchrῶνται· ἢ γὰρ ἀπὸ τοῦ  
 οἴνου θερμότης ἐπέισακτός ἐστιν, ἥς σβεννυμένης  
 συμβαίνει τὸ πάθος. καὶ μετὰ τὰ ἀφροδίσια οἱ  
 25 πολὺ προΐενται μετὰ τοῦ σπέρματος, οὗτοι εὐ-

<sup>1</sup> Omitting ἦ with Richards.

<sup>2</sup> Omitting ms. καὶ αὐτὸ τὸ μαραινόμενον θερμὸν.



## PROBLEMS, XXX. 1

melancholic persons continue to be despondent after drinking ; for the heat of the wine quenches the natural heat. But heat in the region with which we think and hope makes us cheerful. This is why all are eager to drink up to the point of drunkenness, because much wine makes all men confident, just as youth does boys ; for old age is despondent, but youth is full of hope. There are some few persons who are seized with despondency while drinking, for the same reason that some are so after drinking. Those upon whom despondency falls as the heat dies away are more inclined to hang themselves. This is why young men and old men are more liable to hang themselves ; for old age causes the heat to die away, but in the young the cause is their condition which is natural. But when the heat is suddenly quenched is the time at which most men make away with themselves, so that everyone is amazed as they have given no sign of it before. Now when the mixture due to black bile becomes colder, it gives rise, as has been said, to all kinds of despair, but when it is hotter, to cheerfulness. This is why the young are more cheerful, and the old less so. For the former are hot and the latter cold ; for old age is a form of chilling. But it may happen that the heat is suddenly quenched by extraneous causes, just as objects which are heated in the fire and cooled unnaturally, like coals when water is poured over them. This is why some men commit suicide after drinking ; for the heat from the wine is a foreign element, and when it is quenched the affection occurs. After sexual intercourse most men are rather depressed, but those who emit much waste product with the semen are more cheerful ; for they are

---

<sup>3</sup> σβέννυται Forster : σβεννυμένου Ruelle.



955 a

θυμότεροι· κουφίζονται γὰρ περιττώματός τε καὶ πνεύματος καὶ θερμοῦ ὑπερβολῆς. ἐκεῖνοι δὲ ἄθυμότεροι πολλάκις· καταψύχονται γὰρ ἀφροδισιάσαντες διὰ τὸ τῶν ἱκανῶν τι ἀφαιρεθῆναι· δηλοῖ δὲ τοῦτο τὸ μὴ πολλὴν τὴν ἀπορροὴν γεγονέναι. ὥς οὖν ἐν κεφαλαίῳ εἰπεῖν, διὰ μὲν τὸ  
 30 ἁνώμαλον εἶναι τὴν δύναμιν τῆς μελαίνης χολῆς ἁνώμαλοί εἰσιν οἱ μελαγχολικοί· καὶ γὰρ ψυχρὰ σφόδρα γίνεται καὶ θερμή. διὰ δὲ τὸ ἡθοποιὸς εἶναι (ἡθοποιὸν γὰρ τὸ θερμὸν καὶ ψυχρὸν μάλιστα τῶν ἐν ἡμῖν ἐστίν) ὥσπερ ὁ οἶνος πλείων καὶ ἐλάττων κεραννύμενος τῷ σώματι ποιεῖ τὸ ἡθος  
 35 ποιούς τινας ἡμᾶς. ἄμφω δὲ πνευματικά, καὶ ὁ οἶνος καὶ ἡ μέλαινα χολή. ἐπεὶ δ' ἔστι καὶ εὐκρατον εἶναι τὴν ἀνωμαλίαν καὶ καλῶς πως ἔχειν, καὶ ὅπου δεῖ θερμότεραν εἶναι τὴν διάθεσιν καὶ πάλιν ψυχράν, ἢ τοῦναντίον διὰ τὸ ὑπερβολὴν ἔχειν, περιττοὶ μὲν εἰσι πάντες οἱ μελαγχολικοί,  
 40 οὐ διὰ νόσον, ἀλλὰ διὰ φύσιν.

955 b

Διὰ τί κατ' ἐνίας μὲν τῶν ἐπιστημῶν ἔξιν ἔχειν 2  
 λέγομεν, κατ' ἐνίας δὲ οὐ; ἢ καθ' ὅσας εὐρετικοί  
 ἐσμεν, ἔξιν ἔχειν λεγόμεθα; τὸ γὰρ εὐρίσκειν  
 ἀπὸ ἕξεως.

Διὰ τί τῶν ζώων ὁ ἄνθρωπος φρονιμώτατος; 3  
 5 πότερον ὅτι μικροκεφαλώτατος κατὰ λόγον τοῦ σώματος; ἢ ὅτι ἀνωμάλως ἐλάχιστος; διὰ γὰρ τοῦτο καὶ μικροκέφαλον, καὶ αὐτῶν οἱ τοιοῦτοι μᾶλλον τῶν μεγαλοκεφάλων φρονιμώτεροι.

Διὰ τί δοκεῖ ἡμῖν πλείων εἶναι ἡ ὁδός, ὅταν μὴ 4  
 10 εἰδότες πόση τίς ἐστὶ βαδίζωμεν, μᾶλλον ἢ ὅταν εἰδότες, ἐὰν τὰ ἄλλα ὁμοίως τύχωμεν ἔχοντες; ἢ

## PROBLEMS, XXX. 1-4

relieved of waste product and of breath and of excessive heat. But the others are usually rather depressed; for they are chilled by sexual intercourse, because they are deprived of something important. This is proved by the fact that the quantity of semen emitted is small. To sum up what we have said, the melancholic are not equable in behaviour, because the power of the black bile is not even; for it is both very cold and very hot. But because it has an affect on character (for heat and cold are the greatest agents in our lives for the making of character), just like wine according as it is mixed in our body in greater or less quantity it makes our dispositions of a particular kind. Both wine and black bile are full of air. But since it is possible that even varying state may be well attempered, and in a sense be a good condition, and since the condition may be warmer when necessary and then again cold, or conversely, owing to the presence of excess, all melancholic persons are abnormal, not owing to disease but by nature.

Why is it that in some branches of knowledge we 2 say that we have a habit, and in others not? Are we said to have a habit in respect of those branches of knowledge in which we make discoveries? For discovery depends on habit.

Why is man the most sensible of all living creatures? 3 Is it because he has the smallest head in proportion to his body? Or is it because some parts are disproportionately small? This is why he has a small head, and such persons are more sensible than those with large heads.

Why is it that the road seems to us longer when we 4 walk along it without knowing how long it is, than when we do know it, if our conditions are equal in other respects? Is it because knowing how long it is

ὅτι τὸ εἰδέναι πόση, ἐστὶν εἰδέναι ἀριθμόν; τὸ γὰρ ἄπειρον καὶ ἀναρίθμητον ταυτόν, καὶ πλεόν ἂν τὸ ἄπειρον τοῦ ὠρισμένου. ὥσπερ οὖν εἰ ἦδει ὅτι τοσήδε ἐστί, πεπερασμένην αὐτὴν ἀνάγκη  
 15 εἶναι, οὕτως εἰ μὴ οἶδε πόση τίς ἐστίν, ὡς ἀντιστρέφοντος παραλογίζεται ἡ ψυχὴ, καὶ φαίνεται αὕτη εἶναι ἄπειρος, ἐπεὶ τὸ ποσὸν ὠρισμένον ἐστὶ καὶ τὸ ὠρισμένον ποσόν. ὅταν τοίνυν μὴ φαίνηται ὠρισμένον, ὥσπερ ἄπειρον δόξει εἶναι, διὰ τὸ τὸ πεφυκὸς ὠρίσθαι, ἂν μὴ ᾗ ὠρισμένον, ἄπειρον  
 20 εἶναι, καὶ τὸ φαινόμενον μὴ ὠρίσθαι φαίνεσθαι ἀνάγκη πως ἀπέραντον.

Διὰ τί πρεσβύτεροι μὲν γινόμενοι μᾶλλον νοῦν 5 ἔχομεν, νεώτεροι δὲ ὄντες θᾶπτον μαθάνομεν; ἢ ὅτι ὁ θεὸς ὄργανα ἐν ἑαυτοῖς ἡμῖν δέδωκε δύο,  
 25 ἐν οἷς χρῆσόμεθα τοῖς ἐκτὸς ὀργάνοις, σώματι μὲν χεῖρα, ψυχῇ δὲ νοῦν; ἔστι γὰρ καὶ ὁ νοῦς τῶν φύσει ἐν ἡμῖν ὥσπερ ὄργανον ὑπάρχων· αἱ δὲ ἄλλαι ἐπιστήμαι καὶ τέχναι τῶν ὑφ' ἡμῶν ποιητῶν εἰσίν, ὁ δὲ νοῦς τῶν φύσει. καθάπερ οὖν τῇ χειρὶ οὐκ εὐθὺς γενόμενοι χρώμεθα βέλτιστα, ἀλλ' ὅταν  
 30 ἢ φύσις αὐτὴν ἐπιτελέσῃ (προϊούσης γὰρ τῆς ἡλικίας ἢ χεὶρ μάλιστα δύναται ἀποτελεῖν τὸ ἑαυτῆς ἔργον), τὸν αὐτὸν τρόπον καὶ ὁ νοῦς τῶν φύσει οὐκ εὐθὺς ἀλλ' ἐπὶ γήρως ἡμῖν μάλιστα παραγίνεται καὶ τότε ἀποτελεῖται μάλιστα, ἢν μὴ ὑπό τινος πηρωθῇ, καθάπερ καὶ τὰ ἄλλα τὰ φύσει  
 35 ὑπάρχοντα. ὕστερον δὲ τῆς τῶν χειρῶν δυνάμεως ὁ νοῦς παραγίνεται ἡμῖν, ὅτι καὶ τὰ τοῦ νοῦ ὄργανά ἐστι τῶν τῆς χειρός. ἔστι γὰρ νοῦ μὲν ὄργανον ἐπιστήμη (τούτῳ γὰρ ἐστι χρήσιμος, καθάπερ αὐλοὶ αὐλητῇ), χειρῶν δὲ πολλὰ τῶν

implies knowing a number ? For the infinite and the unnumbered are the same thing, and the infinite is always larger than the finite. If one knows that it is so long, it must be limited ; in the same way if one does not know how long it is, then the mind miscalculates as though one were reversing it, and the journey seems to be infinite, since a definite quantity is limited and what is limited is a definite quantity. So when it does not seem to be limited, it will appear infinite, because what is naturally limited is infinite, if the limit is not laid down, and what appears not to be limited must appear in a sense infinite.

Why have we more sense when we grow older, but 5 learn more quickly when we are young ? Is it because God has endowed us with two instruments within ourselves by means of which we employ outside instruments, the hand for the body and the mind for the soul ? For the mind exists within us among our natural functions as an instrument ; other branches of knowledge and the crafts are among the things created by us, but the mind is one of the gifts of nature. So, just as we do not use the hand in the best way as soon as we are born, but only when nature has brought it to perfection (for as our age advances the hand gains power to achieve its function), in the same way also the mind, which is a natural function, does not assist us in the best way at once, but in old age, and then reaches its highest perfection if it is not crippled by any agent, just like all the other things which belong to us by nature. But the mind comes to us at a later date than the power of the hands, because the instruments of the mind develop later than those of the hand. For the instrument of the mind is knowledge (for this is useful to the mind, just as flutes are useful to the flute-player), and there are many useful

955 b

φύσει ὄντων· ἡ δὲ φύσις αὐτὴ γε ἐπιστήμης πρό-  
 10 τερον, καὶ τὰ ὑπ' αὐτῆς γινόμενα. ὦν δὲ τὰ  
 ὄργανα πρότερα, καὶ τὰς δυνάμεις πρότερον εἰκὸς  
 958 a ἐγγίνεσθαι ἡμῖν· τούτοις γὰρ χρώμενοι ἕξιν λαμ-  
 βάνομεν, καὶ ἔχει ὁμοίως τὸ ἐκάστου ὄργανον πρὸς  
 αὐτό· καὶ ἀνάπαλιν, ὡς τὰ ὄργανα πρὸς ἄλληλα,  
 οὕτω <ὦν><sup>1</sup> τὰ ὄργανα πρὸς αὐτά. ὁ μὲν οὖν νοῦς  
 5 διὰ ταύτην τὴν αἰτίαν πρεσβυτέροις οὖσιν ἡμῖν  
 μᾶλλον ἐγγίνεται. μανθάνομεν δὲ θάπτον νεώτεροι  
 ὄντες διὰ τὸ μηδὲν πω ἐπίστασθαι. ὅταν δὲ ἐπι-  
 στώμεθα, οὐκέτι ὁμοίως δυνάμεθα δέχεσθαι,<sup>2</sup> καθ-  
 ἅπερ καὶ μνημονεύομεν μᾶλλον οἷς ἂν ἔωθεν πρῶτον  
 10 ἐντυγχάνωμεν, ἔπειτα προϊούσης τῆς ἡμέρας οὐκέτι  
 ὁμοίως διὰ τὸ πολλοῖς ἐντετυχηκέναι.

Διὰ τί ἀνθρώπῳ πειστέον μᾶλλον ἢ ἄλλῳ ζῳῷ; 6  
 πότερον ὥσπερ Πλάτων Νεοκλεῖ ἀπεκρίνατο, ὅτι  
 ἀριθμεῖν μόνον ἐπίσταται τῶν ἄλλων ζώων; ἢ  
 ὅτι θεοὺς νομίζει μόνον; ἢ ὅτι μιμητικώτατον;  
 μανθάνειν γὰρ δύναται διὰ τοῦτο.

15 Διὰ τί οὐ χαίρομεν θεώμενοι οὐδὲ ἐλπίζοντες 7  
 ὅτι τὸ τρίγωνον δύο ὀρθαῖς ἴσας ἔχει τὰς ἐντὸς  
 γωνίας, οὐδὲ τῶν ἄλλων τῶν τοιούτων οὐθέν, εἰ  
 μὴ τῇ θεωρίᾳ, αὕτη δὲ ὁμοίως ἐστὶν ἡδεῖα κἂν  
 εἰ τρισὶν ὀρθαῖς ἢ πλείοσιν ἴσας ἔσχεν; ἀλλ' ὅτι  
 Ὀλυμπία ἐνικῶμεν, καὶ περὶ τῆς ναυμαχίας τῆς  
 20 ἐν Σαλαμῖνι, χαίρομεν καὶ μεμνημένοι καὶ ἐλπί-  
 ζοντες τοιαῦτα, ἀλλ' οὐ τάναντία τοῖς τοιούτοις.  
 ἢ ὅτι ἐπὶ μὲν τοῖς τοιούτοις χαίρομεν ὡς γενομένοις

<sup>1</sup> ὦν added by Richards.

<sup>2</sup> δυνάμεθα δέχεσθαι Richards: δυνάμεθα. δυνάμεθα δὲ ἔχε-  
 σθαι Ruelle.



functions for the hands ; but nature itself is prior to knowledge, and so also are the things produced by it. It is natural that, where the instruments are prior, the functions should also appear earlier in us ; for it is by using these that we acquire a habit, and the instrument of each function bears the same relation to it ; conversely, as the instruments are related to each other, so are the functions of which they are the instruments. So it is for this reason that the mind is more developed in us when we are older. But we learn more quickly when we are younger, because we know nothing yet. But when we possess knowledge, we are no longer equally able to admit more. Just as we remember better those whom we first meet with in the morning ; then as the day goes on we have not the same capacity, because we have met with many people.

Why should more obedience be paid to man than 6 to any other animal ? Is it, as Plato replied to Neocles, because he alone of all animals can count ? Or because he alone believes in gods ? Or because he is the most imitative animal ? For this is the reason why he can learn.

Why do we feel no pleasure when we see or even 7 expect that a triangle has its interior angles together equal to two right angles, nor in any such facts, except for the pleasure derived from speculation, and this would be equally pleasant if the angles were equal to three right angles or more ? But we do feel pleasure, either that of memory or of anticipation, in such facts as our victory at Olympia or our sea-fight at Salamis, and no pleasure in facts the opposite to these. Is it because we rejoice in such things as either past or present events, but in the case of happenings



956 a

ἢ οὖσιν, ἐπὶ δὲ τοῖς κατὰ φύσιν ὡς κατὰ ἀλήθειαν  
θεωρίας ἡδονήν, ὡς ἔχει, μόνην ἡμῖν ποιεῖν, τὰς  
25 δὲ πράξεις τὴν ἀπὸ τῶν συμβαινόντων ἀπ' αὐτῶν;  
ἀνομοίων οὖν οὐσῶν τῶν πράξεων, καὶ τὰ ἀπο-  
βαίνοντα ἀπ' αὐτῶν γίνεται τὰ μὲν λυπηρά, τὰ  
δὲ ἡδέα· φεύγομεν δὲ καὶ διώκομεν καθ' ἡδονήν  
καὶ λύπην ἅπαντα.

Διὰ τί μέχρι ὑγείας πραγματεύονται οἱ ἰατροί; 8  
ἰσχυαίνει γάρ, εἴτα ἐκ τούτου ξηραίνει, εἴτα  
30 ὑγείαν ἐποίησεν, εἴτα ἐνταῦθα ἔστη. πότερον  
οὐκ ἔστι δυνατόν ἐκ τούτου γενέσθαι ἄλλο; ἢ εἰ  
δυνατόν, ἄλλης ἐπιστήμης, καὶ ἔσται ὃ τις ἐξ  
ὑγείας ποιήσῃ ἄλλο τι; εἰ δὲ γίνεται ἐκ τῶν  
ἐναντίων καὶ τῶν μεταξύ, δῆλον ὅτι ἀρρωστεῖ ἢ  
ξηρότερος ἢ ὑγρότερος ἢ τι τοιοῦτον. ποιεῖ δὲ  
35 ἐκ ψύχους ἦττον σφόδρα, καὶ τέλος<sup>1</sup> ὠδὶ θερμὸν  
καὶ ὠδὶ ξηρὸν ἢ ὑγρὸν μεταβαῖνον ἐκ τῶν ἐναν-  
τίων ἢ μεταξύ, ἕως ἂν ἔλθῃ εἰς τὸ οὕτως ἔχειν,  
ὃ ἦν τοῦ ὑγιαίνειν· ἐκ τε τούτου οὐ πέφυκεν ἄλλο  
τι ὃν ἢ τὸ μεταξύ. δύναται μὲν οὖν ποιῆσαι ὁ  
ἔχων. ὡς γὰρ ἦλθεν, ἀναλῦσαι δύναται καὶ  
40 ἀπελθεῖν. οὐ μὲν ἢ γε τέχνη τούτου ἐστίν. ἀεὶ  
γὰρ βέλτιον. ὥστε οὐδὲ ἄλλη, οὔτε αὐτὴ ποιήσῃ  
958 b ἐξ ὑγείας ἄλλο τι· οὐθὲν γὰρ ἐγένετο ἢ τὸ ἐναντίον  
τούτου, εἴπερ ἢ αὐτὴ ἐπιστήμη. οὕτω καὶ ἐπὶ  
οἰκίας οὐδὲν ποιήσῃεν ἂν τὸναντίον· οὐκ ἔστιν  
ἄλλη τέχνη<sup>2</sup> ἐκ τούτου ποιήσουσα, πλὴν ὡς μέρους,  
οἶον ἢ σκυτικὴ ὑπόδημα ἐκ προσχίσματος. ἐξ

<sup>1</sup> τέλος Forster from Th. G. : τέλεον Ruelle.

<sup>2</sup> ἄλλη τέχνη Forster from Th. G. : ἐν ἄλλῃ τέχνῃ Ruelle.

in nature they really only give us the pleasure of contemplation, but actions give us the pleasure which arises from their results ? So, as actions are unlike, the results also differ : some are painful and some are pleasant ; for we avoid and pursue everything according to the pleasure or pain it gives.

Why do doctors exercise their craft only as far 8 as health is concerned ? For the doctor thins the patient down, then dries him ; then he has produced health and there he stops. Is it not possible for some other condition to be produced from health ? Or if it is possible does it belong to another science, and will it be another condition which a man will produce from health ? Now if health is produced from an opposite or intermediate condition, evidently a man is ill because he is too dry or too moist, or something of the kind. Now the doctor produces a less violent state from cold, and at the end makes his patient so hot and so dry or so moist from an opposite or intermediate condition, until he reaches a condition which is that of health ; and from this condition no state is possible except an intermediate one. Now the man who possesses an art can produce this condition. For just as he has reached his point, he can undo his work and leave it, but the doctor's art is not like this ; for he always aims at a better condition ; so neither any other art nor the art of medicine itself will produce anything else from health ; for, if the art remains the same, nothing comes from it except its opposite. So, too, with a house, nothing could make the opposite. Nor can any other art make anything out of health, except in the sense of making the whole from a part, as the shoemaker's art can make a complete shoe from the forepart of a shoe. For one thing can

958 b

5 ἑκατέρου γὰρ γίνεται διττῶς, ἢ συντιθεμένου ἢ φθειρομένου.

Διὰ τί τὸν φιλόσοφον τοῦ ῥήτορος οἴονται δια- 9  
φέρειν; ἢ ὅτι ὁ μὲν φιλόσοφος περὶ αὐτὰ τὰ  
εἶδη τῶν πραγμάτων διατρίβει, ὁ δὲ περὶ τὰ  
μετέχοντα, οἷον ὁ μὲν τί ἐστὶν ἀδικία, ὁ δὲ ὡς  
10 ἄδικος ὁ δεῖνα, καὶ ὁ μὲν τί ἡ τυραννίς, ὁ δὲ οἷόν  
τι ὁ τύραννος;

Διὰ τί οἱ Διονυσιακοὶ τεχνῆται ὡς ἐπὶ τὸ πολὺ 10  
πονηροὶ εἰσιν; ἢ ὅτι ἤκιστα λόγου <καὶ><sup>1</sup> σοφίας  
κοινωνοῦσι διὰ τὸ περὶ τὰς ἀναγκαίας τέχνας τὸ  
πολὺ μέρος τοῦ βίου εἶναι, καὶ ὅτι ἐν ἀκρασίαις τὸ  
15 πολὺ τοῦ βίου εἰσὶν, τὰ δὲ καὶ ἐν ἀπορίαις; ἀμφό-  
τερα δὲ φαυλότητος παρασκευαστικά.

Διὰ τί οἱ ἐξ ἀρχῆς τῆς μὲν κατὰ τὸ σῶμα 11  
ἀγωνίας ἀθλόν τι προὔταξαν, σοφίας δὲ οὐθὲν  
ἔβηκαν; ἢ ὅτι ἐπιεικῶς δεῖ τοὺς κριτάς, ἃ περὶ  
διάνοιάν ἐστίν, ἢ μὴθὲν χεῖρους τῶν ἀγωνιστῶν  
εἶναι ἢ κρείττους; εἰ δὲ ἔδει σοφία τοὺς πρω-  
20 τεύοντας ἀγωνίζεσθαι καὶ ἀθλον προὔτέτακτο,  
κριτῶν ἂν ἠπόρουν αὐτοῖς. ἐπὶ δὲ τῶν γυμνικῶν  
ἀγώνων ἅπαντός ἐστι κρίναι, τῇ ὅψει μόνῃ θεα-  
σάμενον. ἔτι δὲ ὁ ἐξ ἀρχῆς κατασκευάζων οὐκ  
ἐβούλετο τοιαύτην ἀγωνίαν προθεῖναι τοῖς Ἑλλήσιν,  
25 ἐξ ὧν ἔμελλον στάσεις καὶ ἔχθραι μεγάλαι ἔσεσθαι.  
οἷον οἱ ἄνθρωποι, ὅταν τις ἢ ἐκκριθῇ ἢ προσδεχθῇ  
εἰς τι τῶν κατὰ τὸ σῶμα ἀθλημάτων, οὐ πάντῃ  
χαλεπῶς φέρουσιν οὐδὲ εἰς ἔχθραν καθίστανται  
τοῖς κρίνουσιν, ὑπὲρ δὲ τοῦ φρονιμωτέρους ἢ  
μοχθηροτέρους εἶναι τοῖς κρίνουσι μάλιστα ὀργί-

<sup>1</sup> καὶ added by Forster from Aulus Gellius (xx. 4), who quotes this Problem.

be made from another in two ways, either by adding to or destroying the original.<sup>a</sup>

Why do men consider the philosopher better than 9 the orator? Is it because the philosopher's interest is in the actual form of things, but the orator only with things which partake of these forms? For instance the philosopher asks what is injustice, the orator states that so-and-so is an unjust man: the former inquires into the nature of despotism, the latter what is a despot.

Why are Dionysiac artists <sup>b</sup> generally bad char- 10 actors? Is it because they partake very little of reason and wisdom since most of their life is spent in arts which they practise for a living, and because much of their life is spent in incontinence and some in dire straits? Both these conditions are productive of baseness.

Why did men originally institute a prize for com- 11 petitions of the body, but none for wisdom? Is it because the judges in matters of the intellect must properly be no worse than the competitors or even superior to them? But if those in the foremost rank had to compete in wisdom and a prize were instituted for it, they would lack judges. But in the case of an athletic competition anyone can judge, merely by watching it. Again, the first lawgiver did not want to institute a competition among the Greeks from which great quarrels and hatreds would arise; now men, when anyone is ruled out or accepted for a bodily competition, are not in any way angry nor do they conceive hatred against the judges, but on the question whether they are more intelligent or inferior they

<sup>a</sup> This Problem is unsatisfactory in its text and apparently pointless.

<sup>b</sup> i.e. actors at the Dionysiac Festivals.

956 b

ζονται καὶ ἀγανακτοῦσιν. στασιῶδες δὲ καὶ  
 30 μοχθηρὸν τὸ τοιοῦτόν ἐστιν. ἔτι δὲ δεῖ τῆς  
 ἀγωνίας τὸ ἄθλον κρεῖττον εἶναι. ἐπὶ μὲν γὰρ  
 τῶν γυμνικῶν ἀθλημάτων τὸ ἄθλον αἰρετώτερον  
 καὶ βέλτιον τῆς ἀγωνίας· σοφίας δὲ τί ἂν ἄθλον  
 βέλτιον γένοιτο;

Διὰ τί ἄλλο νοεῖ καὶ ποιεῖ ἄνθρωπος μάλιστα; 12  
 ἢ ὅτι τῶν ἐναντίων ἢ αὐτῇ ἐπιστήμη; ἢ ὅτι ὁ  
 35 μὲν νοῦς πολλῶν ἐστίν, ἢ δὲ ὁρεξίς ἐνός; ὁ μὲν  
 οὖν ἄνθρωπος τῷ νῷ τὰ πλεῖστα ζῇ, τὰ δὲ θηρία  
 ὁρέξει καὶ θυμῷ καὶ ἐπιθυμίᾳ.

Διὰ τί φρόνιμοί τινες κτῶμενοι οὐ χρώμενοι 13  
 διατελοῦσιν; πότερον ὅτι τῷ ἔθει χρῶνται; ἢ  
 διὰ τὸ ἐν ἐλπίδι ἡδύ;

\* \* \* ὅτι ἡ αἴσθησις καὶ ἡ διάνοια τῷ ἡρεμεῖν 14  
 40 τὴν ψυχὴν ἐνεργεῖ; ὁ καὶ ἡ ἐπιστήμη δοκεῖ εἶναι,  
 957 a ὅτι τὴν ψυχὴν ἴστησιν· κινουμένης γὰρ καὶ φερο-  
 μένης οὔτε αἰσθῆσθαι οὔτε διανοηθῆναι δυνατόν.  
 διὸ καὶ τὰ παῖδιά καὶ οἱ μεθύοντες καὶ οἱ μαινό-  
 μενοι ἀνόητοι· διὰ γὰρ τὸ πλῆθος τοῦ θερμοῦ τοῦ  
 ἐνυπάρχοντος πλείστη κίνησις αὐτοῖς καὶ σφοδρο-  
 5 τάτῃ συμβαίνει, ληγουσῆς δὲ ταύτης ἐμφρονέστεροι  
 γίνονται· ἀταράχου γὰρ οὔσης τῆς διανοίας μᾶλλον  
 ἐφίστάναι δύνανται αὐτήν. οἳ τ' ἐν τῷ καθεύδειν  
 ἐνυπνιαζόμενοι ἵσταμένης τῆς διανοίας, καὶ καθ'  
 ὅσον ἡρεμεῖ, ὀνειρώττουσιν. μάλιστα γὰρ ἐν τοῖς  
 ὕπνοις ἡ ψυχὴ κινεῖται. περισταμένου γὰρ τοῦ  
 10 θερμοῦ ἐκ τοῦ ἄλλου σώματος εἰς τὸν ἐντὸς τόπον,  
 τότε πλείστη καὶ σφοδροτάτῃ κίνησις ὑπάρχει,  
 οὐχ ὥσπερ οἱ πολλοὶ ὑπολαμβάνουσι τότε ἡρεμεῖν  
 καὶ καθ' αὐτὴν εἶναι, καὶ μάλιστα ὅταν μηδὲν



are irritated and become very angry with the judges. So this question produces quarrels and troubles. Again, the prize must be more desirable than the competition. For in the case of athletic contests the prize is more desirable and better than the competition ; but what prize could be better than wisdom ?

Why is man specially apt to think one thing and 12 do another ? Is it because the same knowledge is concerned with opposites ? Or is it because the mind thinks of many things, but appetite only aims at one ? Now man lives for the most part by the intelligence, but beasts live by appetite, temper and desire.

Why do some wise men continue to acquire and 13 not to use ? Is it because they are slaves of habit, or because of the pleasure they find in anticipation ?

(Why is it that those who sleep most heavily and 14 pleasantly see no dreams ? Is it) <sup>a</sup> because sensation and thought perform their functions when the soul is at rest ? Knowledge—*ἐπιστήμη*—seems to be that which checks—*ἵστησι*—the soul ; for, when the soul is moved and travelling, it is not possible either to feel or to think. This is why children, the intoxicated and madmen cannot think ; for owing to the quantity of heat within them the movement is very great and violent, but when this ceases they become more sensible ; for as the mind is untroubled they can control it more. Those who dream while they are asleep dream while the mind is steady and in so far as it is at rest. For the soul moves most in sleep. For when the heat collects from the rest of the body in the region within, then the movement is greatest and most violent, and does not at that time remain quiet and steady, as most people suppose, and especially when

<sup>a</sup> From Th. G.



957<sup>a</sup> ἴδωσιν ἐνύπνιον. συμβαίνει δὲ τὸναντίον· διὰ γὰρ  
 τὸ ἐν πλείστη κινήσει εἶναι καὶ μηδὲ κατὰ μικρὸν  
 15 ἡρεμεῖν, οὐδὲ διανοεῖσθαι δύναται. ἐν πλείστη δὲ  
 κινήσει, ὅταν ἡδιστα καθεύδῃ, εἰκότως ἐστίν, ὅτι  
 τότε μάλιστα καὶ πλείστον θερμὸν ἀθροίζεται εἰς  
 τὸν εἶσω τόπον. ὅτι δὲ ἐν τῇ κινήσει οὐσα ἢ  
 ψυχὴ οὐ μόνον ὕπαρ ἄλλ' οὐδ' ἐν τοῖς ὕπνοις  
 δύναται διανοεῖσθαι, καὶ κεῖνο σημεῖον· ἐν γὰρ τοῖς  
 20 μετὰ τὴν πρόσεσιν τῶν σιτίων ὕπνοις ἡκιστα ἔστιν  
 ἐνύπνια ὁρᾶν. τότε δὲ μάλιστα συμβαίνει κινεῖσθαι  
 αὐτὴν διὰ τὴν ἐπεισαχθεῖσαν τροφήν. τό τε  
 ἐνύπνιον ἐστίν, ὅταν διανοοῦμένοις καὶ πρὸ ὁμ-  
 μάτων τιθεμένοις ὕπνος ἐπέλθῃ. διὸ καὶ ταῦτα  
 μάλιστα ὁρῶμεν ἢ πράττομεν ἢ μέλλομεν ἢ βου-  
 25 λόμεθα· περὶ γὰρ τούτων μάλιστα πλειστάκις  
 λογισμοὶ καὶ φαντασίαι ἐπιγίνονται. καὶ οἱ βελ-  
 τίους βελτίω τὰ ἐνύπνια ὁρῶσι διὰ ταῦτα, ὅτι καὶ  
 ἐγρηγορότερες περὶ βελτιόνων διανοοῦνται, οἱ δὲ  
 χεῖρον ἢ τὴν διάνοιαν ἢ τὸ σῶμα διακείμενοι χείρω.  
 καὶ γὰρ ἢ τοῦ σώματος διάθεσις πρὸς τὴν τῶν  
 30 ἐνυπνίων φαντασίαν συμβλητικόν· τοῦ γὰρ νοσοῦν-  
 τος καὶ αἱ τῆς διανοίας προθέσεις φαῦλαι, καὶ ἔτι  
 διὰ τὴν ἐν τῷ σώματι ταραχὴν ἐνοῦσαν ἢ ψυχὴ οὐ  
 δύναται ἡρεμεῖν. οἱ δὲ μελαγχολικοὶ διὰ τοῦτο  
 ἐξάπτουσιν ἐν τοῖς ὕπνοις, ὅτι πλείονος τῆς θερ-  
 μασίας οὐσης, μᾶλλον τοῦ μετρίου ἢ ψυχὴ ἐν  
 35 κινήσει, σφοδροτέρας δὲ τῆς κινήσεως οὐσης οὐ  
 δύνανται καθεύδειν.

no dream is seen. The truth is the exact opposite ; for because it is subject to the greatest movement and cannot even keep still for a short time, it cannot even think. So naturally the time of greatest movement is when sleep is pleasantest, because it is then most of all that the greatest quantity of heat is collected in the region within. There is a further proof, that when the soul is in motion it cannot have a waking vision nor even think in sleep ; for in the sleep which comes after the taking of food it is least possible to see dreams ; and then is the time when the soul is most disturbed owing to the introduction of food. Now, a dream comes when sleep overtakes men while they are thinking and have something before their eyes. This is why we most often see what we are doing or intending to do or wishing to do ; for it is in connexion with these things that calculations and fantasies most often occur. Better men have better dreams for this reason, that they think of better things when they are awake, but those who are inferior either in mind or in body think of inferior things. For the condition of the body does contribute to the appearance of dreams ; the projections of a sick man's thought are inferior, and also his soul cannot rest because of the disturbance which exists in his body. This is why the melancholic start in their sleep, because, as the heat is excessive, the soul has more movement than the normal, and as the movement is more violent they cannot sleep.

## ΛΑ

### ΟΣΑ ΠΕΡΙ ΟΦΘΑΛΜΟΥΣ

- 957 <sup>a</sup> Διὰ τί τρύφαντες τὸν ὀφθαλμὸν πανόμεθα τῶν <sup>1</sup>  
 παταρμῶν; ἢ ὅτι ἀναπνοὴ ταύτῃ γίνεται τῷ ὑγρῷ;  
<sup>40</sup> δακρύνει γὰρ ὁ ὀφθαλμὸς μετὰ τὴν τρύψιν· ὁ δὲ  
 957 <sup>b</sup> παταρμὸς διὰ πλήθος ὑγροῦ. ἢ ὅτι τὸ ἔλαττον  
 θερμὸν φθείρεται ὑπὸ τοῦ πλείονος; ὁ δὲ ὀφθαλμὸς  
 τριφθεὶς πλείω λαμβάνει θερμότητα τῆς ἐν τῇ  
 ῥινί. διὰ τοῦτο δὲ καὶ τις αὐτὴν τὴν ῥίνα τρύψῃ,  
 παύεται ὁ παταρμὸς.
- <sup>5</sup> Διὰ τί τῷ ἐνὶ ὀφθαλμῷ ἀκριβέστερον ὁρῶσιν ἢ <sup>2</sup>  
 τοῖν δυοῖν; ἢ ὅτι πλείους οὔσαι κινήσεις τοῖν  
 δυοῖν γίνονται, οἷον τοῖς διεστραμμένοις; οὐκ οὖν  
 μία ἢ κίνησις, τοῦ δὲ ἐνὸς ἀπλῆ. ἤττον οὖν  
 ὁρῶσιν ἀκριβέστερον.
- Διὰ τί ὀργιζόμενοι μὲν τοὺς ὀφθαλμοὺς μάλιστα <sup>3</sup>  
<sup>10</sup> ἐπιδιδόασιν πρὸς τὸ ἐρυθριᾶν, αἰσχυνόμενοι δὲ τὰ  
 ὦτα; ἢ διότι οἱ μὲν καταψύχονται ἐν τῇ αἰδοῖ (ἐν  
 ὀφθαλμοῖς γὰρ αἰδώς) <ὥστε> <sup>1</sup> ἀντιβλέπειν οὐ δύ-  
 νανται; καὶ ἡ δειλία κατάψυξις τίς ἐστὶν ἐνταῦθα.  
 μεθίσταται δὲ εἰς τοῦναντίον τῷ ἔμπροσθεν τὸ θερ-  
 μόν.<sup>2</sup> τὰ δὲ ὦτα ἀντίκειται· διὸ καὶ μάλιστα ἐρυ-  
<sup>15</sup> θριῶσιν αἰσχυνόμενοι. ἐν δὲ τῷ κνήθεσθαι ἐπὶ τὸ  
 αἰσθητικώτερον καὶ κινητικώτερον ἢ βοήθεια ὥς

<sup>1</sup> ὥστε added by Forster.

## BOOK XXXI

### PROBLEMS CONNECTED WITH THE EYES

WHY do we stop sneezing if we rub our eyes? Is <sup>1</sup> it because by this means there is an evaporation of moisture? For the eye weeps after rubbing; and sneezing is due to a quantity of moisture. Or is it because the lesser heat is destroyed by the greater? The eye when rubbed has greater heat than the heat in the nostril. For this reason, if one rubs the nostril itself, the sneezing stops.

Why can men see more clearly with one eye than <sup>2</sup> with two? Is it because the two eyes can have more than one movement, as happens with those who squint? So their movement is not one, but the movement of the single eye is simple. So the two see less clearly.

Why when men grow angry do their eyes tend very <sup>3</sup> much to redden, but when they are ashamed their ears? Is it because in shame the eyes are chilled (for shame resides in the eyes), so that they cannot face one? Cowardice also involves a chilling in that part. Now the heat travels in a direction away from the forepart of the head, and the ears are situated in the opposite part of it; so they grow red when men are ashamed. But in a state of irritation help is sent to the more sensitive and emotional part, as though

---

<sup>1</sup> θερμὸν Forster from Th. G. : ὀπισθεν Ruelle.

957 b

ἀδικουμένου· φοβούμενοις γὰρ ἐνταῦθα ἐκλείπει  
μάλιστα.

Διὰ τί θατέρου καταληφθέντος ὀφθαλμοῦ ὁ 4  
ἕτερος ἀτενίζει μᾶλλον; ἢ διότι ἐκ ταύτου  
20 ἡρτηνται αἱ ἀρχαὶ τῶν ὀφθαλμῶν; θατέρου οὖν  
κινουμένου καὶ ἡ κοινὴ ἀρχὴ κινεῖται, ἐκείνης δὲ  
κινουμένης καὶ ὁ ἕτερος. ληφθέντος οὖν θατέρου  
ἡ κίνησις κινήσει αὐτόν, ὥστε δύναται ἀτενίζειν  
μᾶλλον.

Διὰ τί οἱ ἐκ γενετῆς τυφλοὶ οὐ γίνονται φαλα- 5  
κροί; ἢ ὅτι πημαίνει τὰ ὄμματα ὑγρότης οὔσα  
25 πολλὴ ἐν τῷ περὶ τὴν κεφαλὴν τόπῳ; διὸ τῶν  
ῥευματικῶν εἰς τοὺς ὀφθαλμοὺς τὰς τε περὶ τοὺς  
κροτάφους φλέβας κάουσι, πυκνοῦντες τοὺς τῶν  
ὑγρῶν πόρους, καὶ ξύουσι τὴν κεφαλὴν, δια-  
τέμνοντες τὸ ἐν αὐτῇ δέρμα. ἐπεὶ οὖν πημαίνει  
τοὺς ὀφθαλμοὺς τὸ ἐν αὐτῇ περίττωμα γινόμενον,  
30 κωλύοι ἂν αὐτοὺς ταῦτο τοῦτο ἐξ ἀρχῆς γίνεσθαι,  
πλέον συνιστάμενον ἐν αὐτῇ. ἐπεὶ δὲ ἐκ περιτ-  
τωμάτων θριξ φύεται, τοῦτο δὲ ἐν τῇ τῶν τυφλῶν  
κεφαλῇ ἐκ γενετῆς ἐστὶ πολὺ, εἰκότως οὐκ εἰσὶ  
φαλακροί.

Διὰ τί οἱ ἐξόφθαλμοι καπνίζονται μᾶλλον; ἢ 6  
ὅτι τάχιστα προσπίπτει προέχοντα;

85 Διὰ τί εἰς μὲν τὰ δεξιὰ ἀμφοτέρας τὰς ὀψεις ἄμα 7  
διαστρέφειν δυνάμεθα, καὶ εἰς τὰ ἀριστερὰ καὶ  
πρὸς τὴν ῥίνα, καὶ εἰς τὸ ἀριστερόν δὲ ἢ τὸ δεξιόν  
τὴν ἑτέραν, ἄμα δὲ εἰς τὸ δεξιὸν καὶ ἀριστερόν  
ἀδυνατοῦμεν; ὁμοίως δὲ καὶ εἰς τὸ κάτω καὶ εἰς  
40 τὸ ἄνω· ἄμα μὲν γὰρ ἐπὶ ταῦτο δυνάμεθα, χωρὶς

## PROBLEMS, XXXI. 3-7

it were being ill-treated; for in the frightened it fails most there.

Why is it that if one eye is covered, the other 4 stares harder? Is it because the origins of the eye are connected at one point? So when one is moved, the common origin of the two eyes is also moved, and when that is moved, so is the other eye. So when one eye is covered, the movement of the other eye will move this eye also, so that it can stare more.

Why do those who are blind from birth never 5 become bald? Is it because a large quantity of moisture in the region of the head does harm to the eyes? So when men have running at the eyes, they burn the veins about the eyebrows, thus thickening the channels of the liquids, and scrape the head, cutting the skin upon it. So since the waste product in it does harm to the eyes, this same waste product by collecting in the head in large quantity might prevent the eyes from forming at the beginning. But since hair grows from waste product, and this is abundant in the head of those who are blind from birth, they are naturally not bald.

Why do those with prominent eyes suffer more 6 from smoke? Is it that the smoke attacks such eyes quickly because they protrude?

Why is it that we can turn both eyes to the right at 7 the same time and to the left and towards the nose, and also one eye either to the left or to the right, but we cannot turn one to the left and one to the right at the same time? <sup>a</sup> The same thing applies to up and down; for we can turn them simultaneously in the same direction, but not separately. Is it because the

<sup>a</sup> Aristotle of course means simultaneous movement outwards.



957 b

δὲ οὐ. ἢ ὅτι αἱ ὄψεις δύο οὔσαι ὁμως ἐξ ἐνὸς  
 958 a συνήρτηνται; ὅσα δὲ τοιαῦτα, ἄκρου θατέρου  
 κινουμένου ἀνάγκη θάτερον ἀκολουθεῖν ἐπὶ ταυτό.  
 τῷ γὰρ ἑτέρῳ ἄκρῳ ἢ ἀρχῇ θάτερον ἄκρον. εἰ  
 οὖν τὸ ἐν ἀδύνατον ἅμα εἰς τὰναντία κινεῖσθαι,  
 ἀδύνατον καὶ τὰς ὄψεις. τὰ μὲν γὰρ ἄκρα εἰς  
 τὰναντία ἂν κινοῖτο, εἰ τὸ μὲν ἄνω τὸ δὲ κάτω  
 κινοῖτο, ἢ δὲ ἀρχὴ ἀμφοῖν ἂν ἀκολουθοίη, ὅπερ  
 ἀδύνατον. ἢ δὲ διαστροφή ἐστι τῶν ὁμμάτων  
 διὰ τὸ ἀρχὴν ἔχειν τὰς σφαῖρας, καὶ μέχρι του<sup>1</sup>  
 στρέφεσθαι εἰς τὰ ἄνω καὶ κάτω καὶ εἰς πλάγιον.  
 ὅταν οὖν ἔχουσαι ὡς ἂν ὁμοίως ἔχοιεν τῇ θέσει  
 10 ἀλλήλαις, καὶ ἐν μέσῳ τοῦ ἐπὶ τὸ ἄνω καὶ κάτω  
 κινεῖσθαι, καὶ εἰς πλάγιον ἐπὶ τοῦ αὐτοῦ σημείου  
 ἐαυτῶν λάβωσιν τὴν ὄψιν, αὗται μὲν ἀδιάστροφοί  
 τε καὶ μάλιστα ἀκίνητοι τῇ θέσει· ὅσαι δὲ ἐπὶ  
 ταύτου σημείου λάβωσι τὰς ὄψεις, ἀδιάστροφοι  
 μὲν εἰσι, διαφέρουσι δὲ ἀλλήλων. καίτοι κρύπτεται  
 15 τοῦ μέλανός τι καὶ τοῖς ἄνω βάλλουσι τὰ λευκά,  
 οἷον μελλέπταρμοι· ἕτεροι δὲ εἰς τὸ πλάγιον,  
 ὥσπερ οἱ μανικοί, οἱ δὲ εἰς τοὺς μυκτῆρας, ὥσπερ  
 τὰ τραγικὰ πρόσωπα καὶ οἱ στρυφνοί· σύννουν γὰρ  
 τὸ βλέμμα. ὅσοι δὲ μήθ' ὁμοίως κειμένων τῶν  
 σφαιρῶν ἐπὶ ταύτῳ σημείῳ ἔχουσι τὰς ὄψεις, ἢ  
 20 ὁμοίως μὲν κειμένων, μὴ ἐπὶ τῷ αὐτῷ δέ, οὗτοι  
 διεστραμμένοι εἰσίν· διὸ ὑποβλέπουσι καὶ συν-  
 ἄγουσι τὰ ὅμματα. πειρῶνται γὰρ ἐπὶ ταῦτόν  
 καταστήσαι σχῆμα τὴν σφαῖραν. ὥστε τὸν μὲν  
 ἐῶσι, τὸν δὲ σχηματίζουσι τῶν ὀφθαλμῶν. ἐὰν  
 γὰρ μὴ κατὰ ταυτό<sup>2</sup> σημεῖον τεθῶσιν αἱ ὄψεις,  
 25 ἀνάγκη διεστράφθαι. ὥσπερ γὰρ τοῖς ὑποβάλ-

<sup>1</sup> του Forster : τοῦ Ruelle.<sup>2</sup> κατὰ ταυτό Bussemaker : κατ' αὐτὸ Ruelle.

eyes, although they are two, are connected at one point ? In such cases when one extreme moves the other must follow in the same direction. For the one extreme causes movement to the other extreme. If, then, it is impossible to move one thing in contrary directions at the same time, it is equally impossible to do it with the eyes. For the extremes would be moving in opposite directions, if one moved upwards and one downwards, and the source of both would make corresponding movements, which is impossible. Squinting with the eyes is due to the fact that the eyeballs have a source and can move upwards, downwards, and sideways to a certain extent. When, then, they are so placed as to be in a similar position to one another and between an upward and a downward movement, and they receive a light ray at a slant on the same spot, then they do not squint and remain quite immobile ; those which receive the rays on the same point never squint, although they differ from each other. Yet when the whites of the eyes are turned up part of the black is hidden, as happens when men are about to sneeze ; others, for instance madmen, turn their eyes sideways, and others again towards the nostrils, as one sees in tragic masks and in those who have an austere expression ; for their look is thoughtful. But those who do not receive the light ray on the same point because the eyeballs are not similarly placed, or who do not receive it on the same point, even though the eyes are similarly placed, such men squint ; this is why they blink and contract the eyes. For they try to force the eyeballs into the same position. So they neglect the one and arrange the other eye. For if the eyes are not set on the same point, squinting is inevitable. For just as when

958 a

λουσιν ὑπὸ τὸν ὀφθαλμὸν [τὸ ἐν] δύο φαίνεται (καὶ γὰρ ἐκείνοις κεκίνηται ἢ ἀρχή), καὶ τούτοις ὁμοίως. ἔαν μὲν οὖν ἄνω κινηθῇ ὁ ὀφθαλμός, τὸ πέρασ κάτω τῆς ὄψεως γίνεται, ἔαν δὲ κάτω, ἄνω τὸ πέρασ. ἐν ἐνὶ δὲ ὀφθαλμῷ μεθισταμένῳ κινεῖσθαι  
 30 μὲν τὸ ὁρώμενον δοκεῖ διὰ ταῦτα ἄνω ἢ κάτω, ὅτι καὶ ἡ ὄψις, δύο δὲ οὐ φαίνεται, ἂν μὴ δύο αἱ ὄψεις ὦσιν, καὶ διαστρέφει. τοιαύτη μὲν τῷ ἑτεροφθάλμῳ γίνεται, ὥστε δύο φαίνεσθαι· κατὰ τὴν θέσιν δὲ γίνεται τῷ μὴ κατὰ μέσον τοῦ ὁμματος κεῖσθαι.

35 Διὰ τί οἱ μύωπες μικρὰ γράμματα γράφουσιν; 8 ἄτοπον γὰρ τὸ μὴ ὀξύ ὁρῶντας ποιεῖν ἔργον ὀξύ ὁρῶντων. πότερον ὅτι μεγάλα φαίνεται τὰ μικρά, ἔαν ἡ ἐγγύς, οἱ δὲ προσάγοντες γράφουσιν; ἢ διὰ τὸ συνάγοντας τὰ βλέφαρα γράφειν; δι' ἀσθένειαν  
 958 b γὰρ τῆς ὄψεως, ἂν μὲν ἀναπεπταμένοις γράφωσι τοῖς ὁμμασι, διασπωμένη ἢ ὄψις ἀμβλὺ ὄρα, οὕτω δὲ ἀθρόως προσπίπτει· γωνίαν δὲ μικρὰν ποιούσα ἐξ ἀνάγκης ποιεῖ μικρὰ γράφειν.

Διὰ τί ὀφθαλμιάσαντες ἔνιοι ὀξύτερον ὁρῶσιν; 9  
 5 ἢ διὰ τὸ ἀποκεκαθάρθαι τὰ ὅμματα; πολλάκις γὰρ ἡ ἑξω πυκνότης ἀποστέγει τὴν ὄψιν, ἀποδακρύσαντι δὲ λύεται. διὸ καὶ τὸ ἀποδάκνεσθαι συμφέρει, οἷον κρόμμυον· θάτερον δὲ πολέμιον, οἷον ὀρίγανον.

Διὰ τί τῇ μιᾷ ὄψει ἀπαθέστεροι; ἢ διότι 10  
 10 ἔλαττον ἢ ψυχὴ πάσχει, ὥστε ἔλαττον τὸ πάθος;

Διὰ τί τοῖς δισταμένοις δύο φαίνεται; ἢ διότι 11

men put a finger under the eye a single image appears double (for the source is shifted), so it is in the other case. If, then, the eye is moved upwards, the terminus of the vision is lowered, and if downwards, it is raised. In shifting the position of one eye the object seen seems on this account to move up or down, because the sight has moved in the same direction, but the image does not appear double, unless the sight is double and there is a squint. The same thing happens to a man with different eyes, so that the image appears double ; but this is due to the position because it does not lie in the centre of the eye.

Why do the short-sighted write small letters ? 8  
For it seems strange that those who have not keen vision should do the work of the sharp-sighted. Is it because small letters appear large, if they are close, and they bring their eyes close to write ? Or is it because they contract the eyelids to write ? For owing to their weakness of sight, if they write with the eyes wide open, the sight is scattered and only sees dimly, but when the eyelids are contracted it is made to strike in a concentrated way ; for as it makes a narrow angle it must produce small writing.

Why do men after suffering from ophthalmia sometimes have clearer vision ? Is it because the eyes are cleaned ? For sometimes a thickness outside covers the vision, but this is cleared if the eye discharges. So what bites the tongue, such as onion, is beneficial ; but the opposite, such as marjoram, does harm.

Why are men with one eye less easily affected ? Is 10 it because the soul suffers less, and so the effect is less ?

Why do images appear double, if the eyes are wide 11 apart ? Is it because the movement does not affect

οὐκ ἀφικνεῖται ἐπὶ τὸ αὐτὸ σημεῖον ἑκατέρου τῶν  
ὀμμάτων ἢ κίνησις; ὥσπερ οὖν δύο ὄραν τὸ δις  
ὄραν οἶται ἢ ψυχῇ. ὅμοιον καὶ ἐπὶ τῶν δακτύλων  
15 τῆς ἐπαλλάξεως· δύο γὰρ τὸ ἐν δοκεῖ τῷ δις  
ἀπτομένῳ<sup>1</sup> ἐνί.

Διὰ τί οὐ διαφέρουσιν αἱ αἰσθήσεις αἱ ἐν τοῖς 12  
δεξιοῖς τῶν ἀριστερῶν, ἐν δὲ τοῖς ἄλλοις πᾶσι  
κρίττω τὰ δεξιὰ; πότερον διὰ τὸ ἔθος, ὅτι εὐθὺς  
ὁμοίως ἀμφοῖν ἐθιζόμεθα αἰσθάνεσθαι; τὰ δὲ  
20 δεξιὰ τῷ ἔθει δοκεῖ διαφέρειν, ἐπεὶ ἐθισθεῖσιν  
ἀμφιδέξιοι γίνονται. ἢ ὅτι τὸ μὲν αἰσθάνεσθαι  
πάσχειν τί ἐστι, τὰ δὲ δεξιὰ διαφέρει τῷ ποιητι-  
κώτερα εἶναι καὶ ἀπαθέστερα τῶν ἀριστερῶν;

Διὰ τί ἐν μὲν τοῖς ἄλλοις κρίττω τὰ δεξιὰ, ἐν 13  
δὲ ταῖς αἰσθήσεσιν ὅμοια; ἢ διότι ταῦτα μὲν  
25 ὁμοίως ἐθιζόμεθα κατ' ἀμφοτέρα τῷ ἔθει; ἔτι τὸ  
μὲν αἰσθάνεσθαι πάσχειν τί ἐστιν, ἢ δὲ τῶν δεξιῶν  
διαφορὰ τῷ εἰς τὸ ποιεῖν καὶ οὐκ εἰς τὸ πάσχειν.

Διὰ τί τὸ γυμνάζεσθαι ἀσύμφορον πρὸς ὀξύωπIAN; 14  
ἢ ὅτι ξηρὸν ποιεῖ τὸ ὄμμα ἢ γυμνασία, ὥσπερ καὶ  
30 τὸ ἄλλο σῶμα; ἢ δὲ ξηρότης σκληρύνει τὸ δέρμα  
πᾶν, ὥστε καὶ τὸ ἐπὶ τῇ κόρῃ. διὸ καὶ οἱ πρε-  
σβῦται οὐκ ὀξὺ ὀρώσιν· καὶ γὰρ τῶν γερόντων  
σκληρόδερμα, ἅμα δὲ καὶ ῥυσά, ὥστε ἐπικη-  
λύπτεται ἢ ὄψις.

Διὰ τί οἱ μύωπες βλέπουσι μὲν οὐκ ὀξὺ, γράφουσι 15  
35 δὲ μικρά; καίτοι τὸ μικρὸν ὀξὺ βλέποντος καθ-  
ορᾶν ἐστίν. ἢ διότι ἀσθενῇ ἔχοντες τὴν ὄψιν  
συνάγουσι τὰ βλέφαρα εἰς μικρόν; ἀθρόα γὰρ  
ἐξιούσα ἢ ὄψις μᾶλλον ὀρᾷ, ἀναπεπταμένου δὲ τοῦ  
ὀμματος διασπᾶται. διὰ μὲν οὖν τὴν ἀσθένειαν

<sup>1</sup> τῷ δις ἀπτομένῳ Forster : ὡς δις ἀπτομένῳ Ruelle.

<sup>a</sup> Cf. *De Somniis*, 460 b 20.



the same point in each of the two eyes ? So the soul thinks that in seeing one object twice, it sees two objects. The same thing occurs when the fingers are crossed ; for the one thing feels like two to the finger which touches it twice.<sup>a</sup>

Why are the senses on the right not superior to 12 those on the left, whereas in all other respects the right is stronger ? Is it due to habit, because we soon accustom ourselves to perceive equally well with the senses on both sides ? It is by habit also that the right seems superior, since men grow ambidextrous by habit. Is it because to feel sensation is to be passive, but the right is superior because it is accustomed to be more active and less passive than the left ?

Why are the right parts superior to the left in other 13 respects but the two are equal in sensation ? Is it because in both cases we are influenced by habit ? Moreover, sensation is a form of passivity, and the superiority of the right parts lies in activity, not in passivity.

Why does athletic exercise do harm to keen 14 vision ? Is it because exercise makes the eye dry, as it does the rest of the body ? Now dryness hardens the whole skin, as it also hardens the skin over the pupil. This is why old men have not keen vision ; for it is characteristic of old men to have hard and wrinkled skin, so that the vision is obscured.

Why is it that the short-sighted have not keen vi- 15 sion, and yet write in small characters ? And yet to see what is small is characteristic of the keen-sighted. Is it because having weak sight they contract the eyelids ? For when the vision is projected in a concentrated form it sees better, but when the eye is wide open the sight is dissipated. So it is owing to weak-



958 b

959 a συνάγουσιν εἰς μικρὸν τὸ βλέφαρον, διὰ δὲ τὸ ἐκ  
 μικροῦ ὁρᾶν μικρὸν μέγεθος ὁρῶσιν. ὅσον δὲ  
 ὁρῶσι μέγεθος, τοσοῦτον καὶ γράφουσιν.

Διὰ τί οἱ μύωπες συνάγοντες τὰ βλέφαρα ὁρῶσιν; 18  
 ἢ δι' ἀσθένειαν τῆς ὀψεως, ὥσπερ καὶ οἱ πρὸς  
 5 τὰ πόρρω τὴν χεῖρα προσάγοντες, οὕτω καὶ τὰ βλέ-  
 φαρα πρὸς τὰ ἐγγὺς προστίθενται [ὥσπερ χεῖρα];  
 τοῦτο δὲ ποιοῦσιν, ἵνα ἀθροωτέρα ἢ ὀψις ἐξίῃ, δι'  
 ἐλάττονος ἐξιοῦσα, καὶ μὴ εὐθύς ἐξ ἀναπεπτα-  
 μένου ἐξιοῦσα διασπασθῇ, ὁρᾶ δὲ ἡ πλείων μεῖζον.

Διὰ τί εἰς τὸ πλάγιον κινοῦσι τὸν ὀφθαλμὸν οὐ 17  
 10 φαίνεται δύο τὸ ἓν; ἢ ὅτι ἐπὶ τῆς αὐτῆς γίνεται  
 γραμμῆς ἡ ἀρχή; δύο δὲ φαίνεται ταύτης μετα-  
 βαλλούσης ἄνω ἢ κάτω, εἰς δὲ πλάγιον οὐδὲν  
 διαφέρει, εἰ μὴ ἅμα καὶ ἄνω. τί δὲ ἐπὶ μὲν  
 τῆς ὀψεως ἐστὶν ὥστε φαίνεσθαι τὸ ἓν δύο, ἂν  
 πως τεθῶσιν οἱ ὀφθαλμοὶ πρὸς ἀλλήλους, ἐπὶ  
 15 δὲ τῶν ἄλλων αἰσθήσεων οὐκ ἐστὶν; ἢ καὶ ἐπὶ τῆς  
 ἀφῆς γίνεται τῇ ἐπαλλάξει τῶν δακτύλων τὸ ἓν  
 δύο; ἐπὶ δὲ τῶν ἄλλων οὐ γίνεται, ὅτι οὔτε ἔξω  
 ἀποτεεινομένων αἰσθάνεται, οὐδὲ δύο. γίνεται δὲ  
 [διὰ] τοῦτο διόπερ καὶ ἐπὶ τῶν δακτύλων μιμεῖται  
 γὰρ τὴν ὄψιν.

20 Διὰ τί τοῦ μὲν ἄλλου σώματος τὰ ἀριστερὰ 18  
 ἀσθενέστερα, τῶν δὲ ὀφθαλμῶν οὐ, ἀλλ' ὁμοίως  
 ὀξύ; ἢ ὅτι τὰ μὲν δεξιὰ τῷ ποιητικῷ εἶναι δια-  
 φέρουσιν, τῷ δὲ παθητικῷ οὐ διαφέρουσιν; αἱ δὲ  
 ὀψεις παθητικάι.

Διὰ τί τῇ ὀψει πρὸς μὲν τὰ ἄλλα ἀτενίζοντες 19  
 25 χεῖρον διατιθέμεθα, πρὸς δὲ τὰ χλωρὰ καὶ ποώδη,  
 οἷον λάχανα καὶ τὰ τούτοις ὅμοια, βέλτιον; ἢ ὅτι

ness that they contract the eyelid, and because they are looking at a small thing from a short distance they see it large. So they write the same size as they see.

Why do the short-sighted contract the eyelids when 16 they look at something? Is it due to their weakness of sight, like those who put up their hand to their eyes when looking at a distant object, so they contract their eyelids to look at near objects? They do this in order that the vision may be more concentrated by passing out through a narrower space, and that it may not be dispersed by passing straight from a wide-open eye, but the wider-open eye sees more.

Why, when one moves the eye sideways, does not 17 the one image appear as two? Is it because the source is in the same line? When this shifts up or down, two objects are seen, but a sideways movement makes no difference, unless it is also upwards. Why, then, in the case of sight does one object appear as two, if the eyes are in a certain relation to each other, but this is not the case with the other senses? Does it happen in the case of touch by crossing the fingers that one feels like two? But it does not happen with the other senses because they are not conscious of what stretches away from them, and they are not double. This is why it happens in the case of the fingers; for they imitate vision.

Why is it that in the rest of the body the left side 18 is the weaker, but it is not so with the eyes, which are equally keen? Are the right parts superior in their activity, but not in their passivity? And vision is passive.

Why does our vision deteriorate if we stare at other 19 things, but improve if we look at green and grassy things such as vegetables, and the like? Is it because

959 a

πρὸς μὲν τὸ λευκὸν καὶ μέλαν ἤκιστα δυνάμεθα ἀτενίζειν (ἄμφω γὰρ λυμαίνεται τὴν ὄψιν), τὰ δὲ τοιαῦτα τῶν χρωμάτων μέσον ἔχει τούτων· διὸ μετρίως τῆς ὀψεως διατιθεμένης οὐδὲ ἐξαδυνα-

30

τοῦμεν αὐτῇ, βέλτιον δὲ διατιθέμεθα. τάχα δὲ ἴσως καθάπερ ἐπὶ τῶν σωμάτων σφοδρότερον πονοῦντες χεῖρον ἔχομεν, τὸ μέσον δὲ βέλτιστα διατίθῃσιν, τὸν αὐτὸν τρόπον καὶ τὴν ὄψιν. πρὸς μὲν γὰρ στερεὰ ἀτενίζοντες πονοῦμεν αὐτήν, πρὸς δὲ τὰ ὑγρά μηδενὸς ἀντιφράττοντος οὐ διαπονοῦμεν.

35

τὰ δὲ χλωρὰ στερεὰ τε μετρίως, καὶ ὑγρὸν ἐν αὐτοῖς ἱκανόν. διὸ βλάπτει τε οὐθέν, καὶ διαναγκάζει τὴν ὄψιν πρὸς τούτοις εἶναι διὰ τὸ τὴν τοῦ χρώματος κρᾶσιν σύμμετρον ἔχειν πρὸς τὴν ὄψιν.

Διὰ τί τὰ μὲν ἄλλα ἀμφοτέροις τοῖς ὀφθαλμοῖς 20 μᾶλλον ὁρῶμεν, τὰ δὲ εὐθὺ τὸ ἐπὶ τῶν στίχων

40

τῷ ἐνὶ προσάγοντες πρὸς τὰ γράμματα μᾶλλον

959 b

καθορῶμεν; ἢ ἀμφότεραι μὲν αἱ ὀψεις συμπίπτουσαι, καθάπερ λέγουσιν οἱ περὶ τὰ ὀπτικά, ταραχὴν παρέχουσιν, ἐπειδὰν δὲ τῇ μιᾷ θεωρῶμεν, πρὸς εὐθεῖαν τὴν ὄψιν, ὥσπερ πρὸς κανόνα, μᾶλλον φαίνεται τὸ εὐθύ.

5

Διὰ τί ὁ καπνὸς τοὺς ὀφθαλμοὺς μᾶλλον δάκνει; 21

ἢ ὅτι μόνοι ἀσθενέστατοι; αἰεὶ γὰρ τὰ ἔσω τοῦ σώματος ἀσθενέστατα. σημεῖον δὲ ὅτι καὶ τὸ ὄξος καὶ ἕκαστον τῶν δριμέων τὴν μὲν ἔξω σάρκα οὐ δάκνει, τὴν δὲ ἐντός, ὅτι ἀραιότατον τοῦ σώ-

10

ματος καὶ μάλιστ' ἔχει πόρους· αἱ γὰρ ὀψεις διὰ τινων πόρων ἐκπίπτουσιν, ὥστε τὸ ἔσω δηκτικώτατον ἀπὸ τῆς σαρκὸς ἀποπίπτει. ὁμοίως δὲ καὶ τὸ κρόμμυνον, καὶ ὅσα ἄλλα δάκνει τοὺς ὀφθαλμούς.

we can stare least at white and black (for both harm the sight), but such colours are intermediate between these ; so that, our vision being now intermediate, we are not rendered impotent by it, but rather improved ? Perhaps, as is the case with bodies, we suffer because of too violent exercise, but the mean puts us in the best position, and similarly with sight. For when we stare at solid objects we strain the sight, but when we look at liquid objects we do not strain it, because there is nothing to interrupt the vision. Now green objects are only moderately solid and there is sufficient moisture in them. So they do no harm and they encourage the sight to rest on them, because the mixture of colour is well adjusted to the vision.

Why do we look at other things with both eyes, but 20 we can see the straightness of lines better by looking at the letters with one eye ? When both eyes act together do they produce a confusion, as writers on optics say, but when we look with one eye with direct vision, as if along a rod, we can see the straight line more clearly ?

Why does smoke make the eyes smart more than 21 other parts ? Is it because they alone are very weak ? For parts within the body are always the weakest. This is proved by the fact that vinegar and all astringent things never make the flesh outside smart, but they do the flesh inside because it is the rarest part of the body and contains most pores ; for the sight travels outwards through pores so that what produces most smart within passes away <sup>a</sup> from the flesh. The same is true of the onion and all other things which make the eyes smart. Of liquids, olive-

<sup>a</sup> The Greek word is almost certainly wrong.

959 b

τὸ δὲ ἔλαιον μάλιστα τῶν ὑγρῶν, ὅτι λεπτομερέστατον· τοιοῦτον δ' ὃν εἰσδύνει διὰ τῶν πόρων· τὸ δ' ὄξος ἐν φαρμάκῳ τῇ ἄλλῃ σαρκί.

15 Διὰ τί ὁ ὀφθαλμὸς μόνον τοῦ σώματος, ἀσθενέστατος ὢν, οὐ ρίγοι; ἢ ὅτι πίων ἐστὶν ὁ ὀφθαλμός, 22  
σαρκὸς δὲ οὐθέν; τὰ δὲ τοιαῦτα ἄριγά ἐστίν. οὐ γὰρ δὴ ὅτι γε πῦρ ἐστὶν ἢ ὄψις, διὰ τοῦτο οὐ ρίγοι· οὐ γὰρ τοιοῦτόν γέ ἐστι τὸ πῦρ ὥστε θερμαίνειν.

20 Διὰ τί δάκρυα, ἐὰν μὲν κλαίοντες ἀφίωμεν, 23  
θερμά ἐστίν, ἐὰν δὲ πονοῦντες τοὺς ὀφθαλμοὺς δακρύνωμεν, ψυχρά; ἢ ὅτι τὸ μὲν ἄπεπτον ψυχρόν, τὸ δὲ πεπεμμένον θερμόν; ἢ δὲ μαλακία ὅλως πᾶσά ἐστιν ἐξ ἀπεψίας, καὶ τῶν τοὺς ὀφθαλμοὺς πονούντων ἄπεπτόν ἐστι τὸ δάκρυον· διὸ ψυχρόν.

25 διὰ τοῦτο καὶ οἱ ἱατροὶ οἶονται σημεῖον εἶναι 24  
μεγάλης νόσου τοὺς ψυχροὺς ἰδρώτας, τοὺς δὲ θερμοὺς τοῦναντίον ἀπαλλακτικούς. ὅταν μὲν γὰρ ἢ τὸ περίττωμα πολὺ, οὐ δύναται τὸ ἐντὸς θερμόν πέττειν, ὥστε ἀνάγκη ψυχρόν εἶναι· ὅταν δὲ ὀλίγον, κρατεῖ. γίνονται δὲ ἐκ τῶν περιττωμάτων αἱ 25  
30 ἀρρωστίαι.

Διὰ τί ποτε εὐκινήτων ὄντων τῶν δεξιῶν μερῶν 24  
ὁ ὀφθαλμὸς ὁ ἀριστερὸς μᾶλλον τοῦ δεξιοῦ συναγεται; ἢ ὅτι τὰ ἀριστερὰ πάντα ὑγρότερα τῶν δεξιῶν ἐστίν, τὰ δὲ ὑγρότερα μᾶλλον συνάγεσθαι 25  
35 πέφυκεν· εἴτα εἰς τὸ δεξιὸν μᾶλλον ἀποτελεῖν δύναται, τοῦ ἀριστεροῦ δυναμένου καὶ καθ' αὐτό.

Διὰ τί ἀμφότεροι κατὰ ἀσθενειάν τινα τῶν 25  
ὀφθαλμῶν διακείμενοι, ὃ τε μύωψ καὶ ὁ πρεσβύτης,

oil has this effect most because its parts are lightest ; being of this nature it sinks in through the pores, but vinegar acts as medicine for the rest of the flesh.

Why is it that the eye alone, which is the weakest 22 part of the body, does not shiver ? Is it because the eye is fat but not fleshy ? Such substances do not shiver. It is not because the vision is fire that it does not shiver ; for its fire is not such as to heat it.

Why is it that tears, if we shed them while crying, 23 are hot, but if the weeping is due to trouble in the eye, the tears are cold ? Is it because what is unconcocted is cold but what is concocted is hot ? Every weakness arises from lack of concoction, and the tears of those who have a pain in the eye are unconcocted ; hence they are cold. For this reason doctors consider that cold sweats are a symptom of serious disease, but that hot ones on the contrary remove disease. For when the waste product is considerable the internal heat cannot concoct it, so that it must be cold ; but when there is little of it, the internal heat gains the mastery. But diseases all arise from waste products.

Why is it that, although parts on the right are most 24 easily moved, the left eye closes more easily than the right ? Is it because all the left parts are moister than the right, and the moister parts naturally close more readily ? [*The concluding sentence of this problem is untranslatable.*] <sup>a</sup>

Why is it that though both the short-sighted and 25 the old man suffer from weakness of the eyes, the

<sup>a</sup> Th. G. seems to translate a different text : " The right eye could act more efficiently ; the left, being moister, would be more likely to follow a lead."



959 b

ὁ μὲν ἐγγὺς προσάγει, ἂν τι βούληται ἰδεῖν, ὁ δὲ  
 40 πόρρω ἀπάγει; ἢ ὅτι οὐχ ὁμοία ἡ ἀσθένεια  
 960 a παρέπεται αὐτοῖς; ὁ μὲν γὰρ πρεσβύτης αὐτὸ  
 ἰδεῖν ἀδύνατός ἐστιν· οὐ δὴ συμπίπτει ἡ ὄψις αὐτῷ,  
 ἀπάγει τὸ θεώμενον, ἅτε καὶ μάλιστα μέλλων  
 ὄψεσθαι· πόρρω δὲ συμπίπτει. ὁ δὲ αὐτὸ μὲν  
 ὄρᾱ, ποῖα δὲ κοῖλα ἢ ποῖα ἐξέχοντα τοῦ ὀρωμένου  
 5 οὐκέτι δύναται κρίνειν, ἀλλὰ περὶ ταῦτα ἀπατᾶται.  
 τὰ δὲ κοῖλα ἢ τὰ ἐξέχοντα μάλιστα τῇ αὐγῇ  
 κρίνεται. πόρρωθεν μὲν οὖν οὐ δύναται τῇ αὐγῇ  
 καταμαθεῖν πῶς ἐπιβάλλει ἐπὶ τὸ ὀρατόν· ἐγγύθεν  
 δὲ μᾶλλον καταφανής ἐστιν.

Διὰ τί τῶν ζώων ἄνθρωπος ἢ μόνον ἢ μάλιστα 26  
 10 διαστρέφεται; ἢ ὅτι ἢ μόνον ἢ μάλιστα ἐπίληπτον  
 ἐν τῇ νεότητι γίνεται, ὅτε καὶ διαστρέφεσθαι  
 συμβαίνει πᾶσιν;

Διὰ τί οἱ ἄνθρωποι μόνοι τῶν ἄλλων ζώων τὰ 27  
 ὄμματα διαστρέφονται; πότερον διὰ τὸ ἐλάχιστον  
 διάστημα εἶναι τῶν ὀμμάτων, καὶ ἐπ' εὐθείας,  
 15 ὥστε εὐδηλον σφόδρα γίνεται τὸ μὴ κατωρθωμένον.  
 ἢ διότι τῶν ἄλλων μονόχροα τὰ ὄμματά ἐστι  
 μᾶλλον; εἰ δ' ἦν ἐν χρώματι τοῦ ὀμματος, οὐκ  
 ἦν διαστροφή. ἢ διότι μόνοι ἐν τῷ γένει ἐπίληπτοι  
 γίνονται τῶν ζώων, ἢ δ' ἐπίληψις διαστροφὴν  
 ποιεῖ, ὅταν γένηται, ὥσπερ καὶ τῶν ἄλλων μορίων·  
 20 ἀλλ' ἐνίοις ὁπὲρ παντελῶς γίνεται ἡ διαστροφή,  
 ὅσοις τὸ ἀρρώστημα;

Διὰ τί πρὸς τὸν λύχνον καὶ πρὸς τὸν ἥλιον 28  
 προστησάμενοι τὴν χεῖρα πρὸ τοῦ φωτὸς μᾶλλον  
 ὀρώμεν; ἢ ὅτι τὸ ἀπὸ τοῦ ἡλίου καὶ λύχνου φῶς  
 προσπίπτον μὲν ἡμῶν πρὸς τὴν ὄψιν ἀσθενεστέραν  
 25 ποιεῖ δι' ὑπερβολήν; φθείρει γὰρ αὐτὰ καὶ τὰ

former brings the object he wishes to see near, while the latter holds it at a distance ? Is it because their inherent weaknesses are not similar ? For the old man is unable to see the object ; so he holds the object far away at the point on which his vision falls, as he will then see it best ; and his vision falls at a distance. The short-sighted man can see it, but he cannot distinguish which parts of the object have an inward curve and which have an outward curve, but he is deceived on these points. Now these inward and outward curves are most easily judged by a ray of light. So from a distance he cannot tell by the light how it falls on the object seen ; but this is more distinct when close by.

Why is man alone or more than any other animal 26 most liable to squint ? Is it because he alone or more than other animals suffers from epilepsy in his youth, when it happens that all squint ?

Why do men alone among animals squint ? Is it 27 because of the very small distance between the eyes, and, their eyes being in a straight line, what is not straight becomes very obvious ? Or is it because the eyes of the other animals tend to be of one colour only ? But if there were only one colour in the eye, there would be no squinting. Or is it because in the animal world men alone suffer from epilepsy, and epilepsy produces squinting, when it occurs, just as it produces distortion in other parts of the body ? But to some squinting comes quite late in life, if they have a disease.

Why is it that if we stretch out our hand towards a 28 lamp or the sun in front of the light we can see better ? Is it because the light from the sun or the lamp falling on our vision makes it weaker because it is excessive ? For kindred things themselves cause destruction by

960 a

συγγενῇ τῇ ὑπερβολῇ. εἰρχθέντα δὲ ὑπὸ τῆς  
χειρὸς τὴν μὲν ὄψιν οὐ πημαίνει, τὸ δὲ ὁρώμενον  
ὁμοίως ἐστὶν ἐν φωτί. διὸ ἡ μὲν μάλλον ὁρά<sup>1</sup>, τὸ  
δὲ ὁρώμενον οὐδὲν ἥττον ὁράται.

Διὰ τί χεὶρ μὲν καὶ πούς διαφορὰν ἔχει πρὸς [τὰ] 29  
30 δεξιὰ <καὶ> τὰ ἀριστερά, ὅμμα δὲ καὶ ἀκοή οὐ;  
ἢ ὅτι τὰ στοιχεῖα τὰ εἰλικρινῇ ἀδιάφορα, ἐν δὲ  
τοῖς ἐκ τῶν στοιχείων ἡ διαφορά; αὗται δὲ αἱ  
αἰσθήσεις εἰσὶν ἐξ εἰλικρινῶν, ἡ μὲν ὄψις πυρός,  
ἡ δ' ἀκοή αἰέρος.

<sup>1</sup> ὁρά Richards : δρᾶ Ruelle.

excess. When the light is shut off by the hand it does not harm the vision, but the object seen is just as much in the light (as before). So the sight sees better and the object is equally visible.

Why are the hand and the foot different on the 29 right- and the left-hand sides, but the eye and the hearing are not? Is it because the pure elements exhibit no differences, but there is difference in what is made out of the elements? These senses are made from the pure elements, sight from fire and hearing from air.

## ΟΣΑ ΠΕΡΙ ΩΤΑ

Διὰ τί τὰ ὦτα ὄντα ἀναιμότατα τοῦ προσώπου, 1  
 ὅταν αἰσχύνωνται, ἐρυθριᾷ μάλιστα; πότερον ὅτι  
 εἰς τὸ κενὸν μάλιστα πορεύεσθαι πέφυκεν τὸ ἀλ-  
 λότριον ὑγρόν, ὥστε ὅταν διαλυθῇ ὑπὸ τῆς θερ-  
 40 μότητος, ἥ γίνεται αἰσχυνομένοις, συνέρχεται εἰς  
 ταῦτα; ἥ διότι ἐπὶ τοῖς κροτάφοις ἐπίκεινται,  
 960 b εἰς οὓς τὸ ὑγρὸν ἀθροίζεται μάλιστα; αἰσχυ-  
 νομένων δὲ εἰς τὸ πρόσωπον ἔρχεται ἡ ὑγρότης·  
 διὸ καὶ ἐρυθριῶσιν. τοῦ δὲ προσώπου ἥκιστα  
 βάθος ἔχει τὰ ὦτα· καὶ φύσει θερμότατα καὶ  
 εὐχροα, ἐὰν μὴ ἀπηρτημένα πόρρωθεν ἢ τῷ ψύχει.  
 5 διὸ καὶ εὐχρούστατον τῶν ἐν τῷ προσώπῳ μορίων.  
 ὥστε ὅταν σκεδασθῇ ἡ θερμότης, μάλιστα ἐπι-  
 πολῆς οὖσα ἐν τούτοις ποιεῖ ἐρυθρά.

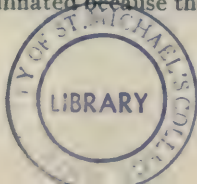
Διὰ τί τὰ ὦτα ἐν τῇ θαλάττῃ ῥήγνυνται τοῖς 2  
 κολυμβῶσιν; πότερον διὰ τὸ κατέχειν τὸ πνεῦμα  
 10 πληρούμενον βιάζεται; ἢ εἰ τοῦτ' αἴτιον, ἔδει καὶ  
 ἐν τῷ ἀέρι. ἢ ὅτι μὴ ὑπεῖκον διακόπτεται θάπτον,  
 καὶ ὑπὸ σκληροτέρου ἢ μαλακοῦ; τὸ οὖν πεφυ-  
 σημένον ἥττον ὑπεῖκει. τὰ δὲ ὦτα, ὥσπερ εἴρηται,  
 ὑπὸ τοῦ κατέχεσθαι τὸ πνεῦμα ἐμφυσᾶται, ὥστε  
 202

## BOOK XXXII

### PROBLEMS CONNECTED WITH THE EARS

WHY do the ears, which are the most bloodless part 1 of the face, grow most red when men are ashamed ? Is it because the alien liquid naturally travels most into the empty space, so that when it is released by the heat, which happens when men are ashamed, it collects in the ears ? Or is it because the ears are close to the temples into which the liquid most readily collects ? Now when men are ashamed, the moisture goes to the face ; hence they blush. Now of all parts of the face the ears have the smallest depth ; and are naturally hottest and most coloured, unless they have been long affected by the cold. So this is the reason why of all parts of the face this has the most colour. So that when the heat is scattered, being mostly on the surface it makes them red.

Why do the ear-drums of divers burst in the sea ? Is 2 it because the ear becoming full owing to the holding of the breath is subject to violent pressure ? If this is the cause, it ought to happen in the air also. Or is it because, if a thing cannot yield, it is more easily broken, and more so under a hard than under a soft blow ? Now what is inflated yields less. But the ears, as has been said, are inflated because the air is held in





960 b

τὸ ὕδωρ σκληρότερον ὂν τοῦ ἀέρος, προσπίπτον διακόπτει.

- 15 Διὰ τί οἱ κολυμβηταὶ σπόγγους περὶ τὰ ὦτα 3 καταδοῦνται; ἢ ἵνα ἡ θάλαττα βία ἰοῦσα μὴ ῥηγνύῃ τὰ ὦτα; οὕτω μὲν γὰρ οὐ γίνεται, ὥσπερ ἀφηρημένων, πλήρη.

Διὰ τί ὁ ἐν τοῖς ὡσὶ ῥύπος πικρὸς ἐστίν; ἢ 4 διότι ὁ ἰδρώς ἐστι σαπρὸς; ἐστὶν οὖν ἀλμυρὸν 20 σαπρὸν. τὸ δὲ σαπρὸν ἀλμυρὸν πικρόν.

Διὰ τί οἱ σπογγεῖς διατέμνονται τὰ ὦτα καὶ τοὺς 5 μυκτῆρας; ἢ ὅπως εὐπνοῦστεροι ὦσι; ταύτῃ γὰρ ἐξιέναι δοκεῖ τὸ πνεῦμα.<sup>1</sup> πονεῖν γὰρ δὴ φασι 25 μᾶλλον αὐτοὺς ἐν τῇ δυσπνοίᾳ τῷ μὴ δύνασθαι προῖεσθαι θύραζε· ὅταν δὲ ὥσπερ ἐξεράσωσι, κουφίζονται. ἄτοπον οὖν εἰ μὴ δύνανται τυγχάνειν ἀναπνοῆς καταψύξεως χάριν· ἀλλ' ἔοικε τοῦτο ἀναγκαιότερον εἶναι. ἢ εὐλόγως ὁ πόνος πλείων κατέχουσιν, ὀγκουμένων καὶ διατεινομένων; φαί- 30 νεται δὲ καὶ αὐτόματός τις εἶναι φoρὰ τοῦ πνεύματος ἔξω· εἰ δὲ καὶ εἴσω, σκεπτέον. ἔοικεν δέ· ὁμοίως γὰρ ἀναπνοὴν ποιοῦσι τοῖς κολυμβηταῖς λέβητα καταφέντες. οὐ πίμπλαται γὰρ οὗτος τοῦ ὕδατος, ἀλλὰ τηρεῖ τὸν ἀέρα. μετὰ βίας γὰρ ἡ κάθεις. ὀρθὸν γὰρ ὅτιοῦν παρεγκλιθὲν εἰσρεῖ.

- 35 Διὰ τί ἔνιοι τὰ ὦτα σκαλεύοντες βήττουσιν; ἢ 6 ὅτι ἐπὶ τοῦ αὐτοῦ πόρου τῷ πνεύμονι καὶ τῇ ἀρτηρίᾳ ἡ ἀκοή; σημεῖον δέ, ὅτι ἀναπληροῦνται <ἂν> [καὶ]<sup>2</sup> γίνονται ἐνεοί. θερμαινομένου οὖν τῇ τρίψει

<sup>1</sup> The ms. has ἀνατέμνουσι δὲ καὶ τὸν τόπον καὶ πρὸς εὐπνοίαν here, but the words are omitted by Th. G. and seem out of place.

<sup>2</sup> ἂν added and καὶ bracketed by Ross.

them, so that, the water being harder than air, it presses on them and bursts them.

Why do divers fasten sponges round their ears 3 when they dive? Is it to prevent the sea breaking the ear-drums, when it enters them violently? For in this case the ears do not become filled as they do when the sponges are taken away.

Why is dirt in the ears bitter? Is it because 4 sweat is rotten? And what is rotten is salt; and what is salt and rotten is bitter.

Why do divers for sponges slit their ears and 5 nostrils? Is it that they may more easily admit the air? For in this way the air seems to escape. For they say that they suffer more in the difficulty of breathing because they cannot expel the breath; but when they have as it were vomited forth the air they are relieved. It is therefore strange that they cannot manage to breathe for the purpose of cooling; this seems to be even more necessary. Or is the strain naturally greater if they hold the breath, and they are therefore swollen and distended? But there seems to be a spontaneous passage of the breath outwards; but we must consider whether a movement inwards is also automatic. It seems to be so. For they can give respiration to divers equally by letting down a cauldron. For this does not fill with water, but retains its air. Its lowering has to be done by force. For any vessel which is upright admits the water if it is tilted.

Why do some men cough when they scratch their 6 ears? Is it because the hearing is connected with the same passage as the lung and the windpipe? This is proved by the fact that if the lung and the windpipe are filled up, a man becomes deaf. So, when

960 b

συντήκεται ἐπὶ τὴν ἀρτηρίαν ἀπὸ τοῦ πόνου  
κάτωθεν ὑγρόν, ὃ ποιεῖ τὴν βῆχα.

40 Διὰ τί τὸ ἀριστερόν οὗς θᾶπτον συμφύεται ὥς 7

961 a ἐπὶ τὸ πολὺ, ὅταν τρυπηθῇ; διὸ καὶ αἱ γυναῖκες  
τὸ μὲν ἄρρεν, τὸ δὲ θῆλυ καλοῦσι τῶν ὠτων. ἢ  
ὅτι τὰ ἀριστερὰ ὑγρὰ καὶ θερμὰ μᾶλλον, συμ-  
φύεται δὲ τὰ τοιαῦτα μάλιστα; διὸ καὶ ἐν φυτῷ  
5 τοῖς χλωροῖς ἢ σύμφυσις· καὶ τὰ τῶν νέων δὲ  
ἔλκη μᾶλλον συμφύεται ἢ τὰ τῶν πρεσβυτέρων.  
σημεῖον δὲ ὅτι ὑγρὰ μᾶλλον καὶ ὅλως θηλυκώτερα  
τὰ ἀριστερά.

Διὰ τί τοῖς μὲν αἰσχυνομένοις ἄκρα τὰ ὦτα 8  
ἐπιφοινίσσεται, τοῖς δὲ ὀργιζομένοις οἱ ὀφθαλμοί;  
10 ἢ ὅτι ἡ μὲν αἰδῶς ἐν ὀφθαλμοῖς κατάψυξις τις  
μετὰ φόβου, ὥστε εἰκότως ἀπολείπει τὸ θερμόν  
τοὺς ὀφθαλμούς; χωριζόμενον δὲ εἰς τὸν δεκτι-  
κώτατον φέρεται τόπον. τοιοῦτος δὲ ὁ ἐν τοῖς  
ἄκροις τῶν ὠτων· ὁ γὰρ ἄλλος ὀστώδης. ὀργι-  
ζομένοις δ' ἐπανέρχεται τὸ θερμόν. μάλιστα δὲ  
15 γίνεται φανερόν ἐν τοῖς ὀφθαλμοῖς διὰ τὴν χροάν  
οὖσαν λευκὴν.

Διὰ τί ὁ ἦχος ὁ ἐν τοῖς ὠσίν, εἰάν τις ψοφήσῃ, 9  
παύεται; ἢ διότι ὁ μείζων ψόφος τὸν ἐλάττω  
ἐκκρούεται;

Διὰ τί, εἰάν τις εἰς τὸ οὗς ὕδωρ ἐγχυθῇ, ἔλαιον 10  
προσεγχεόνται, οὐ δυναμένου τοῦ ἐνόντος ὑγροῦ  
20 ἐξελεῖν δι' ἄλλου ὑγροῦ; πότερον διὰ τὸ ἐπιπολῆς  
γίνεσθαι τὸ ἔλαιον τοῦ ὕδατος, καὶ διὰ γλισχρότητα  
αὐτοῦ ἔχεσθαι τὸ ὕδωρ ἐξιόντος τοῦ ἐλαίου, ἵνα  
συνεξίῃ τὸ ὕδωρ; ἢ ἵνα ὀλισθηροῦ τοῦ ὠτὸς

the ear is heated by rubbing, moisture is caused by melting from the seat of the irritation to the wind-pipe, which produces a cough.

Why does the left ear heal more quickly, as a 7 general rule, when it has been pierced? This is why women call the right ear male and the left ear female. Is it because the parts on the left are moister and hotter, and such things heal most quickly? This is why healing takes place in green plants; and the scars of the young heal more quickly than those of older people. This proves that the parts on the left are moister and generally speaking more akin to the female.

Why is it that when men are ashamed the tips 8 of their ears grow red, but when they are angry their eyes? Is it because shame is a certain chilling in the eyes coupled with fear, so that the heat naturally leaves the eyes; when it drains from there, it passes into the region best able to receive it? And the region of the ear-tips is such a place; for the rest of the region is bony. When men are angry, the heat rises. It appears most noticeably in the eyes because the colour there is light.

Why does humming in the ears cease if one makes 9 a noise? Is it because the greater sound drives out the less?

Why do they pour oil on top, if water has been 10 poured into the ear, seeing that the moisture inside cannot escape through other moisture? Is it because the oil is on the surface of the water and because of its viscosity the water adheres to it when the oil comes out, so that the water comes out with it? Or is it that the water may come out when the

981 a

γενομένου ἐξέλθῃ τὸ ὕδωρ; τὸ γὰρ ἔλαιον λείον  
ὄν ποιεῖ ὀλισθαίνειν.

Διὰ τί ἦττον ὦτα ῥήγνυται τοῖς κολυμβώσιν, 11  
25 ἂν προεγχέωσιν εἰς τὰ ὦτα τὸ ἔλαιον; ἢ τοῦ  
μὲν ῥήγνυσθαι τὰ ὦτα εἴρηται πρότερον ἢ αἰτία,  
τὸ δὲ ἔλαιον ἐγχυθὲν εἰς τὰ ὦτα τὴν ὕστερον  
θάλατταν ἀπολισθαίνειν ποιεῖ, καθάπερ ἐπὶ τῶν  
ἔξω τοῦ σώματος συμβαίνει τοῖς ἀλλημιμένοις.  
ὀλισθαίνουσα δὲ πληγὴν οὐ ποιεῖ εἰς τὸ ἐντὸς τοῦ  
30 ὥτος, διόπερ οὐ ῥήγνυσιν.

Διὰ τί τῶν ὥτων ἀναίμων ὄντων μάλιστα οἱ 12  
αἰσχυρόμενοι ἐρυθριῶσιν; ἢ ἕκαστον εἰς τὸ κενὸν  
ἐκάστου μάλιστα φέρεται; δοκεῖ δὲ τοῦ αἰσχυνο-  
μένου ἄνω θερμὸν φέρεσθαι τὸ αἷμα. εἰς οὖν τὸ  
κενώτατον ἐρυθριᾶν ποιεῖ. τὸ δ' αὐτὸ τοῦτο  
35 καὶ ἐπὶ τῶν γνάθων. ἔτι δὲ καὶ ὅτι λεπτότατον  
τὸ δέρμα τὸ περιτεταμένον, μάλιστα δὴ φαίνεται  
δι' αὐτά.

Διὰ τί οὐδεὶς χασμώμενος τὸ οὖς σκαλεύει; ἢ 13  
ὅτι ὅτε χασμᾶται, ἐμφυσᾶται καὶ ἡ μῆνιγξ, δι'  
ἧς ἀκούει; σημεῖον δέ· ἥκιστα γὰρ ἀκούουσι  
40 χασμώμενοι. τὸ γὰρ πνεῦμα, ὥσπερ καὶ κατὰ  
τὸ στόμα, καὶ εἰς τὰ ὦτα ἐντὸς πορευόμενον, ἐξ-  
981 b ωθεῖται τὸν ὑμένα καὶ κωλύει τὸν ψόφον εἰσιέναι.  
ἂν οὖν οὕτως ἔχοντος ἄψηται τῆς ἀκοῆς ὥς  
σκαλεύειν, μάλιστ' ἂν βλάβειε· πρὸς ἀντιπίπτον  
γὰρ ἡ πληγὴ γίνεται, καὶ οὐ πρὸς ὑπεῖκον τὸ τοῦ  
5 πνεύματος. τὸ δὲ δέρμα καὶ τὴν μῆνιγγα ἀφ-  
εστάναι τῶν στερεῶν δῆλον. ὥστε πόνον μάλιστα  
οὕτω ποιεῖ, καὶ τραυματίζοι ἄν.

ear has become slimy ? For oil being smooth makes it slimy.

Why are divers less apt to break their ear-drums, if they pour oil beforehand into the ears ? The reason why the ear-drums break has been stated before,<sup>a</sup> but oil poured into the ears makes the sea-water which comes in later slip along, just as happens with the outer parts of the body, when men are smeared with oil. As it slips along, it does not strike a blow on the inside of the ear and so does not break it.

Why is it, seeing that the ears are the most bloodless part of the face, that men grow red in the ears when they are ashamed ? Does each substance travel most readily to that part which is most empty of it ? When a man is ashamed, the blood seems to travel upwards in a heated condition. So it causes that part which contains least blood to grow red. The same thing is true of the cheeks. It is also due to the fact that the skin is stretched tight and very thin, and hence the blood shows more through them.

Why does no one scratch his ear while yawning ? Is it because, when he yawns, the ear-drum through which he hears is inflated ? There is proof of this ; for men can hear least well while they are yawning. For, just as with the mouth, the air entering within the ear pushes out the membrane and prevents the sound from entering. If in this condition one touches the hearing organ to scratch it, one would do great harm ; for the blow meets with a resisting, not a yielding surface. For it is clear that the skin and the ear-drum are far from solid. So that this produces great pain and might cause a wound.

<sup>a</sup> Cf. 2 *supra*.



## ΟΣΑ ΠΕΡΙ ΜΥΚΤΗΡΑ

Διὰ τί ὁ πταρμὸς λυγμὸν μὲν παύει, ἐρυγμὸν δὲ <sup>1</sup>  
<sup>10</sup> οὐ παύει; ἢ διότι οὐ τοῦ αὐτοῦ τόπου τὸ πάθος  
 ἐκάτερον, ἀλλ' ὁ μὲν ἐρυγμὸς κοιλίας, ὁ δὲ λυγμὸς  
 τοῦ περὶ τὸν πνεύμονα κατάψυξις καὶ ἀπειψία  
 πνεύματος καὶ ὑγροῦ; κοινωνοῦσιν δ' οἱ περὶ τὸν  
 ἐγκέφαλον τόποι τῷ πνεύμονι, οἷον τοῖς ὠσίν.  
<sup>15</sup> φανερόν δέ· ἅμα γὰρ ἐνεοὶ καὶ κωφοὶ γίνονται,  
 καὶ αἱ νόσοι ἀντιπεριίστανται αἱ τοῦ ὠτός εἰς τὰ  
 τοῦ πνεύμονος πάθη. ἐν τοῖς<sup>1</sup> δὲ σκαλεύουσι τὸ  
 οὖς βῆχες ἐγγίνονται. τὸ δὲ περὶ τὸν πταρνύμενον  
 τόπον εἶναι τῆς ῥινὸς κοινωνίαν τῷ πνεύμονι δηλοῖ  
 ἡ ἀναπνοὴ κοινὴ οὔσα. ὥστε πτάρνυται μὲν θερ-  
 μαινομένου αὐτοῦ· τῷ δὲ συμπάσχειν ὁ κάτω  
<sup>20</sup> τόπος, ἐν ᾧ ἐστὶν ὁ λυγμός. ἡ δὲ θερμασία πέττει.  
 διὸ ὄξος τε παύει λυγμὸν καὶ ἡ ἀπνευστία, ἐὰν  
 ἡρεμαία ἢ ἡ λύγξ. ἐκθερμαίνει γὰρ τὸ πνεῦμα  
 κατεχόμενον, ὥστε καὶ ἐν τῷ πταρμῷ ἡ ἀντι-  
 κατὰσχεσις γενομένη τοῦ πνεύματος τοῦτο ποιεῖ,  
 καὶ οἰκείως ἡ ἐκπνευσις γίνεται, καὶ ἐκ τοῦ ἄνω  
<sup>25</sup> τόπου· ἀδύνατον γὰρ πτάρειν μὴ ἐκπνέοντα. ἡ  
 οὖν ὁρμὴ ῥήγνυσι τὸ ἐγκατειλημμένον πνεῦμα, ὃ  
 ποιεῖ τὸν λυγμόν.

<sup>1</sup> ἐν τοῖς Forster : ἐνίοις Ruelle.

## BOOK XXXIII

### PROBLEMS CONNECTED WITH THE NOSTRILS

WHY does sneezing stop hiccough, but not eructation? Is it because the two affections do not belong to the same region, but eructation is a cooling and lack of concoction in the stomach, whereas hiccough is due to a similar condition in the region of the lungs? Now the parts about the brain are connected with the lung, as they are with the ears. This is obvious; for men become deaf and dumb at the same time, and diseases of the ear change into diseases of the lung. So when men scratch the ear, they cough at the same time. That there is a connexion between the nose, where the sneezing occurs, and the lung, is shown by the fact that breathing is common to both. So a man sneezes when this part grows hot; but the lower region, in which the hiccough takes place, acts in sympathy. Now heating causes concoction. So vinegar and holding the breath both stop hiccoughs, if they are slight. For it heats the air which is constrained, so that in the case of a sneeze also the restraining of the breath produces the same result, and the expiration takes place naturally and from the upper region; for it is impossible to sneeze without expiration. The violence of the sneeze thus breaks up the enclosed air, which is the cause of hiccough.

961 b

Διὰ τί, ἐάν τις μέλλων πτάρνυσθαι τρύψῃ τὸν 2  
ὀφθαλμόν, ἤττον πτάρνυται; ἢ διότι τὸ ποιοῦν  
τὸν πταρμόν θερμότης τίς ἐστίν, ἢ δὲ τρύψις  
30 θερμότητα ποιεῖ, ἢ διὰ τὸ πλησίον εἶναι τῶν  
ὀφθαλμῶν τὸν τόπον ᾧ πτάρνυται, ἀφανίζει τὴν  
ἐτέραν, ὥσπερ τὸ ἔλαττον πῦρ ὑπὸ τοῦ πλείονος  
μαραινόμενον;

Διὰ τί δις πτάρνυται ὡς ἐπὶ τὸ πολὺ, καὶ οὐχ 3  
ἅπαξ ἢ πλεονάκεις; ἢ διότι δύο εἰσὶ μυκτῆρες;  
35 ἐκάτερον οὖν διέσχισται τὸ φλέβιον, δι' οὗ πνεῦμα  
ρεῖ.

Διὰ τί πρὸς τὸν ἥλιον βλέψαντες πτάρνυνται 4  
μᾶλλον; ἢ διότι κινεῖ θερμαίνων; καθάπερ οὖν  
πτεροῖς θιγγάνοντες. ἀμφότεροι γὰρ τὸ αὐτὸ  
ποιοῦσιν· τῇ γὰρ κινήσει θερμαίνοντες ἐκ τοῦ  
ὑγροῦ θάττον πνεῦμα ποιοῦσιν. τούτου δὲ ἢ  
40 ἔξοδος πταρμός.

962 a Διὰ τί λύγγα παύει πταρμός καὶ πνεύματος 5  
ἐπίσχεσις καὶ ὄξος; ἢ ὁ μὲν πταρμός, ὅτι ἀντι-  
περίστασις ἐστὶ τοῦ κάτω πνεύματος, ὥσπερ αἱ  
ἄνω φαρμακεῖαι πρὸς τὴν κάτω κοιλίαν; ἢ δὲ  
5 ἀπνευστία τὰς ἀσθενεῖς λύγγας, ὅτι ἡ μικρὰ ὀρμή  
τοῦ πνεύματος ἢ ἀνιοῦσα, ὥσπερ περὶ τὴν βῆχα,  
<ἦ,><sup>1</sup> ἐάν τις κατάσχη, παύεται, οὕτω καὶ ἐνταῦθα  
καὶ κατέσπασε καὶ κατέπνιξε καὶ συναπεβιάσατο.  
τὸ δὲ ὄξος παύει, ὅτι τὸ περιστὸς ὑγρὸν καὶ  
κωλῶν ἀπερυγεῖν ἐπνευμάτωσεν τῇ θερμασίᾳ.  
10 ἔστι γὰρ ἐρυγμός μὲν, ὅταν πνευματωθῇ τὸ ἐν  
τῇ ἄνω κοιλίᾳ ὑγρὸν καὶ πεφθῇ, ἢ δὲ λύγξ, ὅταν  
ὑπὸ ὑγροῦ κατέχηται πνεῦμα περιττὸν περὶ τὸν  
πνευματικὸν τόπον. τοῦτο γὰρ ὀρμῶν καὶ μὴ  
δυνάμενον διακόψαι σπασμὸν ποιεῖ, ὁ δὲ σπασμός  
212

Why is it that, if one rubs the eye when about to 2  
sneeze, one is less liable to sneeze? Is it because the  
cause of a sneeze is a form of heat, but friction  
produces heat which, because the eyes are near the  
region of the sneeze, causes the other heat to dis-  
appear, just as the lesser fire is extinguished by the  
greater?

Why does one generally sneeze twice and neither 3  
once nor a large number of times? Is it because we  
have two nostrils? So the channel through which  
the air passes is divided into two.

Why is one more apt to sneeze after looking at the 4  
sun? Is it because the sun heats us and produces a  
disturbance? So it is the same thing as tickling  
with feathers. For both produce the same effect;  
for producing movement by heat they create breath  
faster from the moisture. The exit of this breath is  
a sneeze.

Why is it that a sneeze, holding the breath, and 5  
vinegar all check a hiccough? In the case of the  
sneeze, is it because it causes a change in the position  
of the breath below, just as medicines administered  
above affect the stomach below? Stopping the breath  
checks slight hiccough because the small assault of  
air which rises (just as with a cough which stops if  
one controls it) checks, stifles, and forces back the  
hiccough. Vinegar stops hiccough because by its  
heat it aerates the surrounding moisture and prevents  
eructation. For eructation occurs when the moisture  
in the upper stomach is aerated and concocted, but  
hiccough occurs when excessive moisture is retained  
in the region of the lung. This breath rising and  
unable to escape causes a spasm, and this spasm

---

<sup>1</sup> ῥ added by Forster.

962 a

οὗτος καλεῖται λύγξ. καὶ διὰ τοῦτο ῥιγώσαντας  
 15 λύγξ λαμβάνει, ὅτι τὸ ψῦχος τὸ ὑγρὸν ποιεῖ συστάν  
 ἐκ τοῦ πνεύματος ἔτι· περιλαμβανόμενον δὲ τὸ  
 ἄλλο πηδᾶ· οὗ ἡ κίνησις λυγμός ἐστιν.

Διὰ τί ἐνίοις ὕδωρ ψυχρὸν προσχέομεν καὶ πρὸς 5  
 τὸ πρόσωπον, ἥνίκα αἷμα ῥεῖ ἐκ τῶν μυκτήρων; ἢ  
 ἀντιπερίσταται εἴσω τὸ θερμόν; ἂν οὖν ἐπιπολῆς  
 20 τύχη αἷμα, ἐξυγραίνει μᾶλλον.

Διὰ τί τὸν μὲν πταρμὸν θεῖον<sup>1</sup> ἡγούμεθα εἶναι, 7  
 τὴν δὲ βῆχα ἢ τὴν κόρυζαν οὐ; ἢ διότι ἐκ τοῦ  
 θειοτάτου τῶν περὶ ἡμᾶς τῆς κεφαλῆς, ὅθεν ὁ  
 λογισμός ἐστι, γίνεται; ἢ ὅτι τὰ μὲν ἄλλα ἀπὸ  
 νοσοῦντων γίνεται, τοῦτο δὲ οὐ;

25 Διὰ τί τρύφαντες τὸν ὀφθαλμὸν πανόμεθα τῶν 8  
 πταρμῶν; ἢ ὅτι ἀνάπνοια ταύτῃ γίνεται τῷ  
 ὑγρῷ; δακρύει γὰρ ὁ ὀφθαλμός μετὰ τρύψιν, ὁ  
 δὲ πταρμός διὰ πλήθος ὑγρότητος. ἢ ὅτι τὸ  
 ἔλαττον θερμόν φθείρεται ὑπὸ τοῦ πλείονος, ὁ δὲ  
 ὀφθαλμός τριφθεὶς πλείω λαμβάνει θερμότητα τῆς  
 30 ἐν τῇ ῥινί; διὰ ταῦτα δὴ καὶ τις αὐτὴν τὴν ῥῖνα  
 τρύψῃ, παύεται ὁ πταρμός.

Διὰ τί τῶν μὲν ἄλλων πνευμάτων αἱ ἔξοδοι, οἷον 9  
 φύσης καὶ ἐρυγμοῦ, οὐχ ἱεραί, ἢ δὲ τοῦ πταρμοῦ  
 ἱερά; πότερον ὅτι τριῶν τόπων ὄντων, κεφαλῆς  
 35 καὶ θώρακος καὶ τῆς κάτω κοιλίας, ἢ κεφαλῇ  
 θειότατον; ἔστι δὲ φύσα μὲν ἀπὸ τῆς κάτω  
 κοιλίας πνεῦμα, ἐρυγμός δὲ τῆς ἄνω, ὁ δὲ πταρμός  
 τῆς κεφαλῆς. διὰ τὸ ἱερώτατον οὖν εἶναι τὸν  
 τόπον καὶ τὸ πνεῦμα τὸ ἐντεῦθεν ὡς ἱερὸν προσ-  
 κυνοῦσιν. ἢ ὅτι ἅπαντα τὰ πνεύματα σημαίνει

is called a hiccough. This is why hiccough seizes men after they have had a fit of shivering, because the cold makes the moisture from the breath set; but the rest being still enclosed causes a jerk, and this movement is a hiccough.

Why do we sometimes pour water on people's 6 faces when blood flows from their nostrils? Is the heat thus compressed within? So if the blood chances to be on the surface it tends to liquefy it.

Why do we consider that sneezing is of divine ori- 7 gin, but not coughing or running at the nose? Is it because it arises from the most divine part of us — the head, whence reasoning comes? Or is it because the other symptoms arise from disease, but this does not?

Why do we stop sneezing if we rub our eye? Is it 8 because by this means air is brought to the moisture? For the eye weeps after rubbing, but sneezing is due to the quantity of moisture. Or is it because the lesser heat is destroyed by the greater, and the eye when rubbed acquires more heat than is present in the nose? For this reason, if one rubs the nose itself, the sneezing stops.

Why is it that other emissions of breath such as 9 wind and eructation are not regarded as sacred, but that sneezing is? Is it because of the three regions, the head, the chest, and the stomach, the head is the most divine? Wind is breath from the lower part of the stomach, eructation from the upper part, and sneezing from the head. From the fact, then, that this region is the most divine, they also worship as divine the breath which is there. Or is it that all discharges of breath show that the parts we have men-

---

<sup>1</sup> θεῖον Richards: θεόν Ruelle.



962 a

40 τοὺς εἰρημένους τόπους βέλτιον ἔχειν ὥς ἐπὶ τὸ πολὺ; μὴ διαχωρούντων γὰρ κουφίζει τὸ πνεῦμα

962 b

διεξιόν, ὥστε καὶ ὁ παρμὸς τὸν περὶ τὴν κεφαλὴν τόπον, ὅτι ὑγιαίνει καὶ δύναται πέττειν. ὅταν γὰρ κρατήσῃ ἢ ἐν τῇ κεφαλῇ θερμότης τὴν ὑγρότητα, τὸ πνεῦμα τότε γίνεται παρμὸς. διὸ καὶ 5 τοὺς ἐκθνήσκοντας κρίνουσιν παρμικῶ, ὥς ἐὰν μὴ τοῦτο δύνωνται πάσχειν, ἀσώτους ὄντας. ὥστε ὡς σημεῖον ὑγείας τοῦ ἀρίστου καὶ ἱερωτάτου τόπου προσκυνοῦσιν ὡς ἱερόν. καὶ φήμην ἀγαθὴν ποιοῦνται.

Διὰ τί ἄνθρωπος πτάρνυται μάλιστα τῶν ἄλλων 10 ζώων; πότερον ὅτι τοὺς πόρους εὐρεῖς ἔχει, δι' ὧν τὸ πνεῦμα καὶ ἡ ὁσμὴ<sup>1</sup> εἰσέρχεται; τούτοις γὰρ πληρουμένοις πνεύματος πτάρνυται. ὅτι δ' εὐρεῖς, σημεῖον ὅτι ἥκιστα ὀσφραντικὸν τῶν ζώων. ἀκριβέστεροι δὲ οἱ λεπτοὶ πόροι. εἰ οὖν εἰς μὲν τοὺς εὐρεῖς πλείον καὶ πλεονάκεις εἰσέρχεται τὸ ὑγρόν, οὗ πνευματουμένου ὁ παρμὸς γίνεται, 11 τοιούτους δὲ μάλιστα τῶν ζώων οἱ ἄνθρωποι ἔχουσι, πλειστάκεις ἂν πταρνύοιντο<sup>2</sup> εἰκότως, ὅσοις ἐλάχιστοι οἱ μυκτῆρες, ὥστε τὸ θερμανθὲν ὑγρὸν ταχὺ ἐξιέναι δύναται πνεῦμα γενόμενον· ἐν δὲ τοῖς ἄλλοις διὰ μῆκος καταψύχεται πρότερον.

Διὰ τί οἱ μὲν ἀπὸ μέσων νυκτῶν ἄχρι μέσης 11 ἡμέρας οὐκ ἀγαθοὶ παρμοί, οἱ δὲ ἀπὸ μέσης ἡμέρας ἄχρι μέσων νυκτῶν; ἢ ὅτι ὁ μὲν παρμὸς μᾶλλον δοκεῖ ἐπισχεῖν τοὺς ἀρχομένους καὶ ἐν τῇ ἀρχῇ; διὸ ὅταν μέλλωσιν ἀρχομένοις συμβῆναι, μάλιστα ἀποτρεπόμεθα τοῦ πράττειν. ἢ μὲν οὖν

<sup>1</sup> ὁσμὴ Bussemaker : ῥύμη Ruelle.

<sup>2</sup> πταρνύοιντο Forster : πτάρνυντο Ruelle.

tioned are generally speaking in better condition ? For without anything else passing out the breath as it escapes lightens the body, and so the sneeze lightens the region about the head, because it is healthy and capable of concoction. For when the heat in the head gains mastery over the moisture, then the breath becomes a sneeze. So they test the dying by their capacity to sneeze, and, if they cannot do this, they are past saving. So men regard sneezing as sacred because it is a sign of the health of the best and most divine region, and they consider it a good omen.

Why does man sneeze more than any other animal ? 10  
Is it because he has wide channels, through which breath and smell enter ? When these are full of air, he sneezes. That they are wide is proved by the fact that man has less power of smell than other animals, but narrow channels are more discriminating. If, then, the moisture whose evaporation involves sneezing, flows in larger quantity and more often into wide channels, and man has these to a greater extent than animals, those would naturally sneeze most often whose nostrils are smallest, so that the hot moisture when it evaporates could escape most quickly ; in other animals owing to the length of their nostrils it is cooled earlier.

Why is it that sneezing between midnight and 11  
midday is not a good thing, but between midday and midnight it is ? Is it because sneezing seems inclined to check those who are starting anything and are at the beginning ? So when sneezing occurs, when we are about to do something and are at the beginning,<sup>a</sup> we are diverted from our action. Now dawn and the

<sup>a</sup> The Greek text is untranslatable and the present translation is from Th. G.

982 b

[καὶ] ἡὼς καὶ τὸ ἀπὸ μέσων νυκτῶν οἶον ἀρχή τις·  
 25 διὸ εὐλαβούμεθα πτάρειν, μὴ κωλύσωμεν ὠρμη-  
 μένον. πρὸς δειλῆς δὲ καὶ ἐπὶ μέσας νύκτας οἶον  
 τελευτή τις καὶ ἐναντίον ἐκείνῳ, ὥστε ἐν τῷ  
 ἐναντίῳ ταῦτόν αἰρετέον.

Διὰ τί οἱ πρεσβῦται χαλεπῶς πτάρνυνται; 12  
 πότερον οἱ πόροι συμπεπτῶκασιν δι' ὧν τὸ πνεῦμα;  
 30 ἢ ὅτι αἶρειν τὰ ἄνω οὐκέτι δυνάμενοι ῥαδίως εἶτα  
 βία ἀφιασι κάτω;

Διὰ τί, ἐάν τις ἀπνευστιάξῃ, ἡ λυγξ παύεται; 13  
 ἢ διότι ἡ μὲν ὑπὸ καταψύξεως γίνεται (διὸ καὶ  
 οἱ φοβούμενοι καὶ οἱ ῥιγοῦντες λύζουσιν), κατ-  
 εχόμενον δὲ τὸ πνεῦμα ἐκθερμαίνει τὸν ἐντὸς  
 τόπον;

35 Διὰ τί οἱ κωφοὶ ἐκ τῶν μυκτῆρων διαλέγονται 14  
 ὥς ἐπὶ τὸ πολὺ; ἢ ὅτι ὁ πνεύμων ἐστὶ τούτοις  
 πεπονηκώς; τοῦτο γάρ ἐστιν ἡ κωφότης, πλή-  
 ρωσις τοῦ τόπου τοῦ πνευμονικοῦ. οὐκ οὐν ῥαδίως  
 ἡ φωνὴ φέρεται, ἀλλ' ὥσπερ τὸ πνεῦμα τῶν  
 40 πνευστιῶντων ἢ ἀσθμαινόντων δι' ἀδυναμίαν  
 ἀθρόον, οὕτως ἐκείνοις ἡ φωνή. βιάζεται οὖν καὶ  
 983 a διὰ τῶν μυκτῆρων. βιαζομένη δὲ τῇ τρίψει  
 ποιεῖ τὸν ἦχον. ἔστι γὰρ ἡ διὰ τῶν ῥινῶν διά-  
 λεκτος γινομένη, ὅταν τὸ ἄνω τῆς ῥινὸς εἰς τὸν  
 οὐρανόν, ἢ συντέτρηται, κοῖλον γένηται· ὥσπερ  
 κώδων γὰρ ὑπηχεῖ, τοῦ κάτωθεν στενοῦ ὄντος.

5 Διὰ τί μόνον ὁ πταρμὸς ἡμῖν καθεύδουσιν οὐ 15  
 γίνεται, ἀλλ' ὥς εἰπεῖν ἅπαντα ἐγρηγορόσιν; ἢ  
 ὅτι ὁ μὲν πταρμὸς γίνεται καὶ ὑπὸ θερμοῦ τινος  
 κινήσαντος τὸν τόπον τοῦτον ἀφ' οὗ γίνεται· διὸ  
 καὶ ἀνακύπτομεν πρὸς τὸν ἥλιον, ὅταν βουλώμεθα  
 πτάρειν· <ἢ> ὅτι καθευδόντων ἡμῶν ἀντιπερι-

time after midnight is, so to speak, a time of beginning ; so we carefully avoid sneezing, lest we should check what has been begun. But the evening and up to midnight is a kind of finishing time and opposite to the other, so that in contrary conditions the same thing becomes desirable.

Why do the old sneeze with difficulty ? Have the 12 channels through which the breath passes become closed ? Or is it because they can no longer raise the breath upwards easily, and so they need an effort to expel it downwards ?

Why does a hiccough cease, if one holds the breath ? 13 Is it because a hiccough is due to chilling (this is why the frightened and shivering hiccough), but when the breath is held it heats the region within ?

Why do the deaf usually talk through their noses ? 14 Is it because with them the lung has been affected ? For deafness is really a congestion in the region of the lungs. So the voice does not travel easily, but as the breathing of those who puff and pant accumulates because of their lack of strength, so is the voice with the deaf. So it is forced out through the nostrils. As it is forced out it makes a noise due to the friction. For talking through the nose occurs when the upper part of the nose, where the holes are leading to the roof of the mouth, becomes hollow ; then it echoes like a bell because the lower part is narrow.

Why does not a sneeze occur when we are asleep, 15 but practically always when we are awake ? Is it because a sneeze is due to some hot agent disturbing the region from which it comes ? This is why we turn towards the sun, when we want to sneeze. Or is it because when we are asleep the heat is compressed

963 a

- 10 ἴσταται τὸ θερμὸν ἐντός; διὸ καὶ γίνεται τὰ κάτω  
 θερμὰ τῶν καθευδόντων, καὶ τὸ πνεῦμα τὸ πολὺ  
 αἰτιὸν ἐστὶν τοῦ ἐξονειρώττειν ἡμᾶς. εἰκότως οὖν  
 οὐ πταρνύμεθα· ἀπαλλαγέντος γὰρ τοῦ θερμοῦ τοῦ  
 ἐκ τῆς κεφαλῆς, ὃ κινεῖν πέφυκεν τὸ ἐνταῦθα  
 ὑγρόν, οὗ ἐξαιρουμένου γίνεται ὁ πταρμός, καὶ τὸ  
 15 συμβαῖνον πάθος εἰκὸς μὴ γίνεσθαι. ἀποψοφοῦσι  
 δὲ μᾶλλον ἢ πτάρνυνται καὶ ἐρεύγονται καθ-  
 εὔδοντες,<sup>1</sup> ὅτι ἐκθερμαινομένου τοῦ περὶ τὴν  
 κοιλίαν τόπου ἐν τοῖς ὕπνοις μᾶλλον ἐκπνευμα-  
 τοῦσθαι συμβαίνει τὰ περὶ αὐτὴν ὑγρά, πνευ-  
 ματούμενα δὲ εἰς τοὺς ἔγγιστα τόπους φέρεσθαι.  
 20 ἐνταῦθα γὰρ καὶ συναπωθεῖται ὑπὸ τοῦ ἐν τῷ  
 ὕπνῳ γινομένου πνεύματος, καθεκτικώτερος γάρ  
 ἐστὶν ἢ προετικώτερος ὁ καθεύδων τοῦ πνεύματος,  
 διὸ καὶ συστέλλει τὸ θερμὸν ἐντός. ὁ δὲ κατέχων  
 τὸ πνεῦμα ὥθει κάτω αὐτό· παρὰ φύσιν γὰρ ἐστὶ  
 τῷ πνεύματι ἢ κάτω φορά, διὸ καὶ χαλεπὸν ἐστὶ  
 25 κατέχειν τὸ πνεῦμα. τὸ δ' αὐτὸ αἷτιον καὶ τοῦ  
 καθεύδειν ἡμῖν ἐστίν. οὔσης γὰρ τῆς ἐγρηγόρσεως  
 κινήσεως, ταύτης δ' ἐν τοῖς αἰσθητηρίοις ἡμῶν  
 γινομένης μάλιστα ἐν τῷ ἐγρηγορέναι ἡμᾶς, δῆλον  
 ὡς καὶ ἡρεμούντων ἡμῶν καθεύδοιμεν ἄν. ἐπεὶ  
 δὲ τὸ μὲν πῦρ κινητικὸν ἐστὶ τῶν ἐν ἡμῖν μορίων,  
 30 τοῦτο δ' ἐν τῷ ὕπνῳ ἐντὸς περιστάται, λιπὸν τὸν  
 περὶ τὴν κεφαλὴν τόπον οὗ ἐστὶ τὸ αἰσθητήριον,  
 ἡρεμοίῃ ἄν μάλιστα ἡμῶν τότε τὰ αἰσθητήρια· ὃ  
 εἶη ἄν αἷτιον τοῦ καθεύδειν.

Διὰ τί πτάραντες καὶ οὐρήσαντες φρίττουσιν; 16  
 ἢ ὅτι κενοῦνται αἱ φλέβες ἀμφοτέροις τούτοις τοῦ  
 35 πρότερον ἐνυπάρχοντος ἀέρος θερμοῦ, κενωθέντων  
 δὲ ἄλλος ἀήρ ἕξωθεν εἰσέρχεται ψυχρότερος τοῦ

within? For this reason the lower parts grow warm when we are asleep, and the large quantity of breath is the cause of the emission of semen during sleep. So naturally we do not sneeze; for when the heat (which naturally moves the moisture there, the withdrawal of which causes a sneeze) is expelled from the head, the affection which accompanies it is not likely to occur. Wind is more common when men are asleep than sneezing and eructation, because as the region about the stomach grows hot in sleep the moisture round it becomes more vaporized, and as it does so it travels to the nearest parts. There it is collected by the breath which forms in sleep, for the sleeper is more prone to hold the breath than to expel it, so that it collects the internal heat. But the man who holds his breath drives it downwards; for a downward course is unnatural to the breath, so that it is difficult to hold the breath. The reason of our sleeping is the same. For being awake implies movement, and movement in our sense-organs takes place for the most part while we are awake, so it is obvious that when we are quite at rest we should sleep. But since fire produces movement in our parts, and this is confined within during sleep, leaving the region about the head where the sense-organ is, our sense-organs would naturally be most quiet at that time; and this would be a cause of sleep.

Why do those who sneeze or make water shiver 16 afterwards? Is it because in both cases the veins are emptied of the hot air which was in them before, and, when they are empty, other air enters from the

---

<sup>1</sup> ἡ ἐργηγορότες incl. Ruelle.



963 a

προϋπάρχοντος ἐν ταῖς φλεβίν· τοιοῦτος δ' εἰσιὼν  
ποιεῖ φρίττειν;

- Διὰ τί τοὺς λυγμοὺς οἱ πταρμοὶ παύουσιν; ἢ ὅτι 17  
ὁ λυγμὸς οὐχ ὥσπερ οἱ ἐρυνγοὶ ἀπὸ τῆς τὰ σιτία  
40 δεχομένης κοιλίας ἐστίν, ἀλλ' ἀπὸ τοῦ πνεύματος,  
963 b συμβαίνει δὲ μάλιστα ἀπὸ καταψύξεως ἐκ ρίγους  
καὶ λύπης καὶ φαρμακείας τῆς ἄνω μάλιστα  
γίνεσθαι; θερμὸς γὰρ ὢν φύσει ὁ τόπος, ὅταν  
καταψυχθῇ, οὐ προίεται τὸ πνεῦμα πᾶν, ἀλλ'  
ὥσπερ πομφόλυγας ποιεῖ· διὸ καὶ τὸ πνεῦμα  
5 κατασχοῦσι παύεται (ἐκθερμαίνεται γὰρ ὁ τόπος),  
καὶ τὸ ὄξος, θερμαντικὸν ὄν, προσφερόμενον. τοῦ  
δὴ θερμοῦ συμβαίνοντος ἀπὸ θερμασίας καὶ τοῦ  
ἐγκεφάλου, τῶν ἄνω τόπων εἰς τὸν πνεύμονα  
συντετρημένων, θερμοῦ τοῦ πνεύμονος ὄντος, ἢ  
τε πρὸ τοῦ πταρμοῦ κατοχὴ καὶ ἡ ἄνωθεν κατά-  
κρουσις λύει τὸ πάθος.
- 10 Διὰ τί οἱ οὐλότριχες, καὶ οἷς ἐπέστραπται τὸ 18  
τρίχιον, ὡς ἐπὶ τὸ πολὺ σιμότεροι; ἢ εἴπερ ἡ  
οὐλότης ἐν παχύτητι, ἢ δὲ παχύτης μετὰ σκλη-  
ρότητος, σκληρὸν δ' ὄν τὸ αἷμα θερμόν, ἢ δὲ  
θερμότης οὐ ποιεῖ περίττωσιν, τὸ δὲ ὅστουν ἐκ  
περιττώματος, ὁ δὲ χόνδρος ὅστουν, εὐλόγως ἂν  
15 ἔκλειψις εἴη τοῦ μορίου; σημεῖον δὲ τὸ τὰ παιδιά  
πάντα εἶναι σιμά.

## PROBLEMS, XXXIII. 16-18

outside which is colder than what was in the veins before ; the entry of this produces sneezing ?

Why does sneezing check hiccough ? Is it because 17 hiccough, unlike eructation which comes from the stomach when it receives food, arises from breath, and occurs mostly after chill due to shivering and pain and medicine administered above ? For the region being naturally hot does not emit all the breath when it is cooled, but makes bubbles as it were ; so when men hold the breath the hiccough stops (for the region is warmed through), and vinegar also which is a heating agent produces the same effect when applied. Then as heat also collects from the heat of the brain, as the upper parts have aperture into the lungs and the lungs are also hot, the holding of the breath before the sneeze and the downward pressure from above stops the hiccough.

Why are those with woolly or curly hair generally 18 snub-nosed ? Is it because woolliness is due to fat, fat is accompanied by hardness, and blood when hard is hot, and heat does not produce waste product ? New bone arises from waste product and the cartilage of the nose is bony, so naturally there would be a scantiness in that part ? This is proved by the fact that all young children are snub-nosed.

## ΟΣΑ ΠΕΡΙ ΤΟ ΣΤΟΜΑ ΚΑΙ ΤΑ ΕΝ ΑΥΤΩΙ

Διὰ τί οἱ μανούς ἔχοντες τοὺς ὀδόντας οὐ μακρό- 1  
βιοι; ἢ ὅτι τὰ μακρόβια πλείους ἔχουσιν, οἷον τὰ  
20 ἄρσενά τῶν θηλειῶν, ἄνδρες γυναικῶν, πρόβατα  
προβάτων. οἱ οὖν ἀραιόδοντες ὥσπερ ἂν ἐλάττονας  
ἔχουσιν ὀδόντας ἐοίκασιν.

Διὰ τί οἱ ὀδόντες ἰσχυρότεροι τῶν σαρκῶν ὄντες 2  
ὁμῶς τοῦ ψυχροῦ αἰσθάνονται μᾶλλον; ἢ ὅτι ἐπὶ  
τοὺς πόρους προσπεφύκασιν, ἐν οἷς ὀλίγον ὄν τὸ  
25 θερμὸν ταχὺ ὑπὸ τοῦ ψυχροῦ κρατούμενον ποιεῖ  
τὴν ἀλγηδόνα;

Διὰ τί τοῦ ψυχροῦ μᾶλλον αἰσθάνονται οἱ ὀδόντες 3  
ἢ τοῦ θερμοῦ, ἢ δὲ σὰρξ τοῦναντίον; πότερον ὅτι  
ἢ μὲν σὰρξ τοῦ μέσου καὶ εὐκρατος, οἱ δὲ ὀδόντες  
ψυχροί, ὥστε τοῦ ἐναντίου μᾶλλον αἰσθητικοί; ἢ  
30 διότι λεπτῶν πόρων εἰσίν, ἐν οἷς μικρὸν τὸ θερμὸν,  
ὥστε ταχὺ πάσχουσιν ὑπὸ τοῦ ἐναντίου; ἢ δὲ  
σὰρξ θερμή, ὥστε οὐδὲν πάσχει ὑπὸ τοῦ ψυχροῦ,  
τοῦ δὲ θερμοῦ ταχὺ αἰσθάνεται· ὥσπερ γὰρ πῦρ  
ἐπὶ πυρὶ γίνεται.

Διὰ τί ἡ γλῶττα σημαντικὸν πολλῶν; καὶ γὰρ 4  
τῶν πυρετῶν ἐν τοῖς ὀξέσι νοσήμασιν, καὶ ἐὰν  
224

## BOOK XXXIV

### PROBLEMS CONNECTED WITH THE MOUTH AND WHAT IS IN THE MOUTH

WHY are men with porous teeth not long-lived <sup>a</sup> ? 1  
Is it because all long-lived creatures have more teeth ?  
For instance, the male has more than the female, men  
more than women, and rams more than ewes. So  
those with porous teeth would seem to resemble those  
with a smaller number.

Why is it that teeth, though stronger than flesh, are 2  
yet more sensitive to cold ? Is it because they are  
attached to channels in which the heat, being small,  
is quickly mastered by the cold and causes pain ?

Why are the teeth more sensitive to cold than to 3  
heat, while it is just the opposite with the flesh ? Is  
it because flesh partakes of the mean and is luke-  
warm, whereas the teeth are cold, so that they are  
more sensitive to their opposite ? Or is it because  
they consist of narrow pores in which there is little  
heat, so that they are quickly affected by the opposite ?  
But the flesh is warm, so that it does not suffer from  
the cold, but is quickly affected by heat ; for it is as  
if fire were added to fire.

Why does the tongue indicate many things ? For 4  
in acute diseases it is a sign of fever, especially if it

\* Cf. Book X. 48.

963 b

35 χάλαζαι ἐνῶσιν· καὶ τῶν ποικίλων προβάτων ποικίλαι. ἢ ὅτι ὑγρότητος δεκτικόν, καὶ ἐπὶ τῷ πνεύμονι ἐπίκειται, οὗ ἡ ἀρχὴ ἐπὶ τῶν πυρετῶν; πολύχροα δὲ πάντα διὰ τὴν πολύχροιαν τῶν ὑγρῶν· βάπτεται δὲ πρῶτον δι' οὗ πρῶτον ἡθεΐται· ἢ δὲ γλῶττα τοιοῦτον. αἷ τε χάλαζαι διὰ τὸ  
40 σομφὴν εἶναι συλλέγονται· ἔστι γὰρ ἡ χάλαζα οἶονεϊ ἰονθος ἄπεπτος ἐν τοῖς ἐντός.

964 a

Διὰ τί ἡ γλῶττα γλυκεῖα μὲν οὐ γίνεται, πικρὰ 5 δὲ καὶ ἀλμυρὰ καὶ ὀξεῖα; ἢ ὅτι διαφθοραὶ ταύτ' ἐστίν, τῆς δὲ φύσεως οὐκ αἰσθάνεται;

Διὰ τί ὅσας ἂν χροὰς ἔχῃ τὸ δέρμα, τοσαύτας 6 ἔχει καὶ ἡ γλῶττα; πότερον ὅτι ἐν μέρος ἐστὶν ὥσπερ ἄλλο τι τῶν ἔξωθεν, ἀλλ' ἐντός περιείληπται; διὰ δὲ τὸ λεπτόν εἶναι ταύτῃ τὸ δέρμα καὶ ἡ μικρὰ ποικιλία ἐμφαίνεται. ἢ διότι τὸ ὕδωρ ἐστὶν ὃ ποιεῖ μεταβάλλειν τὰς χροὰς; ἢ δὲ γλῶττα μάλιστα πάσχει ὑπὸ τοῦ πόματος.

10 Διὰ τί ἐκ τοῦ στόματος καὶ θερμὸν καὶ ψυχρὸν 7 πνέουσιν; φυσῶσι μὲν γὰρ ψυχρόν, ἀάζουσι δὲ θερμόν. σημείον δὲ ὅτι θερμαίνει, ἐὰν πλησίον προσαγάγῃ τις τοῦ στόματος τὴν χεῖρα. ἢ ἀμφοτέρως ὃ ἀῆρ κινούμενος θερμός;<sup>1</sup> ὃ δὲ φυσῶν κινεῖ τὸν αἶρα οὐκ ἀθρόως, ἀλλὰ διὰ στενοῦ τοῦ  
15 στόματος· ὀλίγον οὖν ἐκπνέων πολὺν κινεῖ τὸν θύραθεν, ἐν ᾧ τὸ θερμὸν ὄν τὸ ἐκ τοῦ στόματος οὐ φαίνεται δι' ὀλιγότητα. ὃ δὲ ἀάζων ἀθρόον ἐκπνεῖ· διὸ θερμόν. ἔστι γὰρ φυσασμοῦ τὸ<sup>2</sup> διὰ-

<sup>1</sup> θερμός suggested by Ruelle from Th. G. : ψυχρός Ruelle's text.

has pustules on it ; and the tongues of piebald sheep are also piebald. Is it because it is receptive of moisture and lies near to the region of the lung, which is the origin of fevers ? Things are many-coloured because liquids are many-coloured. For that through which liquids first percolate is coloured by them ; and the tongue has this characteristic. Pustules collect on the tongue because it is porous ; for the pustule is a kind of pimple which is not internally concocted.

Why does the tongue never become sweet, but 5 bitter, salt, and acrid ? Is it because such qualities are corruptions and the tongue cannot perceive its own nature ?

Why does the tongue have as many colours as the 6 skin has ? Is it because it is the one part which is like any other outside part, though it is enclosed in the mouth ? But because the skin in this part is thin, even a small variation in colour becomes apparent. Or is it because it is water which is responsible for a change of colour ? And the tongue is most affected by drink.

Why do men breathe both hot and cold from the 7 mouth ? For they blow out cold but breathe out hot breath. There is proof that the breath causes heat, if one puts the hand near to the mouth. Or is the air moved hot in both cases ? But the man who blows hard does not move the air in a mass, but through a narrow mouth ; so, although he only blows out a little breath, he moves the air over a long range, in which case the heat coming from the mouth is not noticeable, because there is little of it. But the man who breathes out emits the breath all at once ; hence it is hot. For it is the characteristic of hard blowing to

---

<sup>a</sup> τὸ Forster : τῷ Ruelle.



964 a φέρειν τῇ συστροφῇ· ὁ δ' ἀασμὸς ἀθρόου ἔκ-  
πνευσις.

Διὰ τί, εἰς σφόδρα καὶ ἀθρόον ἐκπνεύσωσιν, 8  
20 ἀδυνατοῦσι πάλιν ἐκπνεῦσαι; ὁμοίως δὲ ἔχει καὶ  
ἐπὶ τοῦ ἀναπνεῦσαι· ἀδυνατοῦσι γὰρ δις ἐφεξῆς  
ποιεῖν αὐτό. ἢ ὅτι τὸ μὲν διώσις τίς ἐστι, τὸ δὲ  
συναγωγὴ τόπου; ἃ ἄχρι τινός ἐστι δυνατὰ  
γίνεσθαι. φανερόν οὖν ὅτι ἐναλλάξ ἀνάγκη ἄμφω  
γίνεσθαι, καὶ ἀδύνατον δις ἐφεξῆς.

25 Διὰ τί ἑτέρου τόπου ὄντος ἢ τὰ σῖτα καὶ τὸ 9  
ποτὸν διεξέρχεται καὶ ἢ ἀναπνέομεν, εἰς μείζω  
ψωμὸν καταπίωμεν, πνιγόμεθα; οὐδὲν δὴ ἄτοπον·  
οὐ γὰρ μόνον εἰάν τι ἐμπέσῃ εἰς τὸν τόπον τοῦτον,  
ἀλλὰ καὶ ἔτι φραχθῇ, οὕτως μᾶλλον πνιγόμεθα.  
30 ταῦτα δὲ παράλληλά ἐστιν, καθ' ὃ τε τὰ σιτία  
δεχόμεθα καὶ καθ' ὃ ἀναπνέομεν. ὅταν οὖν  
ἐμπέσῃ μείζων ψωμός, καὶ ἢ ἀναπνοὴ συμφράττει,  
ὥστε μὴ εἶναι τῷ πνεύματι ἔξοδον.

Διὰ τί, ὅσοι τὴν διὰ χειρὸς τομὴν ἔχουσι δι' 10  
ὅλης, μακροβιώτατοι; ἢ διότι τὰ ἀναρθρα βραχύ-  
35 βια καὶ ἀσθενῇ; σημεῖον δὲ τῆς μὲν ἀσθενείας  
τὰ νέα, τῆς δὲ βραχυβιότητος τὰ ἔνυγρ. δηλὸν  
ἄρα ὅτι τὰ ἡρθρωμένα τοῦναντίον. τοιαῦτα δέ,  
ὧν καὶ τὰ φύσει ἀναρθρα μάλιστα ἡρθρωται. τῆς  
δὲ χειρὸς τὸ ἔσω ἀναρθρότατον.

Διὰ τί ἐν τῷ μακρὸν ἀναπνεῖν ἐλκόντων μὲν 11  
964 b εἴσω τὸ πνεῦμα συμπίπτει ἢ κοιλία, ἐκπνεόντων  
δὲ πληροῦται; πιθανὸν δ' ἐστὶ τοῦναντίον συμ-  
βαίνειν. ἢ ὅτι τῶν μὲν ἀναπνεόντων συμπιεζου-

drive along the air in puffs ; but gentle breathing is an expulsion of the air all at once.

Why is it that, if a man exhales violently and 8 all at once, he cannot exhale again ? A similar thing is true of inhaling ; for men cannot do it twice in succession. Is it because the former is a sort of dilatation, and the latter is a contraction of the region ? Both these can only be carried to a certain limit. So it is evident that the two processes must alternate, and cannot be done twice in succession.

Why is it that although the channels by which food 9 and drink pass and that by which we breathe are different, yet if we swallow too large a piece of food, we choke ? This is not surprising, for not only do we choke if anything falls into this region, but if it is closed we choke all the more. Now the channels (that by which we absorb food and that by which we breathe) lie side by side. So when too large a piece of food goes down, the breath passage also is closed, so that there is no exit for the breath.

Why is it that those with whom the life-line tra- 10 verses the whole hand are long-lived ? Is it because all unarticulated creatures are short-lived and weak ? The young are instances of weakness, and water-animals of short life. So obviously the articulated creatures must be the opposite ; that is such creatures, as those whose naturally unarticulated parts are best articulated. And the inside of the hand has least articulation.

Why is it that in taking a long breath, when one 11 draws in the breath the stomach contracts, but when one exhales the stomach inflates ? The opposite might be expected to happen. Is it because when men

964 b

μένη ταῖς πλευραῖς κάτω, καθάπερ αἱ φύσαι,  
προσογκεῖν φαίνεται;

- 5 Διὰ τί ἀναπνέομεν; ἥ καθάπερ τὸ ὑγρὸν εἰς 12  
πνεῦμα διαλύεται, οὕτως καὶ τὸ πνεῦμα εἰς τὸ  
πῦρ; τὸ τῆς φύσεως οὖν θερμὸν ὅταν τὸ πολὺ τοῦ  
πνεύματος πῦρ ποιήσῃ, ἀλγηδόνα ἐμποιεῖ, τοῖς  
δὲ πόροις καὶ ὄγκον· διόπερ ἐξωθοῦμεν τὸ πῦρ  
μετὰ τοῦ πνεύματος. ὅταν δ' ἐξέλθῃ τὸ πνεῦμα  
10 καὶ τὸ πῦρ,<sup>1</sup> συμπιπτόντων τῶν πόρων καὶ κατα-  
ψυχομένων ἀλγηδόνες γίνονται· ἔλκομεν οὖν τὸ  
πνεῦμα πάλιν. εἴτα ἀνοίξαντες τοῦ σώματος τοὺς  
πόρους καὶ βοηθήσαντες, πάλιν γίνεται τὸ πῦρ, καὶ  
πάλιν ἀλγοῦντες ἐκπέμπομεν, καὶ διὰ τέλους τοῦτο  
15 πράττομεν, καθάπερ καὶ σκαρδαμύσσομεν κατὰ τὸ  
καταψύχεσθαι τὸ περὶ τὸν ὀφθαλμὸν σῶμα καὶ  
ξηραίνεισθαι. καὶ βαδίζομεν οὖν προσέχοντες τῇ  
βαδίσει τὸν νοῦν, κυβερνωμένης δὲ τῆς διανοίας  
αὐτοῖς \* \* \* τοῦτον οὖν τὸν τρόπον καὶ τὰ περὶ  
τὴν ἀναπνοὴν ποιοῦμεν· μηχανώμενοι γὰρ τὸν ἀέρα  
20 ἔλκειν ἀναπνέομεν, καὶ πάλιν ἔλκομεν.

<sup>1</sup> μετὰ . . . τὸ πῦρ: Ruelle's text omits this line.

inhale the stomach is compressed by the ribs below and then like bellows seems to expand ?

Why do we inhale ? Does breath dissolve into 12 fire, just as moisture does into air ? So the natural heat, when the greater part of the breath produces fire, causes pain and pressure on the channels ; consequently we expel the fire with the breath. Now when the breath and the fire have gone forth, as the channels contract and cool, there are pains ; so we draw in the breath again. Then when we have reopened the channels of the body and reinforced them, fire forms again, and as we are again in discomfort we expel the breath, and go on doing so indefinitely, just as we blink because of the chilling and drying of the region in the neighbourhood of the eye. Just, then, as we walk without paying attention to our walking but with just the intellect to guide . . .<sup>a</sup> We act in the same way in breathing ; for we breathe by contriving to draw in the breath, and then we draw it in again.

<sup>a</sup> There is a lacuna in the ms. here. Th. G. has an adverb " conveniently," which would suit the context.

## ΟΣΑ ΠΕΡΙ ΤΑ ΥΠΟ ΤΗΝ ΑΦΗΝ

Διὰ τί μᾶλλον φρίττομεν ἑτέρου θιγόντος πως <sup>1</sup>  
 ἢ αὐτοὶ ἡμῶν; ἢ ὅτι αἰσθητικωτέρα ἢ ἀφή τοῦ  
 ἄλλοτρίου ἢ ἡ τοῦ οἰκείου; τὸ γὰρ συμφυὲς  
<sup>25</sup> ἀναίσθητον. καὶ φοβερώτερον τὸ λάθρα καὶ ἑξ-  
 απιναίως γινόμενον, ὃ δὲ φόβος κατάψυξις· ἢ δὲ  
 ἄλλοτρία ἀφή πρὸς τὴν οἰκείαν ἄμφω ταῦτα ἔχει.  
 καὶ ὅλως δὲ παθητικὸν ἕκαστον πέφυκεν ἢ μᾶλλον  
 ἢ μόνον ὑπ' ἄλλου ἢ ὑφ' αὐτοῦ, οἷον καὶ ἐπὶ τοῦ  
 γαργαλίζεσθαι συμβαίνει.

<sup>30</sup> Διὰ τί γαργαλίζονται τὰς μασχάλας καὶ τὰ ἐντὸς 2  
 τῶν ποδῶν; ἢ διὰ τὴν λεπτότητα τοῦ δέρματος;  
 καὶ ὦν ἀσυνήθης ἢ ἀφή, οἷον τούτων καὶ τοῦ  
 ὠτός;

Διὰ τί φρίττομεν οὐκ ἐπὶ τοῖς αὐτοῖς πάντες; <sup>3</sup>  
 ἢ ὅτι οὐδ' ἐπὶ τοῖς αὐτοῖς πάντες ἡδόμεθα, ὥσπερ  
<sup>35</sup> οὐδὲ λυπούμεθα ἐπὶ τοῖς αὐτοῖς πάντες; ὁμοίως  
 δὴ οὐ φρίττομεν ἐπὶ τοῖς αὐτοῖς· ἔστι γὰρ ἢ αὕτη  
 κατάψυξις τις. διὸ οἱ μὲν τοῦ ἱματίου δακνομένου  
 φρίττουσιν, οἱ δὲ πρίονος ἀκονουμένου ἢ ἐλκομένου,  
 οἱ δὲ κισήρεως τεμνομένης, οἱ δὲ ὄνου λίθον  
 ἀλουόντος.

## BOOK XXXV

### PROBLEMS CONNECTED WITH TOUCH

WHY do we shudder more readily when someone else touches us anywhere than when we touch ourselves? Is it because another's touch provokes sensation more readily than our own? For what is an organic part of us is not readily perceived. Also what is done to us covertly and unexpectedly is more alarming, and alarm involves chilling. Now the touch of another has both these qualities in comparison with our own touch. Speaking generally, every passive sensation is either produced solely by someone else or to a greater degree than by oneself, as happens with tickling.

Why is one ticklish under the arms and on the soles of the feet? Is it due to the thinness of the skin and because some parts are not accustomed to touch, such as these and the ear?

Why do we not all shudder at the same things? Is it because we do not all enjoy the same things, just as we are not all pained by the same things? Similarly we do not all shudder at the same things. In all cases it is the same chilling process. So some of us shudder when a cloak is torn, some when a saw is sharpened or drawn across, others at the cutting of pumice-stone, and others again when the mill-stone is grinding on stone.



984 b

Διὰ τί τοῦ μὲν θέρους ὄντος θερμοῦ, τοῦ δὲ 4  
 985 a χειμῶνος ψυχροῦ, τὰ σώματα θιγγανόντων ψυχει-  
 νότερά ἐστι τοῦ θέρους ἢ τοῦ χειμῶνος; πότερον  
 ὅτι ὁ ἰδρῶς καὶ ἡ ἰδiosis καταψύχει τὰ σώματα,  
 τοῦτο δ' ἐν μὲν τῷ θέρει γίνεται, ἐν δὲ τῷ χειμῶνι  
 οὐ; ἢ ὅτι ἀντιπεριίσταται ἐναντίως τὸ ψυχρὸν καὶ  
 5 τὸ θερμὸν τῇ ὥρᾳ, καὶ ἔσω φεύγει ἐν τῷ θέρει,  
 διὸ καὶ ἰδρῶτα ἀνίησιν· ἐν δὲ τῷ χειμῶνι ἀποστέγει  
 τὸ ψῦχος καὶ ἀτμίζει τὸ σῶμα ὥσπερ ἡ γῆ;

Διὰ τί φρίττουσιν αἱ τρίχες ἐν τῷ δέρματι; ἢ 5  
 ὅταν σπάσωσιν τὸ δέσμα, εἰκότως ἐξανέστησαν;  
 10 συσπῶσι δὲ καὶ ὑπὸ ρίγους καὶ ὑπ' ἄλλων παθῶν.

Διὰ τί αὐτὸς αὐτὸν οὐθεὶς γαργαλίζει; ἢ ὅτι 6  
 καὶ ὑπ' ἄλλου ἤττον, εἰς προαίσθηται, μᾶλλον δ',  
 ἂν μὴ ὀρᾷ; ὥσθ' ἡκιστα γαργαλισθήσεται, ὅταν  
 μὴ λανθάνῃ τοῦτο πάσχων. ἔστιν δὲ ὁ γέλως  
 15 παρακοπή τις καὶ ἀπάτη. διὸ καὶ τυπτόμενοι εἰς  
 τὰς φρένας γελῶσιν· οὐ γὰρ ὁ τυχὼν τόπος ἐστὶν  
 ὧ γελῶσιν. τὸ δὲ λαθραῖον ἀπατητικόν. διὰ  
 τοῦτο καὶ γίνεται ὁ γέλως καὶ οὐ γίνεται ὑφ'  
 αὐτοῦ.

Διὰ τί ποτε τὰ χεῖλη μάλιστα γαργαλιζόμεθα; 7  
 ἢ διότι δεῖ τὸ γαργαλιζόμενον μὴ πρόσω τοῦ  
 20 αἰσθητικοῦ εἶναι; ἔστι δὲ τὰ χεῖλη περὶ τὸν τόπον  
 τοῦτον μάλιστα. διὰ τοῦτο δὲ γαργαλίζεται τὰ  
 χεῖλη τῶν περὶ τὴν κεφαλὴν τόπων, ἃ ἐστὶν  
 εὖσαρκα, εὐκινήτοτα οὖν μάλιστα ἐστίν.

Διὰ τί, εἰάν τις τὸν περὶ τὰς μασχάλας τόπον 8  
 κνήσῃ, ἐκγελῶσιν, εἰάν δέ τινα ἄλλον, οὐ; ἢ διὰ  
 25 τί πτερῶ τὰς ρῖνας κνήσαντες πτάρνυνται; ἢ

<sup>a</sup> The midriff is the muscle separating the heart and lungs

Why is it that, although summer is hot and winter 4 cold, bodies are colder to the touch in summer than in winter? Is it because sweat and perspiration chill the body, and this occurs in summer but not in winter? Is it because the compression of cold and heat takes place inversely to the season of the year, and in the summer the cold escapes inwards, so that it drives out the sweat, whereas in the winter the cold keeps the sweat inside and the body (like the earth) causes it to evaporate?

Why do the hairs bristle on the skin? Is it natural 5 that they should stand on end when one contracts the skin? And the skin contracts through cold and other affections.

Why can no one tickle himself? Is it for the same 6 reason that one feels another's tickling less if one anticipates it, and more if one does not see it coming? So that one will be least ticklish when one is aware that it is happening. Now laughter is a form of derangement and deception. This is why men laugh when struck in the midriff<sup>a</sup>; for it is not a chance part with which we laugh. Now what happens un-awares deceives us. This is why laughter occurs and is not produced by oneself.

Why are we most ticklish on the lips? Is it be- 7 cause the tickled part must not be far from the sense-organ? And the lips are particularly near this region. For this reason also the lips are the most ticklish part in the region of the head, because they are fleshy and so are easily moved.

Why is it that men laugh, if they are tickled about 8 the armpits, but not in any other place? Or why do men sneeze when their nose is tickled with a feather?

from the stomach and was in Greek theory the seat of the mind.

965 a

τόποι εἰσὶ τῶν φλεβίων, ὧν ἡ καταψυχομένων ἢ τούναντίον πασχόντων ὑγραίνεται, ἢ εἰς πνεῦμα ἐκ τοῦ ὑγροῦ διαλύεται; ὥσπερ ἐὰν τὰς ἐπὶ τοῦ τραχήλου πίεση τις φλέβας καθεύδουσιν ἡμῖν, ἡδονὴ θαυμασία<sup>1</sup> τίς ἐστίν· τοῦτο δέ, ὅταν πλέον τὸ  
 30 πνεῦμα ἐγγένηται, ἀθρόον ἔξω ἀφίεμεν. ὡσαύτως καὶ ἐπὶ παρμῶ τῷ πτερῷ διαθερμάναντες καὶ κνήσαντες διελύσαμεν εἰς πνεῦμα· πλέονος δὲ γενομένου ἐξεώσαμεν.

Διὰ τί μετὰ τὰ σιτία φρίττομεν πολλάκις; ἢ 9 ὅτι ψυχρὰ εἰσπορευόμενα ἀπὸ πρώτης κρατεῖ  
 35 μᾶλλον τοῦ φυσικοῦ θερμοῦ ἢ κρατεῖται;

Διὰ τί τὸ περιαγόμενον ἐναλλάξ τοῖς δακτύλοις 10 δύο φαίνεται; ἢ διότι δυσὶν αἰσθητηρίοις ἀπτόμεθα; τοῖς γὰρ ἐκτὸς<sup>2</sup> τῶν δακτύλων, κατὰ φύσιν ἔχοντες τὴν χεῖρα, ἀμφοτέροις οὐ δυνατόν θιγεῖν.<sup>3</sup>

<sup>1</sup> καθεύδουσιν ἡμῖν, ἡδονὴ θαυμασία Ross : καθεύδουσιν. ἡ μὲν ἡδονὴ θερμασία Ruelle.

<sup>2</sup> ἐκτὸς Forster : ἐντὸς Ruelle.

<sup>3</sup> θιγεῖν Ross : εἰπεῖν Ruelle.

## PROBLEMS, XXXV. 8-10

Is it because these are in the neighbourhood of small veins, and when these are either chilled or suffering the opposite effect they grow moist, and from the moisture there is dissolution into breath ? So if someone compresses the veins on the neck when we are asleep a wonderfully pleasant sensation is caused. And when the breath becomes considerable we emit it all at once. Just in the same way, in sneezing by warming with a feather and tickling, we dissolve the moisture into breath ; and when it becomes excessive we expel it.

Why do we often shiver after food ? Is it because 9 the cold introduced from the first rather exercises control over the natural heat than suffers control ?

Why does one object feel as if it were two if it is 10 grasped in the crossed fingers ? Is it because we are touching it with two sensitive parts ? For when we hold our hand naturally, we cannot touch an object with the outside of two fingers at once.

## ΟΣΑ ΠΕΡΙ ΠΡΟΣΩΠΟΝ

Διὰ τί τοῦ προσώπου τὰς εἰκόνας ποιοῦνται; 1  
 πότερον ὅτι τοῦτο δηλοῖ ποιοῖ τινες; ἢ ὅτι μάλιστα  
 γινώσκεται;

Διὰ τί τὸ πρόσωπον ἰδίουςι μάλιστα, ἀσαρκό- 2  
 5 τατον ὄν; ἢ διότι εὐῖδρωτα μὲν ὅσα ὕφυγρα καὶ  
 ἀραιά, ἢ δὲ κεφαλὴ τοιαύτη; ὑγρότητα γὰρ  
 οἰκείαν ἔχει πλείστην. δηλοῦσι δ' αἱ φλέβες  
 τείνουσαι ἐντεῦθεν, καὶ οἱ κατάρροι γινόμενοι ἐξ  
 αὐτῆς, καὶ ὁ ἐγκέφαλος ὑγρός, καὶ οἱ πόροι πολλοί·  
 σημεῖον δ' αἱ τρίχες, ὅτι πολλοὶ πόροι εἰσὶ πε-  
 10 ραίνοντες ἔξω. οὐκουν ἐκ τῶν κάτω ὁ ἰδρώς,  
 ἀλλ' ἐκ τῆς κεφαλῆς γίνεται. διὸ ἰδίουςιν καὶ  
 πρῶτον μάλιστα τὸ μέτωπον· ὑπόκειται γὰρ τὸ  
 πρῶτον. τὸ δ' ὑγρὸν κάτω ρεῖ, ἀλλ' οὐκ ἄνω.

Διὰ τί ἐν τῷ προσώπῳ μάλιστα οἱ ἰονθοι; ἢ 3  
 15 διότι μακρὸς ὁ τόπος καὶ ὑγρότητα ἔχει; σημεῖον  
 δὲ ἢ τε τῶν τριχῶν ἐκφυσις καὶ ἢ τῶν αἰσθήσεων  
 δύναμις· ὁ δὲ ἰονθος ὥσπερ ἐξάνθημα ὑγρότητός  
 τινος ἀπέπτου.

## BOOK XXXVI

### PROBLEMS CONNECTED WITH THE FACE

WHY do men make likenesses of the face? Is it 1  
because this shows men's characters? Or because  
the face is the part most easily recognized?

Why does one sweat most in the face, which has 2  
least flesh? Is it because all parts which are moist  
and rare are most liable to sweat, and the head is of  
this nature? For it contains the greatest quantity  
of natural moisture. This is proved by the fact that  
the veins stretch from the head, that catarrh comes  
from it, that the brain is moist, and that there are  
many pores in it; the hair proves that there are  
many pores extending outwards. So sweat comes  
not from the lower parts, but from the head. So  
the forehead sweats first and most; for it lies in  
the first place. And moisture flows downwards, not  
upwards.

Why do pimples appear most on the face? Is it 3  
because that region is porous and contains moisture?  
The growth of hair and the power of sensation proves  
this; and a pimple is a kind of florescence of un-  
concocted moisture.



## ΟΣΑ ΠΕΡΙ ΟΛΟΝ ΤΟ ΣΩΜΑ

20 Διὰ τί ἀεὶ τοῦ σώματος ῥέοντος, καὶ τῆς ἀπ- 1  
 ορροῆς γινομένης ἐκ τῶν περιττωμάτων, οὐ κου-  
 φίζεται τὸ σῶμα, εἴαν μὴ ἰδίῃ; ἢ διότι ἐλάττων  
 ἢ ἔκκρισις γίνεται; ὅταν γὰρ ἐξ ὑγροῦ μεταβάλῃ  
 εἰς αἶρα, πλεόν γίνεται ἐξ ἐλάττονος· τὸ γὰρ  
 25 διακρινόμενον πλεόν, ὥστε ἐν πλείονι χρόνῳ ἢ  
 ἔκκρισις.

Διὰ τί δὲ τοῦτο; ἢ διότι δι' ἐλαττόνων πόρων 2  
 ἢ ἔξοδός ἐστιν; τὸ γὰρ γλίσχρον καὶ τὸ κολλῶδες  
 μετὰ μὲν τοῦ ὑγροῦ ἐκκρίνεται διὰ τὴν κατάμιξιν,  
 μετὰ δὲ τοῦ πνεύματος ἀδυνατεῖ. μάλιστα δὲ  
 30 τοῦτ' ἐστὶ τὸ λυποῦν. διὸ καὶ οἱ ἔμετοι τῶν  
 ἰδρώτων κουφίζουσι μᾶλλον, ὅτι συνεξάγουσι  
 τοῦτο, ἅτε παχύτεροι καὶ σωματωδέστεροι ὄντες.  
 ἢ καὶ ὅτι τῇ μὲν σαρκὶ πόρρω οὗτος ὁ τόπος, ἐν  
 ᾧ τὸ γλίσχρον καὶ τὸ κολλῶδες, ὥστε ἔργον μετα-  
 στησαι, τῇ δὲ κοιλίᾳ ἐγγύς; ἢ γὰρ ἐν ταύτῃ  
 35 γίνεται ἢ πλησίον· διὸ καὶ δυσεξάγωγος ἄλλως.

Διὰ τί αἱ τρύφεις σαρκουῖσιν; ἢ ὅτι αὐξητικῶ- 3  
 τατον τῶν ἐν τῷ σώματι τὸ θερμόν ἐστιν; τοῦ  
 μὲν γὰρ ἐνυπάρχοντος μείζους οἱ ὄγκοι γίνονται  
 διὰ τὸ ἀεὶ αὐτὸ ἐν κινήσει εἶναι καὶ εἰς τὸ ἄνω

## BOOK XXXVII

### PROBLEMS CONNECTED WITH THE BODY GENERALLY

WHY is it that, although there is always a flow in 1 the body as well as the emission from waste products, the body does not grow light, unless it sweats ? Is it because the excretion is too little ? For when there is a change from liquid to air, more is formed from less ; for what separates out is more, so that the secretion takes longer to act.

But why does this happen ? Is it because the 2 efflux is through fewer channels ? For the viscous and sticky element is excreted with the liquid owing to their being mixed, but cannot be excreted with the breath. This is especially what causes discomfort. So vomiting causes more lightening than sweat, because it carries this viscous matter with it, being thicker and more corporeal. Or is it also because the region in which the viscous and sticky element lies is far away from the flesh, so that it is hard to change its position, but it is near to the stomach ? For it is formed in the stomach or near to it ; so it is hard to remove in any other way.

Why does massage make flesh ? Is it because heat 3 is most powerful in causing growth in the body ? For the bulk grows greater than before because the body is always in motion, and the moisture in us is travelling

- 966 a φέρεσθαι καὶ πνευματοῦν τὰ ἐν ἡμῖν ὑγρά, ὃ ἐν τῇ τρύψει γίνεται· ἐκλείποντος δὲ φθίνει καὶ ἐλαττοῦται τὸ σῶμα. ἢ ὅτι ὀγκοτέρα τῆς τροφῆς γίνεται ἢ σὰρξ διὰ τὴν θερμασίαν; ἅπαν γὰρ τὸ θερμὸν ἐπισπαστικὸν τοῦ ὑγροῦ ἐστίν, ἢ δ' εἰς 5 τὴν σάρκα διαδιδόμενη τροφή ὑγρά ἐστι, καὶ ἐπιδέχεται τὴν τροφήν μᾶλλον διὰ τὴν ἀραίωσιν· ἀραιότερα γὰρ γινομένη μᾶλλον δύναται δέχεσθαι ὥσπερ σπογγία. ἢ δὲ τρύψις εὐπνουν καὶ ἀραιὰν ποιεῖ τὴν σάρκα, καὶ κωλύει συστάσεις γίνεσθαι κατὰ τὸ σῶμα. τούτου δὲ μὴ ὄντος οὐδὲ συντήξεις 10 γίνονται· αἱ γὰρ ἀτροφίαι καὶ αἱ συντήξεις ἐκ τῶν ἀθροισθέντων εἰσίν. εὐπνούστερα δὲ καὶ ἀραιότερα καὶ ὁμαλέστερα γινόμενα εἰκὸς μᾶλλον ὀγκοῦσθαι· τῆς τε γὰρ τροφῆς δεκτικώτερα καὶ τῶν ἐκκρίσεων προετικώτερα γίνεται, ὅτι οὐ δεῖ πυκνοῦν τὴν σάρκα πρὸς ὑγίειαν, ἀλλ' ἀραιοῦν· ὥσπερ γὰρ 15 πόλις ὑγιεινὴ ἐστὶ καὶ τόπος εὐπνους (διὸ καὶ ἡ θάλαττα ὑγιεινὴ), οὕτω καὶ σῶμα τὸ εὐπνουν μᾶλλον ὑγιεινὸν ἐστὶ τοῦ ἐναντίως ἔχοντος. δεῖ γὰρ ἢ μὴ ὑπάρχειν μηδέν, ἢ τούτου ὡς τάχιστα ἀπαλλάττεσθαι· καὶ δεῖ οὕτως ἔχειν τὸ σῶμα ὥστε λαμβάνον εὐθὺς ἐκκρίνειν τὴν περίττωσιν, 20 καὶ εἶναι ἐν κινήσει αἰεὶ καὶ μηδέποτε ἡρεμεῖν. τὸ μὲν γὰρ μένον σήπεται, ὥσπερ καὶ ὕδωρ τὸ μὴ κινούμενον· σηπόμενον δὲ νόσον ποιεῖ· τὸ δὲ ἐκκρινόμενον πρὸ τοῦ διαφθαρῆναι χωρίζεται. τοῦτο οὖν πυκνουμένης μὲν τῆς σαρκὸς οὐ γίνεται (ὥσπερ εἰ γὰρ ἐμφράττονται οἱ πόροι), ἀραιουμένης 25 δὲ συμβαίνει. διὸ καὶ οὐ δεῖ ἐν τῷ ἡλίῳ γυμνὸν βαδίζειν (συνίσταται γὰρ ἢ σὰρξ καὶ κομιδῇ

upwards and becoming vaporized, which occurs as the result of massage ; when this fails, the body withers and grows smaller. Or does the flesh become more bulky owing to the heating effect of food ? For all that is hot attracts liquid, and the food which is continually being distributed into the flesh is moist, and the flesh admits food more readily because of its rarity ; for when it becomes rare it can admit it more easily, as a sponge does. Now massage makes the flesh airy and fine, and prevents accumulations from forming in the body. When there is no such condition, no wastage takes place ; for atrophy and wasting arise from accumulations. It is quite natural that what is more airy, rarer and more consistent should also become more bulky ; for such things are more capable of accepting food and more able to eject secretions, because for health one does not need to thicken the flesh but to refine it ; for just as a city or a place is healthy if well-ventilated (this is why the sea is healthy), so also a well-ventilated body is in a healthier condition than one in an opposite condition. For either there should be no waste product from the first or the body should get rid of it as quickly as possible ; the body, then, should be in such a condition that on receiving the waste product it immediately excretes it, and it should be in motion and never still. For what is stagnant decays, just as water does which does not move, and decay produces disease ; but what is excreted is passed away before it decays. So this excretion does not take place when the body is densified (for the channels are, so to speak, obstructed), but it does when it is rarefied. This is why it is not wise to walk naked in the sun (for the flesh grows dense and acquires a completely

968 a

ἀποταρκοῦται· τὸ μὲν γὰρ ἐντὸς ὑγρὸν διαμένει, τὸ δ' ἐπιπολῆς ἀπαλλάττεται ἑξατμιζόμενον, ὥσπερ καὶ τὰ κρέα τὰ ὀπτὰ τῶν ἐφθῶν μᾶλλον τὰ ἐντὸς ὑγρά ἐστίν) οὐδὲ τὰ στήθη γυμνὰ ἔχοντα  
 80 βαδίζειν ἐν ἡλίῳ (ἀπὸ γὰρ τῶν ἄριστα ὠκοδομημένων τοῦ σώματος ὁ ἥλιος ἀφαιρεῖ, ὃ ἥκιστα δεῖται ἀφαιρέσεως), ἀλλὰ μᾶλλον τὰ ἐντὸς ξηραντέον. ἐκεῖθεν μὲν οὖν διὰ τὸ πόρρω εἶναι, ἐὰν μὴ μετὰ πόνου, οὐκ ἔστιν ἰδρῶτα ἄγειν· ἀπὸ τούτων δὲ διὰ τὸ πρόχειρα εἶναι ῥάδιον ἀναλῶσαι τὸ ὑγρὸν.

85 Διὰ τί ψυχθέντες ἀπὸ τῆς αὐτῆς θερμασίας καίόμεθα μᾶλλον καὶ ἀλγοῦμεν; πότερον διὰ τὴν πυκνότητα στέγει ἢ σὰρξ τὸ προσπίπτον θερμόν; διὸ μόλυβδος ἐρίου θερμότερος. ἢ βίαιος γίνεται τοῦ θερμοῦ ἢ δίοδος διὰ τὸ πεπηγέναι ὑπὸ ψυχροῦ τὸ σῶμα;

968 b

Διὰ τί αἱ ξηροτριβίαι στερεὰν τὴν σάρκα παρα- 5 σκευάζουσιν; ἢ ὅτι διὰ τὴν τριῦσιν τῆς θερμασίας ἐπιγινομένης τὸ ὑγρὸν καταναλίσκεται; πρὸς δὲ τούτοις ἢ σὰρξ τριβομένη πυκνοῦται· ἅπαντα δὲ  
 6 ὅσα πλείονος τρίψεως τυγχάνει πυκνοῦται καὶ στερεὰ γίνεται. θεωρῆσαι δὲ τὸ τοιοῦτον ἔστιν ἐπὶ πολλῶν· τὸ γὰρ σταῖς ἢ πηλὸς ἢ ἄλλο τι τῶν τοιούτων, ἐὰν μὲν ὕδωρ ἐπιχέας ἑλκης, ὑγρά καὶ κλυδῶντα διαμένει, ἐὰν δὲ πλείω τριῦσιν προσ- αγάγῃς, πυκνοῦταί τε καὶ στερεοῦται ταχέως καὶ γλίσχρα γίνεται.

10 Διὰ τί αἱ τρίψεις μᾶλλον σαρκοῦσι τῶν δρόμων; 6 ἢ ὅτι οἱ μὲν δρόμοι περιψύχουσιν τὴν σάρκα καὶ οὐ δεκτικὴν τροφῆς παρασκευάζουσιν, ἀλλὰ τὰ μὲν συσσεύεται κάτω, τὰ δ' ἐπιπολῆς<sup>1</sup> πολλοῦ τοῦ

fleshy consistency ; for the internal moisture remains there, but that on the surface evaporates and disappears, just as in baked meat the inside is moister than in boiled). Nor should one walk in the sun with a bare chest (for the sun is then drawing from the best constructed part of the body, which least needs any drawing off), but the internal parts rather require drying. From these parts, because they are far away, it is not possible to drive the sweat without great difficulty ; but from the external parts it is easy to expend the moisture, because they are near at hand.

<sup>a</sup> Why is it that from a given heat we burn and suffer <sup>4</sup> more if we are cold ? Does the flesh enclose the heat striking it because of its density ? This is why lead grows hotter than wool. Or is the passage of the heat violent because the body has become set by cold ?

Why does dry massage make the flesh hard ? Is it <sup>5</sup> because owing to the heat engendered by the massage the moisture is expended ? But in addition to this the flesh thickens when it is rubbed ; everything which is vigorously rubbed becomes thick and hard. This can be observed in many instances ; for with dough or clay or any similar substance, if you pour water on them before you pull them out, they remain wet and watery, but if you apply more rubbing, they rapidly become dense and hard and grow viscous.

Why does massage produce more flesh than running ? <sup>6</sup> Is it because running chills the flesh and makes it unable to receive food, but part of the food is shaken downwards and part remains on the surface, and, when

\* Cf. Book VIII. 19.

---

<sup>1</sup> ἐπιπολῆς Bussemaker : ἐπὶ MSS.



986 b

φυσικοῦ θερμοῦ ἐπιτελουμένου παντελῶς λεπτο-  
 νόμενα εἰς πνεῦμα διακρίνεται; ἡ δὲ παλάμη τῇ  
 15 τρίψει τὴν σάρκα ἀραιὰν καὶ δεκτικὴν αὐτῆς παρα-  
 σκευάζει. καὶ ἡ ἑξῶθεν δὴ ἀφ᾽ ἐναντιουμένη διὰ  
 τῆς πιλήσεως τῇ φορᾷ αὐτὸν συνέχει μᾶλλον, καὶ  
 ἀνάκλασιν τῆς σαρκὸς ποιεῖται.

## PROBLEMS, XXXVII. 6

the considerable natural heat is completely exhausted, grows thin and evaporates into air? But the palm of the hand by massage makes the flesh thin and able to receive food. Also the external contact, because it opposes the natural movement of the flesh by its pressure, contracts it and drives it back upon itself.

## ΟΣΑ ΠΕΡΙ ΧΡΟΑΝ

20

Διὰ τί τὸν μὲν κηρὸν καὶ τοῦλαιον λευκαίνει ὁ <sup>1</sup>  
 ἥλιος, τὴν δὲ σάρκα μελαίνει; ἢ ὅτι τὰ μὲν λευ-  
 καίνει ἀπάγων τὸ ὕδωρ; φύσει γὰρ τὸ ὑγρὸν  
 μέλαν διὰ τὴν μίξιν τοῦ γεώδους [ὑδατος], τὴν δὲ  
 σάρκα ἐπικαίει.

<sup>25</sup> Διὰ τί οἱ ἀλιεῖς καὶ πορφυρεῖς καὶ ἀπλῶς οἱ τὴν <sup>2</sup>  
 θάλατταν ἐργαζόμενοι πυρροὶ εἰσιν; πότερον ὅτι  
 ἢ θάλαττα θερμὴ καὶ αὐχμώδης ἐστὶ διὰ τὴν  
 ἄλμην; τὸ δὲ τοιοῦτον πυρρὰς ποιεῖ τὰς τρίχας,  
 καθάπερ ἢ τε κονία καὶ τὸ ἀρσενικόν. ἢ τὰ μὲν  
<sup>30</sup> ἐκτὸς γίνονται θερμότεροι, τὰ δ' ἐντὸς περιψύχονται  
 διὰ τὸ βρεχομένων αὐτῶν ἀεὶ ξηραίνεσθαι ὑπὸ τοῦ  
 ἡλίου τὰ πέριξ; τούτων δὲ τοῦτο πασχόντων αἱ  
 τρίχες ξηραίνόμεναι λεπτύνονται καὶ πυρροῦνται.  
 καὶ πάντες δὲ οἱ πρὸς ἄρκτον πυρρότριχες καὶ  
 λεπτότριχες εἰσιν.

Διὰ τί οἱ μὲν ἐν ἱματίῳ δρόμοι καὶ ἡ τοῦ ἐλαίου <sup>3</sup>  
<sup>35</sup> εἰς ἱμάτιον χρῆσις ἄχρους ποιεῖ, οἱ δὲ γυμνοὶ  
 δρόμοι εὐχρους; ἢ ὅτι ἡ μὲν εὐπνοια εὐχροίαν  
 ποιεῖ, ἢ δὲ κατάπνιξις τούναντίον; διὰ δὲ τὸ  
 συνθερμαινόμενον τὸ ἐπιπολῆς ὑγρὸν μὴ διαψύχε-  
 σθαι ἄχροίαν ποιεῖ. ἄμφω δὲ ταῦτόν ποιεῖ, ἢ

## BOOK XXXVIII

### PROBLEMS CONNECTED WITH THE COMPLEXION

WHY is it that the sun bleaches wax and oil, but 1  
blackens flesh? Is it because the sun bleaches the  
former by abstracting the moisture, for the moisture  
is black in its natural state because it is mixed with  
earthy matter, but it burns the flesh?

Why do fishermen, divers for murex, and generally 2  
those whose work is on the sea have red hair? Is it  
because the sea is hot and a drying agent because it  
is salty? Such things make hair red, just as lye and  
yellow orpiment do. Or do the outside parts become  
hotter, while the internal parts are chilled, because,  
when they are wet, the surrounding parts are con-  
tinually being dried by the sun? When this occurs  
the hair as it dries becomes thin and red. All those  
also who live in the north are red and thin-haired.

Why does running in a cloak and the smearing with 3  
oil inside the cloak make men pale, while running  
naked gives them a good colour? Is it because good  
ventilation produces good colour, and stifling the  
opposite? The cause of the pallor is that the surface  
moisture which grows hot does not cool. Both these

966 b

ἐν τῷ ἱματίῳ ἰδίσις καὶ ἡ εἰς τὸ ἱμάτιον ἄλειψις·  
 967 a ἐγκατακλείεται γὰρ ἡ θερμότης. οἱ δὲ γυμνοὶ  
 δρόμοι εὐχρουν ποιοῦσιν διὰ τούναντίον, ὅτι κατα-  
 ψύχει ὁ ἀὴρ τὰς συνισταμένας ἐκκρίσεις καὶ  
 διαπνέει τὸ σῶμα. ἔτι τὸ ἔλαιον ὑγρὸν ὄν καὶ  
 λεπτόν, ὑπαλειφθέν καὶ τοὺς πόρους ἐμφράττον,  
 5 οὔτε τὸ ἐκ τοῦ σώματος ὑγρὸν καὶ πνεῦμα ἔξω  
 ρεῖν ἔα, οὔτε τὸ ἐκτὸς πνεῦμα ἐντός. διὸ κατα-  
 πνιγόμενα ἐν τῷ σώματι ὑγρά περιττώματα σηπό-  
 μενα ἄχροιαν ποιεῖ.

Διὰ τί ἡ εὐπνοια εὐχρους ποιεῖ; ἢ ὅτι ἄχροια 4  
 ἔοικεν εἶναι οἶον σῆψις τις χρωτός; ὅταν οὖν τὸ  
 10 ἐπιπολῆς ὑγρὸν καὶ θερμὸν ᾖ, τοῦτο συμβαίνει  
 καὶ χλωρὸν γίνεσθαι, ἐὰν μὴ ψυχθῇ καὶ ἀποπνεύσῃ  
 τὸ θερμόν.

Διὰ τί οἱ μὲν ἰδρώσαντες ἐκ τῶν γυμνασίων 5  
 εὐχροοὶ εἰσιν εὐθύς, οἱ δὲ ἀθληταὶ ἄχροοι; ἢ διότι  
 ὑπὸ μὲν τοῦ μετρίου πόνου τὸ θερμόν ἐκκάεται  
 15 καὶ ἐπιπολάζει, ὑπὸ δὲ τῶν πολλῶν ἐξηθεῖται μετὰ  
 τοῦ ἰδρώτος καὶ τοῦ πνεύματος, ἀραιουμένου τοῦ  
 σώματος ἐν τῷ πονεῖν; ὅταν μὲν οὖν ἐπιπολάσῃ  
 τὸ θερμόν, εὐχροοὶ γίνονται, καθάπερ οἱ τε θερ-  
 μαινόμενοι καὶ αἰσχυνόμενοι· ὅταν δὲ ἐκλίπῃ,  
 ἄχροοι. οἱ μὲν οὖν ἰδιῶται μέτρια γυμνάζονται,  
 οἱ δὲ ἀθληταὶ πολλά.

20 Διὰ τί μᾶλλον καίονται ὑπὸ τοῦ ἡλίου οἱ καθ- 6  
 ἐζόμενοι τῶν γυμναζομένων; ἢ ὅτι οἱ ἐν κινήσει  
 ὄντες ὥσπερ ριπίζονται ὑπὸ τοῦ πνεύματος διὰ τὸ  
 κινεῖν τὸν ἀέρα, οἱ δὲ καθήμενοι οὐ πάσχουσι  
 τοῦτο;

Διὰ τί ὁ μὲν ἥλιος ἐπικάει, τὸ δὲ πῦρ οὐ; ἢ 7

conditions, sweating in a cloak and the oiling beneath the cloak, produce the same result; for in both cases the heat is confined. Naked running produces a good colour for exactly the opposite reason, namely that the air cools the collection of secretions and ventilates the body. Moreover, oil being liquid and light, when it is smeared on and obstructs the pores, does not allow the body's moisture and breath to escape outside, nor air from outside to pass in. So the wet waste products being stifled in the body decompose and cause pallor.

Why does plenty of air give men a good colour? 4  
Is it because pallor seems to be, as it were, a decay of the skin? So when the surface is wet and warm, it tends to become pale, unless it is cooled and gives off the heat.

Why do those who sweat after gymnastic exercise 5 immediately develop a good colour, whereas athletes are pale? Is it because as a result of moderate exercise the heat burns out and comes to the surface, but with constant training the heat percolates through with the sweat and the breath, as the body becomes rarefied with the exercise? When, then, the heat is on the surface, men have a good colour, just as they have when heated or ashamed; but when the heat leaves them they are pale. Now the amateur takes moderate exercise, but the professional athlete takes much.

Why are those who sit still more burned by the 6 sun than those who take exercise? Is it because those who are in motion are, so to speak, fanned by the wind because they are moving the air, but those who are sitting still do not experience this?

Why does the sun scorch the skin, while fire does 7



967 a

25 διότι λεπτότερός ἐστιν ὁ ἥλιος, καὶ μᾶλλον δύναται διαδύεσθαι εἰς τὴν σάρκα; τὸ δὲ πῦρ, εἰ καὶ ἐπικαύσῃ, ἄνω μόνον ποιεῖ τὸ χρῶμα, τὰς φωδὰς καλουμένας· εἴσω δὲ οὐκ εἰσδύεται.

967 b

Διὰ τί τὸ πῦρ οὐ ποιεῖ μέλανας, ὁ δὲ ἥλιος 8 ποιεῖ· τὸν δὲ κέραμον ποιεῖ, ὁ δὲ ἥλιος οὐ; ἢ οὐχ ὁμοίως ἐκάτερον ποιεῖ, ἀλλ' ὁ μὲν ἐπικάων τὴν χροάν μελαίνει, τὸ δὲ πῦρ τὸν κέραμον ἀναπιμπλᾷ  
5 ἢ ἀναφέρει ἀσβόλῳ; τοῦτο δ' ἔστι λεπτῆς μαρίλης, ἀποθραυομένων ἅμα καὶ καομένων τῶν ἀνθράκων. τοὺς δὲ ἀνθρώπους ὁ μὲν ἥλιος μελαίνει, τὸ δὲ πῦρ οὐ, ὅτι τοῦ μὲν μαλθακὴ ἢ θερμότης, καὶ διὰ μικρομέρειαν δύναται τὸ δέρμα αὐτὸ κάειν· ὥστε διὰ μὲν τὸ τῆς σαρκὸς μὴ ἄπτεσθαι οὐκ ἀλγεινόν,  
10 διὰ δὲ τὸ κάειν μέλαν ποιεῖ. τὸ δὲ πῦρ ἢ οὐχ ἄπτεται ἢ εἴσω διέρχεται, ἐπεὶ μέλανα καὶ τὰ πυρίκαυστα γίνεται, ἀλλ' οὐ μόνον ἐκείνον τὸν τόπον κάει οὐ ἢ χροιά.

Διὰ τί οἱ γηράσκοντες μελάντεροι γίνονται; ἢ 9 ὅτι πᾶν σηπόμενον μελάντερον γίνεται, πλὴν  
15 εὐρώτος; ταῦτόν<sup>1</sup> δ' ἐστὶ γῆρας καὶ σαπρότης. ἔτι ἐπειδὴ τὸ αἷμα ξηραίνόμενον μελάντερον γίνεται, εἰκότως ἂν μελάντεροι εἶεν οἱ πρεσβύτεροι· τοῦτο γάρ ἐστι τὸ χρωῶζον ἡμῶν τὰ σώματα φυσικῶς.

Διὰ τί περὶ τὴν τῶν σίτων ἐργασίαν, οἱ μὲν περὶ 10 τὰς κριθὰς ἄχροι γίνονται καὶ καταρροϊκοί, οἱ δὲ περὶ τοὺς πυροὺς εὐεκτικοί; ἢ διότι εὐπεπτότερος ὁ πυρὸς τῆς κριθῆς, ὥστε καὶ αἱ ἀπόρροιαι;

<sup>1</sup> ταῦτό Forster : τοῦτο Ruelle.

## PROBLEMS, XXXVIII. 7-10

not? Is it because the sun is lighter and so can penetrate the flesh more? But the fire, even if it does burn, only affects the skin on top, producing what are called blisters; but it does not penetrate within.

Why does the fire not make us black, whereas the sun does, and why does the fire blacken potter's clay, but the sun does not? Or are the two effects produced in different ways, the sun blackening the skin by burning it, while the fire permeates potter's clay with the soot which it throws up? Soot consists of light charcoal, which forms when the coal simultaneously breaks up and burns. The sun blackens human beings and the fire does not, because the sun's heat is mild and can burn the actual skin because it consists of small particles; as it is not in contact with the flesh it is not painful, but because it burns it makes it black. But fire either does not touch the flesh at all or penetrates within it, since what is burned in fire also becomes black, but it does not burn merely that part where the colour of the body lies.

Why do those who are getting older grow darker? 9 Is it because everything which is decaying grows darker, except mildew? And old age and decay are the same thing. Moreover, since blood as it dries grows darker, naturally old men would be darker. For it is the blood which gives the natural colour to the body.

Why in connexion with work on grain do those 10 who deal with barley become pale and subject to catarrh, while those who deal with wheat are in good condition? Is it because wheat is more digestible than barley, and so also are the emanations from it?

967 a

Διὰ τί ὁ μὲν ἥλιος τὸ μὲν ἔλαιον λευκαίνει, τὴν 11  
 δὲ σάρκα μελαίνει; ἢ ὅτι τοῦ μὲν ἐλαίου ἀπάγει  
 25 τὸ γεῶδες; τοῦτο δὲ ἦν τὸ μέλαν, ὥσπερ τὸ  
 γεῶδες τοῦ οἴνου. τὴν δὲ σάρκα μελαίνει, ὅτι  
 κάει· τὸ γὰρ γεῶδες καόμενον ἅπαν γίνεται μέλαν.

PROBLEMS, XXXVIII. 11

Why does the sun bleach oil but blacken flesh ? 11  
Is it because it abstracts the earthy element from the oil ? This like the earthy element in wine is the black part of it. But the sun blackens the flesh because it burns it ; for the earthy element when burned always becomes black.



ARISTOTLE'S  
RHETORIC TO ALEXANDER



## INTRODUCTION

THE *Treatise on Rhetoric dedicated to Alexander* that has come down to us among the works of Aristotle is a practical handbook for public speakers. It merely considers the problem of how to carry conviction with an audience, and gives none of the warnings against the abuse of oratory nor any of the background of logic, psychology and ethics that render Aristotle's *Rhetoric* a philosophical work. In fact, it represents the sophistic school of rhetoric that Aristotle opposed.

Some scholars have, indeed, maintained that it is an earlier work of the master himself, later replaced by the other treatise as his authoritative treatment of the subject. But more probably it was written during the generation after his death, at the beginning of the third century B.C.,<sup>a</sup> the author basing his work on that of Aristotle, whose classificatory method he adopts with modifications, but keeping on the plane of practical utility.

It is probable that the author was also guided by the work of Isocrates, although he nowhere mentions him. Of Isocrates' *Techne Rhetorike* some fragments

<sup>a</sup> The latest event referred to is the expedition of the Corinthians under Timoleon to aid Syracuse against the Carthaginians in 341 B.C. There is no reference that supplements this *terminus a quo* with a *terminus ad quem*.

## INTRODUCTION

survive (see the Teubner *Isocrates*, pp. 275 ff.), and these are partly echoed in our treatise.

The name of the book and its ascription to Aristotle are due to the preface ; this is in the form of a letter from Aristotle to Alexander during the period of his campaign of conquest in the East. The writer presents to his former pupil a work (or works) on rhetoric, and lectures him like a schoolboy on the importance of the study ! This effusion has been rejected as spurious by most scholars from Erasmus onwards ; it reads like a particularly unconvincing forgery, ignoring as it does the change of relation that had taken place between professor and pupil. However, an attempt has been made by Wendland <sup>a</sup> to retain it as genuinely the work of Anaximenes (whom he regards as the author of the treatise)—a preface clumsily modified later to add value to the work by ascribing it to Aristotle !

‘As to the treatise itself,’ writes Cope,<sup>b</sup> ‘though there is *some* general correspondence, in the treatment and topics selected and illustrated, between this author and Aristotle, yet the numerous and important differences in detail, as well as the marked inferiority in subtlety and spirit, power and interest, the entire absence of the logical element in this work, the striking contrast of *style* between them—here often obscure from its vagueness and indefiniteness though otherwise clear and simple, but feeble and inexpressive ; there, also often obscure and elliptical, but characterized by a terse and pregnant brevity—the more scientific exactness, and the much higher moral tone that appear in Aristotle’s work, all unite to prove

<sup>a</sup> *Hermes*, xxxix. 499.

<sup>b</sup> *Introduction to Aristotle’s Rhetoric*, pp. 401 ff.

## ARISTOTLE

beyond the possibility of doubt that the two arts of Rhetoric could not have proceeded from the same intellect, taste, judgement and moral standard. The *Rhet. ad Alex.* is a work proceeding from an entirely different and inferior order of mind and character.'

The ascription of the authorship to Anaximenes is based on a passage in Quintilian (III. iv. 9, Spalding vol. i. p. 455) :

*Anaximenes iudicialem et concionalem generales partes esse uoluit ; septem autem species hortandi, dehortandi, laudandi, uituperandi, accusandi, defendendi, exquirendi (quod ἐξισταστικόν dicit) : quarum duae primae deliberatiui, duae sequentes demonstratiui, tres ultimae iudiciales generis sunt partes.'*

This analysis of rhetoric does not, it is true, tally exactly with our treatise, where the bipartite division with which Quintilian begins does not occur ; but even in Quintilian this clashes with the tripartite division that follows—in fact his scheme looks like a careless conflation of two distinct schemes. The bipartite division follows Dionysius of Halicarnassus, *De Oratoribus Antiquis* (Reiske vol. v. p. 626), who says that Anaximenes 'has also handled deliberative and forensic debates,' ἡπται δὲ καὶ συμβουλευτικῶν καὶ διανοητικῶν ἀγώνων. But Quintilian's arrangement of seven species in three genera tallies with our book, except that it classes *exquirendi species* as a third division of *iudiciale genus*, whereas in the Greek work *Exetastikon* stands alone as an independent form of oratory, though it can also be introduced into speeches of any of the other kinds.

The identification of the book before us with the one described by Quintilian was first made by Publius

## RHETORIC TO ALEXANDER

Victorius in his preface to the *Rhetoric* of Aristotle ; it is accepted as probable by Spalding in his edition of Quintilian and by Spengel, Hammer, and Grenfell and Hunt on the present work. Professor Forster thinks this was in any case written shortly before 300 B.C. by a Peripatetic, contemporary with Theophrastus.

Anaximenes of Lampsacus is said to have been a tutor of Alexander ; he went with him on his Asiatic expedition. He wrote histories of Philip and of Alexander, and a history of Greece from the mythical age down to the battle of Mantinea ; of each of these works a few fragments have been preserved. He was also an orator, and a teacher of rhetoric, and he composed speeches for others to deliver. As a specimen of his work he published (under another man's name) an oration decrying Sparta, Athens and Thebes.

The text of the present edition is based on that of Bekker in the Berlin Aristotle published in 1831, where it occupies pp. 1420-1447 in the second volume. References to the page, column (*a* and *b*) and line of that edition are printed in the margin of the text. Use has also been made of the text of Spengel as revised by Hammer in 1894 (Teubner, *Rhetores Graeci*, i. ii. pp. 8 ff.) and of valuable textual notes added by Professor E. S. Forster to his translation of the book in the Oxford *Works of Aristotle Translated*, vol. xi. The Teubner text was based on a collation of eleven mss., which the editors divide into two groups, one of five copies of superior value (which they subdivide into groups of three and two), the other a group of six inferior copies. Since then the ms. evidence has been supplemented by a

## ARISTOTLE

papyrus found in Egypt and published by Grenfell and Hunt in 1906 (*Hibeh Papyrus*, Part I. No. 26, pp. 114-138); this contains eight fragments of the book, covering in all about 180 lines or  $2\frac{1}{2}$  pages of the Berlin edition. Grenfell and Hunt date the writing in the first half of the third century B.C., which puts this copy within about two generations of the authorship and seventeen centuries before the oldest of the mss. previously extant; these belong to the fifteenth and sixteenth centuries.

In the textual notes of this edition the readings of the papyrus are occasionally quoted under the title II. Only a few other variants of special interest are added, indicated merely as v.ll.

As to the translation, it is necessary to explain that no attempt has been made to render it either as literal or as idiomatic as possible; it is designed to assist the reader of the Greek, and not to substitute an English book for it. The rendering of technical terms is always a difficulty; in this book, as the Greek is to hand, they are Englished as far as possible: for instance the *Ecclesia*, being the Commons of Athens in Parliament assembled, figures as 'parliament' and the oratory addressed to it as 'parliamentary.' The kaleidoscopic term *λόγος* must always evade the translator; he may be pardoned if he varies his version with the context, and uses 'word,' 'spoken word,' 'speech,' 'rational speech,' 'argument,' 'reason,' etc., as the spirit moves him. Some variation of the rendering of other terms is desirable, either to indicate the varieties of meaning in different contexts or merely to warn the reader that no English word is an exact equivalent of the Greek.

# RHETORIC TO ALEXANDER

## OUTLINE OF THE TREATISE

The essay begins with a scientific classification of c. i.  
the kinds of oratory. It is divided into three Genera—demegoric or Parliamentary, epideictic or Ceremonial, and dicanic or Forensic (viz. speeches delivered in the ecclesia, at festivals and other public gatherings, and in the law-courts); and into seven Species—Exhortation and Dissuasion, Eulogy and Vituperation, Prosecution and Defence (each of these pairs falling under one of the Genera), and lastly Investigation, which may either stand alone or (as is more usual, c. xxxvii. *init.*), be introduced into an oration of any genus.

Common topics used in orations of the first genus are justice, legality, expediency, honour, facility, practicability and necessity. Illustrations are given of the first three.

Next the subjects of oratory are reviewed. c. ii.  
Parliamentary speeches support or oppose proposals as to matters of religious ritual, legislation and constitutional reform, foreign policy (alliances, and peace and war), finance. Materials are suggested for enlarging on these subjects.

Ceremonial orations of eulogy or vituperation deal c. iii.  
with a person's character and fortunes, and with his conduct in youth and manhood, amplifying the creditable and minimizing the discreditable points, or *vice versa*.

Forensic speeches advance or refute charges of c. iv.  
error and crime. Various modes of accusation are described, and three methods of defence.

Investigation exposes inconsistencies in a man's c. v.  
conduct or statements.



## ARISTOTLE

- c. vi. Elements common to all species—in addition to (1) the common topics enumerated with special reference to political oratory in c. i., and (2) the methods of amplification and minimization that in c. iii. were specially attached to the ceremonial genus—are (3) proofs, and (4) anticipation, postulation, recapitulation, length of speech, explanation.
- c. vii.-xiii. Proofs are either (1) direct, employing probabilities, examples, tokens (infallible), 'enthymemes' or considerations, maxims, signs (fallible) and refutations—the distinctions between which are explained ;
- c. xiv. or (2) supplementary, based on the opinion of the speaker, evidence given voluntarily by witnesses or extracted under torture, and unproved affirmations made on oath.
- c. xv.-xvii.
- cc. xviii.-xxviii. Next are discussed Anticipation of the probable arguments of the other side, Appeals to the court for attention, justice and sympathy, Repetition to drive home one's case, Irony, Elegancies of style, Length of speech appropriate to different cases, Choice and Arrangement of words, and Forms of Sentence—viz. Antithesis, Parisosis or parallelism of construction, and Paromoeosis or parallelism of sound.
- c. xxiix. Structure of a Parliamentary speech of Exhortation or Dissuasion : (1) Introduction—preliminary statement of the case, request for attention, and conciliation of the audience when friendly, or neutral, or hostile either owing to misrepresentation of the past or the present, or owing to one's personality, or to the circumstances.
- cc. xxx.-xxx. (2) Exposition, stating past facts or the present situation or anticipating the future, must be clear in style, brief and convincing. Arrangement of material.

## RHETORIC TO ALEXANDER

Confirmation by proof, or if the facts are obvious, by general considerations.

(3) Anticipation of the arguments of the other side. c. xxxiii.

(4) Appeal to feelings of friendship, gratitude and pity in Exhortation, of envy and hatred in Dissuasion. c. xxxiv.

Structure of Ceremonial orations of Eulogy or Vituperation, praising or criticizing the subjects, character, pedigree, fortune, and past conduct in youth and manhood. c. xxxv.

Structure of Forensic speeches—(a) in Prosecution : c. xxxvi.

(1) Introduction : conciliation of goodwill of the court for one's client ; refutation of misrepresentations. (2) Proof of the charge. (3) Anticipation of defendant's arguments. (4) Recapitulation. (b) In Defence : refutation of prosecutor's proof of his charge, or (admitting the action charged) justification or palliation ; reply to prosecutor's anticipation of your case ; rhetorical questions ; means to gain the goodwill of the court and to cause dislike of your opponent.

Structure of Investigational oratory (when used in a separate speech) : the introduction must create a favourable impression ; heads of criticism ; gentle tone and conciliatory bearing. c. xxxvii.

Miscellaneous : modes of making a political proposal ; modes of proof ; perorations ; personality of the speaker. c. xxxviii.

The book ends with a passage, unquestionably a spurious addition, in which various disconnected subjects are glanced at—sacrificial ritual, friendships and alliances, defence, revenue, foreign policy, good citizenship, generosity, means to victory, rupture of alliances, righteous conduct, goods of body and of mind.

ΑΡΙΣΤΟΤΕΛΟΥΣ  
ΡΗΤΟΡΙΚΗ ΠΡΟΣ ΑΛΕΞΑΝΔΡΟΝ

ΑΡΙΣΤΟΤΕΛΗΣ ΑΛΕΞΑΝΔΡΩΙ ΕΥ ΠΡΑΤΤΕΙΝ

- 1420 a Ἐπέστειλās μοι ὅτι πολλάκις πολλοὺς πέπομφας  
πρὸς ἡμᾶς τοὺς διαλεξομένους ὑπὲρ τοῦ γραφῆναί  
σοι τὰς μεθόδους τῶν πολιτικῶν λόγων. ἐγὼ δὲ  
οὐ διὰ ῥαθυμίαν ὑπερεβαλλόμεν ἔν τούτοις τοῖς  
10 χρόνοις, ἀλλὰ διὰ τὸ ζητεῖν οὕτως ὑπὲρ αὐτῶν  
γραφῆναί σοι διηκριβωμένων ὥς οὐδεὶς ἄλλος γέ-  
γραφε τῶν περὶ ταῦτα πραγματευομένων. ταύτην  
δὲ εἰκότως τὴν διάνοιαν εἶχον· ὥσπερ γὰρ ἐσθῆτα  
σπουδάξεις τὴν εὐπρεπεστάτην τῶν λοιπῶν ἀνθρώ-  
πων ἔχειν, οὕτω δύναμιν λόγων λαβεῖν ἐστί σοι  
15 πειρατέον τὴν εὐδοξοτάτην· πολὺ γὰρ κάλλιον ἐστί  
καὶ βασιλικώτερον τὴν ψυχὴν ἔχειν εὐγνωμονοῦσαν  
ἢ τὴν ἔξιν τοῦ σώματος ὁρᾶν εὖειματοῦσαν. καὶ  
γὰρ ἄτοπόν ἐστί τὸν τοῖς ἔργοις πρωτεύοντα φαί-  
νεσθαι τῶν τυχόντων τοῖς λόγοις ὑστερίζοντα, καὶ  
ταῦτα εἰδότα ὅτι τοῖς μὲν ἐν δημοκρατίᾳ πολιτενο-  
20 μένοις ἢ ἀναφορὰ περὶ πάντων τῶν πραγμάτων εἰς  
τὸν νόμον<sup>1</sup> ἐστί, τοῖς δ' ὑπὸ τὴν τῆς βασιλείας

<sup>1</sup> C. F. Hermann: δῆμον codd.

# ARISTOTLE'S RHETORIC TO ALEXANDER

*Aristotle to Alexander. Salutations.<sup>a</sup>*

1420 a

You write to me that you have again and again sent people to me to speak about my composing for you a treatise on the principles of political oratory. It is not indolence on my part that has caused me to keep putting it off all this time, but the endeavour to have a treatise on the subject written for you with a degree of accuracy that has not yet been attained by any other of the authors dealing with it. And there was a good reason for my having this intention ; for just as it is your desire to wear the most splendid attire of all mankind, so it is proper that you should attempt to attain the most distinguished ability in rational discourse,<sup>b</sup> since it is much nobler and more kingly to possess wisdom of mind than to see one's bodily form finely appavelled. Indeed it would be strange that he who holds the first place in action should be seen to lag behind ordinary people in discourse, and this when he knows that whereas under democratic government all matters of public business are referred to the law, with nations ranged under royal leader-

<sup>a</sup> On this introductory letter, probably spurious, see Introduction, pp. 258 ff.

<sup>b</sup> On λόγος see p. 262.

1420 a ἡγεμονίαν τεταγμένοις πρὸς λόγον. ὥσπερ οὖν  
 τὰς αὐτονόμους τῶν πόλεων διορθοῦν εἴωθεν ἐπὶ  
 τὸ κάλλιστον ἄγων ὁ κοινὸς νόμος, οὕτω τοὺς ὑπὸ  
 25 τὴν σὴν βασιλείαν καθεστῶτας ἄγειν δύναται ἂν ἐπὶ  
 τὸ συμφέρον ὁ σὸς λόγος. καὶ γὰρ ὁ νόμος ἐστὶν  
 ὡς ἀπλῶς εἰπεῖν λόγος ὠρισμένος καθ' ὁμολογίαν  
 κοινὴν πόλεως, μηνύων πῶς δεῖ πράττειν ἕκαστα.

Πρὸς δὲ τούτοις οὐκ ἄδηλον οἶμαί σοι τοῦτ' ἐστίν,  
 ὅτι τοὺς μὲν λόγῳ χρωμένους καὶ μετὰ τούτου  
 πάντα πράττειν προαιρουμένους ὡς ὄντας καλοὺς  
 τε καὶ ἀγαθοὺς ἐπαινοῦμεν, τοὺς δὲ ἄνευ λόγου τι  
 1420 b 5 ποιοῦντας ὡς ὄντας ὠμοὺς καὶ θηριώδεις μισοῦμεν.  
 διὰ τούτου<sup>1</sup> καὶ τοὺς<sup>2</sup> κακοὺς αὐτῶν τὴν<sup>3</sup> κακίαν  
 ἐμφανίσαντας ἐκολάσαμεν, καὶ τοὺς ἀγαθοὺς δηλώ-  
 σαντας αὐτῶν τὴν ἀρετὴν ἐξηλώσαμεν. τούτῳ<sup>4</sup> καὶ  
 τῶν μελλόντων κακῶν ἀποτροπὴν εὐρήκαμεν καὶ  
 τῶν ὑπαρχόντων ἀγαθῶν ὄνησιν ἐσχήκαμεν,<sup>5</sup> καὶ  
 10 διὰ τούτου καὶ τὰς ἐπιούσας δυσχερείας ἐφύγομεν  
 καὶ τὰς μὴ προσούσας ἡμῖν ὠφελείας ἐπορισάμεθα.  
 ὥσπερ γὰρ βίος ἄλυπος αἰρετός, οὕτω λόγος συ-  
 νετός ἀγαπητός. εἰδέναι δέ σε δεήσει ὅτι παρα-  
 δείγματα ἐστὶ τοῖς πλείστοις τῶν ἀνθρώπων τοῖς  
 15 μὲν ὁ νόμος τοῖς δὲ ὁ σὸς βίος καὶ λόγος· ὅπως  
 οὖν διαφέρων ἥς πάντων Ἑλλήνων καὶ βαρβάρων  
 πᾶσάν ἐστί σοι σπουδὴν ποιητέον, ἵνα τὴν ἐκ  
 τούτου ἀπομίμησιν οἱ περὶ ταῦτα διατρίβοντες τοῖς  
 τῆς ἀρετῆς στοιχείοις καλλιγραφούμενοι μὴ πρὸς  
 τὰ φαῦλα σφᾶς αὐτοὺς ἄγωσιν ἀλλὰ καὶ<sup>6</sup> τῆς  
 αὐτῆς ἀρετῆς μετέχειν ἐπιθυμῶσιν.

20 Ἔτι δὲ τὸ βουλευέσθαι τῶν περὶ τὸν ἄνθρωπον

<sup>1</sup> v.l. τοῦτο.

<sup>2</sup> τοὺς add. Sp. (Spengel).

<sup>3</sup> Sp.: τὴν αὐτῶν codd.

<sup>4</sup> Sp.: οὕτω codd.

## RHETORIC TO ALEXANDER

1420 a

ship the reference is to reason. As, therefore, self-governing states are customarily guided to the noblest course by the common law, so the capacity to lead those who are under your royal government to an advantageous policy will rest with your reason. In <sup>25</sup> fact, to put it simply, law is reason defined in accordance with a common agreement of the state, setting forth how men are to act in each matter.

Moreover, I think it must be manifest to you that we praise as noble and good those persons who employ <sup>30</sup> reason and who make a principle of carrying on all their affairs with its aid, whereas we hate those who act without reason as being savage and bestial. By <sup>1420 b</sup> means of reason<sup>a</sup> we are wont to punish the bad when <sup>5</sup> they display their badness and to applaud the good when they manifest their goodness. By it we have discovered means to avert impending evils, and have <sup>10</sup> had the benefit of existing goods, and by its aid we are wont to escape approaching annoyances and to procure advantages that we do not possess. For just as life without pain is desirable, so is wise reason acceptable. And it will be proper for you to know that the greatest part of mankind regulate their conduct either by the law or by your life and principle ; <sup>15</sup> therefore you must make every effort to excel all Greeks and foreigners, in order that those who occupy themselves in these pursuits may by means of the elements of virtue draw a fair copy therefrom, and so may not guide themselves to what is evil but may aspire to participate even in the same goodness.

Moreover, of all human things counsel is the most <sup>20</sup>

<sup>a</sup> Or, reading *διὰ τοῦτο*, 'For this cause . . .'

<sup>b</sup> Rac. (Rackham): *ἔσχομεν* codd.

<sup>c</sup> καὶ om. v.l.



1420 b

θειότατόν ἐστιν, ὥστε οὐκ εἰς τὰ πάρεργα καὶ  
 μηδενὸς ἄξια τὴν σπουδὴν ἐστὶ σοι καταναλωτέον,  
 ἀλλὰ τὴν μητρόπολιν αὐτὴν τοῦ καλῶς βουλευέσθαι  
 μαθεῖν βουλευτέον. τίς γὰρ δὴ ποτ' ἂν ἀμφισβη-  
 τήσῃ τῶν νοῦν ἔχόντων ὅτι τὸ μὲν πράττειν μὴ  
 25 βουλευσάμενον σημείον ἐστὶν ἀνοίας, τὸ δὲ κατὰ  
 τὴν ὑφήγησιν τοῦ λόγου συντελεῖν τι τῶν ὑπ'  
 ἐκείνου παραγγελθέντων παιδείας; ἰδεῖν δὲ ἔστι  
 πάντας τοὺς ἀριστα τῶν Ἑλλήνων πολιτευομένους  
 λόγῳ πρῶτον ἢ τοῖς ἔργοις συγγινομένους, πρὸς δὲ  
 τούτοις καὶ τοὺς μέγιστον ἀξίωμα τῶν βαρβάρων  
 30 ἔχοντας τούτῳ πρὸ τῶν πραγμάτων χρωμένους,  
 1421 a εἰδότας καλῶς ὡς ἀκρόπολις ἐστὶ σωτηρίας ἢ διὰ  
 τοῦ λόγου γινομένη τοῦ συμφέροντος θεωρία.  
 ταύτην ἀπόρθητον οἰητέον, οὐ τὴν ἐκ τῶν οἰκο-  
 δομημάτων ἀσφαλῆ πρὸς σωτηρίαν εἶναι νομιστέον.  
 Ἄλλὰ γὰρ ὁκνῶ ἔτι πλείω γράφειν, μὴ ποτε  
 5 καλλωπίζεσθαι δόξῳ περὶ τῶν ἀκριβῶς γνωριζο-  
 μένων ὡς οὐχ ὁμολογουμένων πίστει ἐπιφέρων.  
 διόπερ ἀφήσω, ἐκεῖνα μόνον εἰπὼν περὶ ὧν ἔστι<sup>1</sup>  
 λέγειν εἰς ἅπαντα τὸν βίον, ὅτι τοῦτό ἐστιν ὧ  
 διαφέρομεν τῶν λοιπῶν ζώων [τοῦτο οὖν καὶ ἡμεῖς  
 διαφέρων τῶν λοιπῶν ἔξομεν ἀνθρώπων]<sup>2</sup> οἱ μεγίστης  
 10 τιμῆς ὑπὸ τοῦ δαιμονίου τετυχηκότες· ἐπιθυμία μὲν  
 γὰρ καὶ θυμῷ καὶ τοῖς τοιοῦτοις χρήται καὶ τὰ  
 λοιπὰ ζῶα πάντα, λόγῳ δὲ οὐδέν τῶν λοιπῶν χωρὶς  
 ἀνθρώπων. ἀτοπώτατον οὖν ἂν<sup>3</sup> εἶη πάντων, εἰ  
 τούτῳ μόνῳ τῶν λοιπῶν ζώων εὐδαιμονέστερον  
 βιοῦντες τὸ αἴτιον τοῦ καλῶς εἶναι διὰ ῥαθυμίας  
 15 ἀφεῖμεν<sup>4</sup> κατολιγωρήσαντες. διακελεύομαι δὴ σοι

<sup>1</sup> v.l. ἔνεστι.<sup>3</sup> v.ll. ἂν οὖν, ἂν, δ' ἂν.<sup>2</sup> secl. edd.<sup>4</sup> Sp.: ἀφώμεν codd.

## RHETORIC TO ALEXANDER

divine, so that you must not waste your zeal on <sup>1420 b</sup> secondary or worthless matters but resolve to gain a knowledge of the very mother-city of wise counsel. For what person possessing intelligence could ever <sup>25</sup> question that it is a sign of folly to act without deliberation, and a mark of education to accomplish by the guidance of reason something that reason commands? It may be seen that all the peoples of Greece possessing the best governments engage in discussion before embarking on action, and in addition to these, those foreigners also that have the highest repute employ discussion before action, well know- <sup>30</sup> ing that the consideration of what is expedient by <sup>1421 a</sup> means of discussion is the citadel of safety. That is the citadel which should be deemed impregnable—no fortress that consists of buildings should be thought safe and secure.

However, I am reluctant to continue writing more, lest perchance, if I bring forward proofs about matters of precise knowledge as if they were not admitted truths, I may be thought to be showing off. I will therefore desist, only stating what may be asserted as regards the whole of life, that it is in this that we are superior to the other living creatures—we upon whom divine power has bestowed the greatest honour; for appetite and <sup>10</sup> passion and the like are experienced by all the other living creatures also, but none of them except man employs reason. So it would be the strangest of all things if, while it is by means of reason only that we live more happily than the other animals, owing to slackness of spirit we were to despise and to relinquish that which is the cause of our well-being. I therefore <sup>15</sup>

1421 a

πάλαι παρακεκλημένω τῆς τῶν λόγων ἀντέχεσθαι φιλοσοφίας. καθάπερ γάρ ἐστι φυλακτικὸν σώματος ὑγίεια, οὕτω ψυχῆς φυλακτικὸν κατέστηκε παιδεία. ταύτης γὰρ προηγουμένης οὐ πταίειν συμβήσεται σοι περὶ τὰς πράξεις, ἀλλὰ σώζειν  
 20 ἀπάσας ὡς ἔπος εἰπεῖν τὰς ὑπαρχούσας σοι τῶν ἀγαθῶν κτήσεις. χωρὶς δὲ τῶν εἰρημένων, εἰ τὸ τοῖς ὀφθαλμοῖς βλέπειν ἡδύ, τὸ<sup>1</sup> τοῖς τῆς ψυχῆς ὁμμασιν ὀξυδορκεῖν ἐστὶ θαυμαστόν. ἔτι δὲ ὥσπερ ὁ στρατηγός ἐστι σωτὴρ στρατοπέδου, οὕτω<sup>2</sup> λόγος μετὰ παιδείας ἡγεμών ἐστι βίου.

25 Ταυτὶ μὲν οὖν καὶ τὰ τούτοις ὅμοια παραλιπεῖν νομίζω καλῶς ἡμῖν ἔχειν κατὰ τὸν ὑπάρχοντα καιρόν.

Ἐγραψας δέ μοι διακελευόμενος ὅπως μηδεὶς τῶν λοιπῶν ἀνθρώπων λήψεται τὸ βιβλίον τοῦτο, καὶ ταῦτα εἰδὼς ὅτι καθάπερ τοὺς ἐξ αὐτῶν γεννηθέντας οἱ γεννήσαντες τῶν ὑποβαλλομένων  
 30 μᾶλλον φιλοῦσιν, οὕτω καὶ οἱ εὐρόντες τι τῶν μετεχόντων· ὥσπερ γὰρ ὑπὲρ τέκνων, οὕτω<sup>3</sup> τῶν λόγων ὑπεραποτεθνήκασιν.<sup>4</sup> οἱ μὲν γὰρ Πάριοι λεγόμενοι σοφισταὶ διὰ τὸ μὴ τεκεῖν αὐτοὶ διὰ ῥαθυμίαν ἄμουσον οὐ στέργουνσιν, ἀλλὰ χρήματα λαβόντες ἀποκηρύττουσιν. διὰ τοῦτο οὖν ἐγὼ σοι  
 35 παρακελεύομαι διαφυλάττειν οὕτω τοὺς λόγους τούτους ὅπως νέοι καθεστῶτες ὑπὸ μηδενὸς<sup>5</sup> διαφθαρήσονται, κοσμίως δὲ μετὰ σοῦ συμβιώσαντες, εἰς ἡλικίαν ἐλθόντες δόξης ἀκηράτου<sup>6</sup> τεύξονται.

<sup>1</sup> τὸ om. v.l.<sup>2</sup> v.l. οὕτω καί.<sup>3</sup> Sp.: τούτων codd.<sup>4</sup> v.l. ὑπεραποθνήσκουσι.<sup>5</sup> v.l. μηδενὸς χρήμασι.<sup>6</sup> ἀγηράτου Ipselkofer.

## RHETORIC TO ALEXANDER

1421 a

unceasingly exhort you to hold fast to the study of reasoned speech, to which you have long been urged. For education constitutes the safeguard of the mind, in the same way as health is the safeguard of the body ; since when education guides it will not befall you to stumble in the path of conduct, but to preserve almost all the good possessions that are your property. And apart from what has been said, if to see with the bodily eyes is pleasant, the penetrating vision of the eyes of the mind is marvellous. And again, as the general is the preserver of the army, so reason coupled with education is the guide of life.

These particular matters, then, and those similar to them I think we may well at the present season leave on one side.

You command me in your letter not to allow this book to come into the possession of anyone else whatever, and this when you know that those who have made some discovery love it more than those to whom it is imparted, just as parents love their own offspring more than changelings ; for discoverers have given their lives on behalf of their theories, as on behalf of children. For the Parian sophists, as they are called, because owing to their uncultured slackness of mind they did not themselves give birth to their doctrines, have no affection for them, but hawk them about on sale for money. On that account I exhort you to guard these discourses in such a manner that while they are still young they may not be corrupted by anyone, but may pass their lives with you in orderly wise, and when they arrive at adult years they may attain unsullied <sup>a</sup> glory.

<sup>a</sup> It seems unnecessary to change the ms. reading to ἀγῆρατον, 'unaging' (Forster).

1421 a

Παρειλήφαμεν δέ, καθάπερ ἡμῖν ἐδήλωσε Νικάνωρ, καὶ τῶν λοιπῶν τεχνογράφων εἴ τις τι  
 40 γλαφυρὸν ὑπὲρ τῶν αὐτῶν τούτων γέγραφεν ἐν ταῖς  
 1421 b τέχναις. περιτεύξῃ δὲ δυσὶ τούτοις<sup>1</sup> βιβλίοις, ὧν  
 τὸ μὲν ἐστὶν ἐμόν, ἐν ταῖς ὑπ' ἐμοῦ τέχναις Θεο-  
 δέκτῃ γραφείσαις, τὸ δὲ ἕτερον Κόρακος. τὰ δὲ  
 λοιπὰ τούτοις ἰδίᾳ πάντα γέγραπται περὶ τε τῶν  
 πολιτικῶν καὶ τῶν δικανικῶν παραγγελμάτων· ὅθεν  
 5 πρὸς ἑκάτερον αὐτῶν εὐπορήσεις ἐκ τῶνδε τῶν  
 ὑπομνημάτων σοι γεγραμμένων. ἔρρωσο.

I. Τρία<sup>2</sup> γένη τῶν πολιτικῶν εἰσὶ λόγων, τὸ μὲν  
 δημηγορικόν, τὸ δ' ἐπιδεικτικόν, τὸ δὲ δικανικόν.  
 εἶδη δὲ τούτων ἑπτὰ, προτρεπτικόν, ἀποτρεπτικόν,  
 10 ἐγκωμιαστικόν, ψεκτικόν, κατηγορικόν,<sup>3</sup> ἀπολογη-  
 τικόν καὶ ἐξεταστικόν, ἢ αὐτὸ καθ' αὐτὸ ἢ πρὸς  
 ἄλλο. τὰ μὲν οὖν εἶδη τῶν λόγων τοσαῦτα ἀριθμῶ  
 ἐστίν, χρησόμεθα δὲ αὐτοῖς ἐν τε ταῖς κοιναῖς  
 δημηγορίαις καὶ ταῖς περὶ τὰ συμβόλαια δικαιο-  
 λογίαις καὶ ταῖς ἰδίαις ὁμιλίαις. οὕτω δ' ἂν ἐτοι-  
 15 μότατον λέγειν περὶ αὐτῶν δυνηθείημεν εἰ καθ'<sup>4</sup> ἐν  
 ἑκάστον εἶδος ἀπολαβόντες ἀπαριθμησαίμεθα τὰς  
 δυνάμεις αὐτῶν καὶ τὰς χρήσεις καὶ τὰς τάξεις.<sup>5</sup>

<sup>1</sup> τοιούτοις? (sed cf. τοῦτο l. 37) Forster.

<sup>2</sup> δύο Sp. (et [τὸ δ' ἐπιδεικτικόν] l. 8).

<sup>3</sup> Sp. (cf. 1426 b 22, 25): κατηγορητικόν.

<sup>4</sup> v.l. εἰ καὶ καθ'.

<sup>5</sup> Sp.: πράξεις.

<sup>a</sup> i.e. 'you will be able to correct and amplify both from my essay' (Wendland).

<sup>b</sup> According to Quintilian III. iv. 9 Anaximenes specified only two kinds of oratory, deliberative and forensic; and it

## RHETORIC TO ALEXANDER, I.

Following the lesson taught us by Nicanor, we have adopted from other writers anything that has been 40 well expressed by anybody writing on the same subjects. You will find two books of this class ; one 1421 b of them is my own—I refer to the treatise that I wrote for Theodectes, the other is the work of Corax. The remaining points in regard to the rules of political and forensic oratory have all been dealt with separately in those treatises. So from the present memoranda, written specially for you, you will be 5 well supplied with regard to each of them.<sup>a</sup> Farewell.

---

I. Public speeches are of three kinds,<sup>b</sup> parliamentary,<sup>c</sup> ceremonial and forensic. Of these there are seven species,<sup>d</sup> exhortation, dissuasion, eulogy, vituperation, accusation, defence, and investigation—either by itself or in relation to another species. This list enumerates the species to which public speeches belong ; and we shall employ them in parliamentary debates, in arguing legal cases about contracts, and in private intercourse.<sup>e</sup> We may be able to discuss them most readily if we take the species seriatim and enumerate their qualities,<sup>f</sup> their uses <sup>g</sup> and their arrangement.<sup>h</sup>

*Oratory: its varieties classified.*

<sup>15</sup>  
*Procedure of the treatise.*

is noticeable that the order of the three here given is varied just below, ll. 12 ff. But *cf.* 1432 b 8.

<sup>c</sup> Addressed to the *Demos* in the *Ecclesia*, the Commons in Parliament assembled.

<sup>d</sup> It must be remembered that the Greek word is a technical term of natural history, in which it denotes the smaller groups into which each genus or kind is subdivided.

<sup>e</sup> *i.e.* the first, third and second kinds of speech enumerated at the start.

<sup>f</sup> These follow here.

<sup>g</sup> 1427 b 39 ff.

<sup>h</sup> 1436 a 28 ff.



Καὶ πρῶτον μὲν τὰς προτροπὰς καὶ ἀποτροπὰς, ἐπεὶ περ ἐν ταῖς ἰδίαις ὁμιλίαις καὶ ταῖς κοιναῖς δημηγορίαις ἐν τοῖς μάλιστα αὐτῶν χρήσις ἐστὶ, 20 διέλθωμεν.<sup>1</sup>

Καθόλου μὲν οὖν εἰπεῖν, προτροπὴ μὲν ἐστὶν ἐπὶ προαιρέσεις ἢ λόγους ἢ πράξεις παρακλήσεις, ἀποτροπὴ δὲ ἀπὸ προαιρέσεων ἢ λόγων ἢ πράξεων διακώλυνσις. οὕτω δὲ τούτων διωρισμένων, τὸν μὲν προτρέποντα χρὴ δεικνύειν ταῦτα ἐφ' ᾧ παρακαλεῖ 25 δίκαια ὄντα καὶ νόμιμα καὶ συμφέροντα καὶ καλὰ καὶ ἡδέα καὶ ῥάδια πραχθῆναι· εἰ δὲ μή, δυνατά τε δεικτέον, ὅταν ἐπὶ δυσχερῇ παρακαλῇ, καὶ ὡς ἀναγκαῖα ταῦτα ποιεῖν ἐστίν. τὸν δὲ ἀποτρέποντα δεῖ διὰ τῶν ἐναντίων κώλυσιν ἐπιφέρειν, ὡς οὐ δίκαιον οὐδὲ νόμιμόν ἐστιν οὐδὲ συμφέρον οὐδὲ 30 καλὸν οὐδὲ ἡδὺ οὐδὲ δυνατόν πράττειν τοῦτο, εἰ δὲ μή, ὡς ἐργῶδες καὶ οὐκ ἀναγκαῖον. ἅπασαι δ' αἱ πράξεις μετέχουσι τούτων ἀμφοτέρων, ὥστε μηδένα τὴν ἑτέραν<sup>2</sup> τῶν ὑποθέσεων ἔχοντα<sup>3</sup> λόγων ἀπορεῖν.

Ὡν μὲν οὖν ὀρέγεσθαι δεῖ τοὺς προτρέποντας καὶ ἀποτρέποντας, ταῦτά ἐστιν· ὀρίσασθαι δὲ πειρά- 35 σομαι τούτων ἕκαστον τί ἐστίν, καὶ δεῖξαι πόθεν αὐτῶν εἰς τοὺς λόγους εὐπορήσομεν.

Δίκαιον μὲν οὖν ἐστὶ τὸ τῶν ἀπάντων ἢ τὸ τῶν πλείστων ἔθος ἄγραφον, διορίζον τὰ καλὰ καὶ τὰ αἰσχροτά. ταῦτα<sup>4</sup> δ' ἐστὶ τὸ γονέας τιμᾶν καὶ φίλους εὖ ποιεῖν καὶ τοῖς εὐεργέταις χάριν ἀποδιδόναι· 40 ταῦτα γὰρ καὶ τὰ τούτοις ὅμοια οὐκ ἐπιτάττουσι<sup>5</sup> τοῖς ἀνθρώποις οἱ γεγραμμένοι νόμοι ποιεῖν, ἀλλ'

<sup>1</sup> Sp.: διέλθοιμεν ἄν.

<sup>2</sup> Kayser: ὥστε μηδετέραν.

<sup>3</sup> [ἔχοντα] Sp.

<sup>4</sup> Rac.: τοῦτο.

<sup>5</sup> v.l. οὐ προσατττουσι.

## RHETORIC TO ALEXANDER, I.

First let us discuss exhortation and dissuasion, as these are among the forms most employed in private conversation and in public deliberation.

Speaking generally, exhortation is an attempt to urge people to some line of speech or action, and dissuasion is an attempt to hinder people from some line of speech or action. These being their definitions, one delivering an exhortation must prove that the courses to which he exhorts are just, lawful, expedient, honourable, pleasant and easily practicable ; or failing this, in case the courses he is urging are disagreeable, he must show that they are feasible, and also that their adoption is unavoidable. One dissuading must apply hindrance by the opposite means : he must show that the action proposed is not just, not lawful, not expedient, not honourable, not pleasant and not practicable ; or failing this, that it is laborious and not necessary. All courses of action admit of both these descriptions, so that no one having one or other of these sets of fundamental qualities available need be at a loss for something to say.

These, then, are the lines of argument at which those exhorting or dissuading ought to aim. I will try to define the nature of each, and to show from 35 what sources we can obtain a good supply of them for our speeches.

What is just is the unwritten custom of the whole or the greatest part of mankind, distinguishing honourable actions from base ones. The former are to honour one's parents, do good to one's friends and repay favours to one's benefactors; for these and 40 similar rules are not enjoined on men by written

1422 a ἔθει<sup>1</sup> ἀγράφῳ καὶ κοινῷ νόμῳ νομίζεται. τὰ μὲν οὖν δίκαια ταῦτά ἐστι.

Νόμος δ' ἐστὶν ὁμολόγημα πόλεως κοινόν, διὰ γραμμάτων προστάττον πῶς χρῆ πράττειν ἕκαστα.

Συμφέρον δ' ἐστὶ τῶν ὑπαρχόντων ἀγαθῶν φυ-  
 5 λακὴ ἢ τῶν μὴ προσόντων κτήσις ἢ τῶν ὑπ-  
 αρχόντων κακῶν ἀποβολή ἢ τῶν προσδοκωμένων  
 γενήσεσθαι βλαβερῶν διακώλυσις. διαιρήσεις δὲ  
 τοῦτο τοῖς μὲν ἰδιώταις εἰς σῶμα καὶ ψυχὴν καὶ τὰ  
 ἐπίκτητα. σώματι μὲν οὖν ἐστὶ συμφέρον ῥώμη  
 10 κάλλος ὑγίεια, ψυχῇ δὲ ἀνδρεία σοφία δικαιοσύνη,  
 τὰ δ' ἐπίκτητα φίλοι χρήματα κτήματα. τὰ δ'  
 ἐναντία τούτοις ἀσύμφορα. πόλει δὲ συμφέροντα  
 τὰ τοιαῦτά ἐστιν, ὁμόνοια, δύναμις πρὸς πόλεμον,  
 χρήματα καὶ προσόδων εὐπορία, συμμάχων ἀρετὴ  
 καὶ πλῆθος. καὶ συλλήβδην ἅπαντα τὰ τούτοις  
 15 ὁμοιότροπα συμφέροντα νομίζομεν, τὰ δὲ τούτοις  
 ἐναντία ἀσύμφορα.

Καλὰ δ' ἐστὶν ἀφ' ὧν εὐδοξία τις καὶ τιμὴ τις  
 ἔνδοξος γενήσεται τοῖς πράξασιν, ἡδέα δὲ τὰ χαρὰν  
 ἐργαζόμενα, ῥάδια δὲ τὰ μετ' ἐλαχίστου χρόνου καὶ  
 πόνου καὶ δαπάνης ἐπιτελούμενα, δυνατὰ δὲ πάντα  
 20 τὰ ἐνδεχόμενα γενέσθαι, ἀναγκαῖα δὲ τὰ μὴ ἐφ'  
 ἡμῖν ὄντα πράττειν, ἀλλ' ὡς<sup>2</sup> ἐξ ἀνάγκης θείας ἢ  
 ἀνθρωπίνης οὕτως<sup>3</sup> ὄντα.

Τὰ μὲν οὖν δίκαια καὶ τὰ νόμιμα καὶ τὰ συμ-  
 φέροντα καὶ τὰ καλὰ καὶ τὰ ἡδέα καὶ τὰ ῥάδια  
 καὶ τὰ δυνατὰ καὶ τὰ ἀναγκαῖα τοιαῦτά<sup>4</sup> ἐστίν.  
 εὐπορήσομεν δὲ περὶ τούτων λέγειν ἐξ αὐτῶν τε  
 25 τῶν προειρημένων καὶ τῶν ὁμοίων τούτοις καὶ τῶν

<sup>1</sup> ἔθει: v.l. εὐθὺς.

<sup>2</sup> ὡς v.l. om.

<sup>3</sup> v.l. ὁντως.

<sup>4</sup> Rac.: ταῦτα.

## RHETORIC TO ALEXANDER, I.

laws but are observed by unwritten custom and <sup>1422 a</sup> universal practice. These then are the just things.

Law is the common agreement of the state enjoining in writing how men are to act in various matters.

What is expedient is the preservation of existing <sup>5</sup> good things, or the acquisition of goods that we do not possess, or the rejection of existing evils, or the prevention of harmful things expected to occur. Things expedient for individuals you will classify under body, mind and external possessions. Expedient for the body are strength, beauty, health ; for the mind, courage, wisdom, justice ; expedient ex- <sup>10</sup> ternal possessions are friends, wealth, property ; and their opposites are inexpedient. Expedient for a state are such things as concord, military strength, property and a plentiful revenue, good and numerous allies. And briefly, we consider all things that <sup>15</sup> resemble these expedient, and things opposite to these inexpedient.

Honourable things are those from which some distinction or some distinguished honour will accrue to the agents, pleasant things are those that cause delight, easy ones those accomplished with very little time and labour and expense, practicable all those that are able to be done, necessary those the per- <sup>20</sup> formance of which does not rest with ourselves but which are as they are in consequence, as it were, of divine or human compulsion.

Such is the nature of the just, the lawful, the expedient, the honourable, the pleasant, the easy, the practicable and the necessary. We shall find plenty to say about them by using these conceptions in themselves as stated above, and also their analogies <sup>25</sup>

1422 a

ἐναντίων αὐτοῖς καὶ τῶν ἤδη κεκριμένων ὑπὸ θεῶν  
ἢ ἀνθρώπων ἐνδόξων<sup>1</sup> ἢ ὑπ' κριτῶν ἢ ὑπὸ τῶν  
ἀνταγωνιστῶν ἡμῖν.

Τὸ μὲν οὖν δίκαιον οἷον αὐτό<sup>2</sup> ἐστίν<sup>3</sup> πρότερον<sup>4</sup>  
ἡμῖν δεδήλωται. τὸ δὲ ὅμοιον τῷ δικαίῳ τοιόνδ'  
30 ἐστίν· “ὥσπερ γὰρ δίκαιον νομίζομεν τοῖς γονεῦσι  
πεῖθεσθαι, τὸν αὐτὸν τρόπον προσήκει τοὺς υἱεῖς  
μιμεῖσθαι τὰς τῶν πατέρων πράξεις”· καὶ “καθ-  
άπερ τοὺς εὖ ποιήσαντας ἀντευεργετεῖν δίκαιόν  
ἐστίν, οὕτω τοὺς μηδὲν ἡμᾶς κακὸν ἐργασαμένους  
δικαιόν ἐστι μὴ βλάπτειν.” τὸ μὲν οὖν ὅμοιον τῷ  
δικαίῳ τὸν τρόπον τοῦτον δεῖ λαμβάνειν, ἐκ δὲ  
35 τῶν ἐναντίων χρή καταφανὲς ποιεῖν αὐτὸ τὸ<sup>5</sup>  
παράδειγμα· “καθάπερ γὰρ τοὺς κακὸν τι ποιή-  
σαντας δίκαιόν ἐστι τιμωρεῖσθαι, οὕτω<sup>6</sup> καὶ τοὺς  
εὐεργετήσαντας προσήκει ἀντευεργετεῖν.” τὸ δὲ  
κεκριμένον ὑπὸ τινων ἐνδόξων δίκαιον οὕτω λήψῃ·  
“ἀλλ' οὐχ ἡμεῖς μόνοι μισοῦμεν καὶ κακῶς ποιοῦ-  
40 μεν τοὺς ἐχθροὺς, ἀλλὰ καὶ Ἀθηναῖοι καὶ Λακε-  
δαιμόνιοι δίκαιον εἶναι κρίνουσι τοὺς ἐχθροὺς  
τιμωρεῖσθαι.” τὸ μὲν οὖν δίκαιον οὕτω μετιῶν<sup>7</sup>  
1422 b πολλαχῶς<sup>8</sup> λήψῃ.

Τὸ δὲ νόμιμον αὐτὸ μὲν οἷόν ἐστιν ὥρισται ἡμῖν  
πρότερον, δεῖ δέ, ὅπου ἂν ἡ χρήσιμον, αὐτόν τε τὸν  
ἀγορεύοντα καὶ τὸν νόμον λαμβάνειν, εἴτα τὸ ὅμοιον  
τῷ γεγραμμένῳ νόμῳ. εἴη δ' ἂν τοιόνδε· “ὥσπερ  
45 γὰρ ὁ νομοθέτης μεγίσταις ζημίαις τοὺς κλέπτας  
ἐκόλασεν, οὕτω δεῖ καὶ τοὺς ἐξαπατῶντας μάλιστα  
τιμωρεῖσθαι· καὶ γὰρ οὗτοι κλέπτουσι τὴν διά-  
νοιαν”· καὶ “καθάπερ ὁ νομοθέτης κληρονόμους  
πεποίηκε τοὺς ἐγγυτάτῳ γένους ὄντας τοῖς ἅπαισιν

<sup>1</sup> v.l. ἐνδόξων post ἢ ὑπό.

and their opposites and the previous judgements of them made by the gods or by men of repute or by judges or by our opponents.

The nature of justice we have, then, already explained. The argument from analogy to the just is as follows : ' As we deem it just to obey our parents, 30 in the same way it behoves our sons to copy the conduct of their fathers,' and ' As it is just to do good in return to those who do us good, so it is just not to do harm to those who do us no evil.' This is the way in which we must take the analogous to the just ; and we must illustrate the actual example given from its 35 opposites : ' As it is just to punish those who do us harm, so it is also proper to do good in return to those who do us good.' The judgement of men of repute as to what is just you will take thus : ' We are not alone in hating and doing harm to our enemies, but Athens and Sparta also judge it to be just to punish 40 one's enemies.' This is how you will pursue the topic of the just, taking it in several forms.

The nature of legality we have previously defined ; but when it serves our purpose we must bring in the person of the legislator and the terms of the law, and next the argument from analogy to the written law. This may be as follows : ' As the lawgiver has 5 punished thieves with the severest penalties, so also deceivers ought to be severely punished, because they are thieves who steal our minds ' ; and ' Even as the lawgiver has made the next of kin the heirs of those

<sup>2</sup> αὐτό add. Rac.

<sup>3</sup> ἐστίν Sp. : ἂν ἦ αὐτ' ἂν ἦν.

<sup>4</sup> πρότερον Sp. : τὸν τρόπον.

<sup>5</sup> τὸ αὐτὸ Sp.

<sup>7</sup> Sp. : μελετῶν.

<sup>6</sup> Sp. : οὕτω ἀντὶ καὶ τοῦς.

<sup>8</sup> Sp. : πολλάκις.



1422 b

ἀποθνήσκουσιν, οὕτω καὶ τῶν τοῦ ἀπελευθέρου  
 10 χρημάτων ἐμὲ νῦν προσήκει κύριον γενέσθαι· τῶν  
 γὰρ ἀπελευθερωσάντων αὐτὸν τετελευτηκότων ἐγ-  
 γυτάτω γένους αὐτὸς ὢν καὶ τῶν ἀπελευθέρων<sup>1</sup>  
 δίκαιος ἂν εἶην ἄρχειν.” τὸ μὲν οὖν ὅμοιον τῷ  
 νομίμῳ τοῦτον τὸν τρόπον λαμβάνεται, τὸ δ’  
 ἐναντίον ὧδε· “ εἰ γὰρ ὁ νόμος ἀπαγορεύει τὰ  
 15 δημόσια διανέμεσθαι, δῆλον ὅτι τοὺς διαιρουμένους  
 αὐτὰ πάντα ἀδικεῖν ὁ νομοθέτης ἔκρινεν.” “ εἰ  
 γὰρ τιμᾶσθαι οἱ νόμοι προστάττουσι τοὺς καλῶς  
 καὶ δικαίως τῶν κοινῶν ἐπιστατήσαντας, δῆλον  
 ὡς καὶ τοὺς τὰ δημόσια διαφθείροντας τιμωρίας  
 ἀξίους νομίζουν.” ἐκ μὲν οὖν τῶν ἐναντίων  
 20 καταφανὲς οὕτω γίνεται τὸ νόμιμον, ἐκ δὲ τῶν  
 κεκριμένων ὧδε· “ καὶ οὐ μόνον ἐγὼ τὸν νόμον  
 τοῦτον εἵνεκα τούτων φημὶ τὸν νομοθέτην θεῖναι,  
 ἀλλὰ καὶ πρότερον οἱ δικασταὶ διεξιόντος Λυσιθείδου  
 παραπλήσια τοῖς νῦν ὑπ’ ἐμοῦ λεγομένοις ἐψηφί-  
 σαντο ταῦτα περὶ τοῦ νόμου τούτου.” τὸ μὲν οὖν  
 25 νόμιμον οὕτω μετιόντες πολλαχῶς<sup>2</sup> δείξομεν.

Τὸ δὲ συμφέρον αὐτὸ μὲν οἷόν ἐστιν ἐν τοῖς πρό-  
 τερον ὥρισταί, δεῖ δὲ λαμβάνειν εἰς τοὺς λόγους  
 μετὰ<sup>3</sup> τῶν προειρημένων καὶ ἐκ τοῦ συμφέροντος  
 ἂν ὑπάρχη τι, καὶ μετιόντας τὸν αὐτὸν τρόπον  
 ὄνπερ ὑπὲρ τοῦ νομίμου καὶ τοῦ δικαίου διήλθομεν,  
 80 οὕτω καὶ τὸ συμφέρον πολλαχῶς ἐμφανίζειν. εἴη δ’  
 ἂν τὸ μὲν ὅμοιον τῷ συμφέροντι τοιόνδε· “ ὥσπερ  
 γὰρ ἐν τοῖς πολέμοις συμφέρει τοὺς εὐψυχοτάτους  
 πρώτους τάττειν, οὕτως ἐν ταῖς πολιτείαις λυσι-

<sup>1</sup> τοῦ ἐλευθέρου (ut videtur) Forster.<sup>2</sup> πολλάκις (ut videtur) Forster.<sup>3</sup> μετὰ add. Kroll.

who die childless, so in the present case I ought to  
 have the disposal of the freedman's estate, because as  
 those who gave him his freedom are dead and gone,  
 it is just that I myself being their next of kin should  
 have control of their freedman.' This is how the  
 topic of analogy to the legal is taken. That of its  
 opposite is taken as follows : ' If the law prohibits the  
 distribution of public property, it is clear that the  
 lawgiver judged all persons who take a share in it to  
 be guilty of an offence.' ' If the laws enjoin that  
 those who direct the affairs of the community honour-  
 ably and justly are to be honoured, it is clear that they  
 deem those who destroy public property deserving  
 of punishment.' This is the way in which what is  
 legal is illustrated from its opposites. It is illustrated  
 from previous judgements thus : ' Not only do I  
 myself assert that this was the intention of the law-  
 giver in enacting this law, but also on a former  
 occasion when Lysitheides put forward considerations  
 very similar to those now advanced by me the court  
 voted in favour of this interpretation of the law.'  
 This is how we shall pursue the topic of legality,  
 exhibiting it in several forms.

25

The nature of expediency has been defined in what  
 came before ; and we must include in our speeches  
 with the topics previously mentioned any argument  
 from expediency also that may be available, and  
 pursue the same method as that which we followed  
 in dealing with legality and justice, displaying the  
 expedient also in many forms. The argument from  
 analogy to the expedient may be as follows : ' As it is  
 expedient in war to post the bravest men in the front  
 line, so it is profitable in the constitution of states for

30

1422 b

τελεῖ τοὺς φρονιμωτάτους καὶ δικαιοτάτους προ-  
εστάναι τοῦ πλήθους''· καὶ ''καθάπερ τοῖς ἀνθρώποις  
ὑγιαίνουσι συμφέρεи φυλάττεσθαι μὴ νοσήσωσιν,

85 οὕτω καὶ ταῖς πόλεσιν ὁμονοοῦσαις συμφέρον ἐστὶ  
προσκοπεῖν μὴ στασιάσωσιν.'' τὰ μὲν οὖν ὅμοια  
τῷ συμφέροντι τοῦτον τὸν τρόπον μετιῶν πολλὰ  
ποιήσεις· ἐκ δὲ τῶν ἐναντίων ὧδέ σοι τὸ συμφέρον  
ἔσται καταφανές· ''εἰ γὰρ λυσιτελεῖ τοὺς ἐπικεικῆς

40 τῶν πολιτῶν τιμᾶν, συμφέρον ἂν εἴη καὶ τοὺς  
πονηροὺς κολάζειν''· ''εἰ γὰρ οἴεσθε ἀσύμφορον τὸ  
μόνους ἡμᾶς πρὸς Θηβαίους πολεμεῖν, συμφέρον

1423 a ἂν εἴη τὸ Λακεδαιμονίους συμμάχους ποιησαμένους  
ἡμᾶς οὕτω Θηβαίοις πολεμεῖν.'' ἐκ μὲν δὴ τῶν  
ἐναντίων οὕτω τὸ συμφέρον καταφανές ποιήσεις, τὸ  
δὲ κεκριμένον ὑπ' ἐνδόξων κριτῶν<sup>1</sup> συμφέρον ὧδε  
5 χρὴ λαμβάνειν· ''Λακεδαιμόνιοί τε γὰρ Ἀθηναίους  
καταπολεμήσαντες συμφέρειν αὐτοῖς ὥγήθησαν μὴ  
τὴν πόλιν αὐτῶν ἀνδραποδίσασθαι, καὶ πάλιν Ἀθη-  
ναῖοι, μετὰ Θηβαίων,<sup>2</sup> ἐξὸν αὐτοῖς ἀνοικίσαι τὴν  
Σπάρτην, συμφέρειν σφίσιν ὥγήθησαν περιποιήσαι  
Λακεδαιμονίους.''

Περὶ μὲν οὖν τοῦ δικαίου καὶ τοῦ νομίμου καὶ  
10 τοῦ συμφέροντος οὕτω μετιῶν εὐπορήσεις· τὸ δὲ  
καλὸν καὶ τὸ ῥάδιον καὶ τὸ ἡδὺ καὶ τὸ δυνατόν  
καὶ τὸ ἀναγκαῖον ὁμοιοτρόπως τούτοις μέτιθι. καὶ  
περὶ μὲν τούτων ἐντεῦθεν εὐπορήσομεν.

II. Πάλιν δὲ διορισώμεθα καὶ περὶ πόσων καὶ  
ποίων καὶ ἐκ<sup>3</sup> τίνων ἔν τε τοῖς βουλευτηρίοις καὶ  
15 ταῖς ἐκκλησίαις συμβουλευόμεν· ἂν γὰρ τούτων  
ἕκαστα σαφῶς ἐπιστώμεθα, τοὺς μὲν ἰδίους λόγους  
αὐτὰ τὰ πράγματα καθ' ἐκάστην ἡμῖν συμβουλίαν

<sup>1</sup> κριτῶν Π: om. cet.<sup>2</sup> μετὰ Θηβαίων Π: om. cet.

the wisest and most just to rank above the multitude';  
 and 'As it is expedient for people in health to be  
 on their guard against contracting disease, so also it  
 is expedient for states enjoying a period of concord 35  
 to take precautions against the rise of faction.' This  
 is the mode of treatment which you will pursue in  
 multiplying cases of analogy to the expedient. You  
 will demonstrate the expedient from cases of the  
 opposite thus: 'If it is profitable to honour virtuous  
 citizens, it would be expedient to punish vicious ones'; 40  
 'If you think it inexpedient for us to go to war with  
 Thebes single-handed, it would be expedient for us 1423 a  
 to make an alliance with Sparta before going to war  
 with Thebes.' This is how you will demonstrate the  
 expedient from cases of the opposite. The proper  
 way to take the opinion of judges of repute is as  
 follows: 'When Sparta had defeated Athens in war 5  
 she decided that it would be expedient for herself not  
 to enslave the city; and again when Athens in co-  
 operation with Thebes had it in her power to destroy  
 Sparta, she decided that it would be expedient for her  
 to let it survive.'

You will have plenty to say on the topics of justice,  
 legality and expediency by pursuing them in this  
 manner. Develop those of honour, facility, pleasure, 10  
 practicability and necessity in a similar way. These  
 rules will give us plenty to say on these topics.

II. Next let us determine the number and nature  
 of the subjects about which and the considerations  
 on which we deliberate in council-chambers and in 15  
 parliaments. If we clearly understand the various  
 classes of these, the business in hand at each debate  
 will itself supply us with arguments specially adapted

1423 b

1423 a

*Subjects of  
 Parliamentary  
 oratory.*  
 15

• ἐκ add. Usener.

1423 a

παραδώσει, τὰς δὲ κοινὰς ἰδέας ἐκ πολλοῦ προ-  
 ειδότες ἐπιφέρειν ἐφ' ἐκάσταις τῶν πράξεων ῥα-  
 δίως δυνησόμεθα. τούτων οὖν ἕνεκα διαιρετέον ἡμῖν

20 περὶ ὧν κοινῇ βουλευόνται πάντες.

Ἐν κεφαλαίῳ μὲν οὖν εἰπεῖν εἰσὶν ἑπτὰ τὸν ἀρι-  
 θμὸν προθέσεις περὶ ὧν δημηγορήσομεν. ἀνάγκη  
 γάρ ἐστι καὶ βουλεύεσθαι καὶ λέγειν ἡμᾶς ἐν βουλῇ  
 καὶ δήμῳ ἢ περὶ ἱερῶν ἢ περὶ νόμων ἢ περὶ τῆς  
 πολιτικῆς κατασκευῆς ἢ περὶ τῶν πρὸς ἄλλας  
 25 πόλεις συμμαχιῶν καὶ συμβολαίων ἢ περὶ πολέμων  
 ἢ περὶ εἰρήνης ἢ περὶ πόρου χρημάτων. αἱ μὲν  
 οὖν προθέσεις αὗται τυγχάνουσιν οὖσαι περὶ ὧν  
 βουλευσόμεθα καὶ δημηγορήσομεν· ἐκάστην δὲ  
 πρόθεσιν διελῶμεθα, καὶ σκοπῶμεν ἐν οἷς τρόποις  
 ἐνδέχεται περὶ τούτων λόγῳ χρήσασθαι.

30 Περὶ μὲν οὖν ἱερῶν τριττῶς<sup>1</sup> ἀναγκαῖον λέγειν·  
 ἢ γὰρ ἐροῦμεν ὥς τὰ καθεστῶτα διαφυλακτέον ἢ  
 ὥς ἐπὶ τὸ μεγαλοπρεπέστερον μεταστατέον<sup>2</sup> ἢ ὥς  
 ἐπὶ τὸ ταπεινότερον. ὅταν μὲν οὖν λέγωμεν ὥς δεῖ  
 τὰ καθεστῶτα διαφυλάττειν, εὐρήσομεν ἀφορμὰς ἐκ  
 μὲν τοῦ δικαίου λέγοντες ὅτι τὰ πάτρια ἔθνη παρὰ

35 πᾶσι παραβαίνειν ἄδικόν ἐστι, καὶ ὅτι τὰ μαντεῖα  
 πάντα τοῖς ἀνθρώποις προστάττει κατὰ τὰ πάτρια  
 ποιεῖσθαι τὰς θυσίας, καὶ ὅτι τῶν πρώτων οἰκι-  
 σαντων<sup>3</sup> τὰς πόλεις καὶ τοῖς θεοῖς ἰδρυσαμένων τὰ  
 ἱερὰ μάλιστα δεῖ διαμένειν τὰς περὶ τοὺς θεοὺς  
 ἐπιμελείας· ἐκ δὲ τοῦ συμφέροντος, ὅτι πρὸς χρη-

1423 b μάτων συντέλειαν ἢ τοῖς ἰδιώταις ἢ τῷ κοινῷ τῆς  
 πόλεως συμφέρον ἔσται κατὰ τὰ πάτρια τῶν ἱερῶν

<sup>1</sup> Bekker: περιττῶς.

<sup>2</sup> μεταστατέον II: πως cet.

<sup>3</sup> Rac.: οἰκίζόντων aut οἰκίζοντας.



to it, while we shall readily be able to produce general ideas applicable to the particular matter in hand if we have been familiar with them long before. For these reasons, therefore, we must classify the matters that universally form the subject of our deliberations in common. 20

To speak summarily therefore, the subjects about which we shall make public speeches are seven in number : our deliberations and speeches in council and in parliament must necessarily deal with either religious ritual, or legislation, or the form of the constitution, or alliances and treaties with other states, 25 or war, or peace, or finance. These, then, being the subjects of our deliberations in council and of our speeches in parliament, let us examine each of them, and consider the ways in which we can deal with them when making a speech.

In speaking about rites of religion, three lines can 30 be taken : either we shall say that we ought to maintain the established ritual as it is, or that we ought to alter it to a more splendid form, or alter it to a more modest form. When we are saying that the established ritual ought to be maintained, we shall draw arguments from considerations of right by saying that in all countries it is deemed wrong to depart from the ancestral customs, that all the oracles enjoin on 35 mankind the performance of their sacrifices in the ancestral manner, and that it is the religious observances of the original founders of cities and builders of the gods' temples that it behoves us most to conserve. Arguing from expediency, we shall say that the performance of the sacrifices in the ancestral manner 1423 b will be advantageous either for individual citizens or for the community on the ground of economy, and



θυομένων, καὶ ὅτι πρὸς εὐτολμίαν λυσιτελήσει<sup>1</sup> τοῖς πολίταις, ἐπεὶ συμπομπευόντων ὀπλιτῶν ἱππέων  
 5 ψιλῶν εὐτολμότεροι γένοιντ' ἂν οἱ πολῖται φιλο-  
 τιμούμενοι περὶ ταῦτα· ἐκ δὲ τοῦ καλοῦ, εἰ οὕτω  
 λαμπρὰς τὰς ἑορτὰς ποιεῖσθαι<sup>2</sup> συμβέβηκεν· ἐκ δὲ  
 τῆς ἡδονῆς, εἰ καὶ πρὸς τὸ θεωρεῖσθαι ποικιλία τις  
 περὶ τὰς τῶν θεῶν θυσίας· ἐκ δὲ τοῦ δυνατοῦ, εἰ  
 μήτε ἔνδεια γεγένηται μήτε ὑπερβολὴ περὶ ταύτας.  
 10 ὅταν μὲν οὖν τοῖς καθεστῶσι συνηγορῶμεν, οὕτω  
 μετιοῦσι σκεπτέον ἐκ<sup>3</sup> τῶν προειρημένων ἢ τῶν  
 τούτοις ὁμοιοτρόπων, καὶ ὥς ἐνδέχεται διδάσκειν  
 περὶ τῶν λεγομένων.

Ὅταν δὲ ἐπὶ τὸ μεγαλοπρεπέστερον συμ-  
 βουλευώμεν μεθιστάναι τὰς ἱεροποιίας, περὶ μὲν  
 τοῦ τὰ πάτρια κινεῖν ἀφορμὰς ἔχομεν εὐπρεπεῖς  
 15 λέγοντες ὅτι τὸ προστιθέναι τοῖς ὑπάρχουσιν οὐ  
 καταλύειν ἐστὶν ἄλλ' αὖξιν τὰ καθεστῶτα, ἔπειθ'  
 ὥς καὶ τοὺς θεοὺς εἰκὸς εὐνουστέρους εἶναι τοῖς  
 μᾶλλον αὐτοὺς τιμῶσιν, ἔπειθ' ὥς οὐδὲ οἱ πατέρες  
 αἰεὶ κατὰ τὰ αὐτὰ τὰς θυσίας ἤγον, ἀλλὰ πρὸς τοὺς  
 καιροὺς καὶ τὰς εὐπραγίας ὀρῶντες καὶ ἰδία καὶ  
 20 κοινῇ τὴν πρὸς τοὺς θεοὺς θεραπείαν ἐνομοθέτουν,  
 ἔπειθ' ὥς καὶ ἐπὶ τῶν λοιπῶν ἀπάντων οὕτω καὶ  
 τὰς πόλεις καὶ τοὺς ἰδίους οἴκους διοικοῦμεν· λέγε  
 δὲ καὶ εἰ τούτων κατασκευασθέντων ὠφέλειά τις  
 ἔσται τῇ πόλει ἢ λαμπρότης ἢ ἡδονή, μετιῶν ὥσπερ  
 ἐπὶ τῶν προτέρων εἴρηται. ὅταν δὲ ἐπὶ τὸ ταπεινό-

<sup>1</sup> Rac.: λυσιτελεῖ.

<sup>2</sup> Rac.: πρὸς τὸ θεωρεῖσθαι (ex seq.) aut θεωρῆσαι.

<sup>3</sup> Kayser: ἐπὶ.

that it will profit the citizens in respect of courage because if they are escorted in religious processions by heavy infantry, cavalry and light-armed troops the pride that they will take in this will make them more courageous. We can urge it on the ground of 5 honour if it has resulted in the festivals being celebrated with so much splendour ; on the ground of pleasure if a certain elaboration has been introduced into the sacrifices of the gods merely as a spectacle ; on the ground of practicability if there has been neither deficiency nor extravagance in the celebrations. These are the lines we must pursue when we 10 are advocating the established order, basing our considerations on the arguments already stated or arguments similar to them, and on such explanation of our case as is feasible.

When we are advocating the alteration of the sacrificial rites in the direction of greater splendour, we shall find plausible arguments for changing the ancestral institutions in saying (1) that to add to what 15 exists already is not to destroy but to amplify the established order ; (2) that in all probability even the gods show more benevolence towards those who pay them more honour ; (3) that even our forefathers used not to conduct the sacrifices always on the same lines, but regulated their religious observances both private and public with an eye to the occasions and to the prosperity of their circumstances ; (4) that this is the 20 manner in which we administer both our states and our private households in all the rest of our affairs as well ; (5) and also specify any benefit or distinction or pleasure that will accrue to the state if these recommendations are carried out, developing the subject in the manner explained in the former cases. When,

1428 b

25 *τερον συστέλλωμεν, πρῶτον μὲν ἐπὶ τοὺς καιροὺς τὸν λόγον ἀνακτέον, τί πράττοντες χεῖρον οἱ πολῖται τυγχάνουσι νῦν ἢ πρότερον· ἔπειθ' ὥς οὐκ εἰκὸς τοὺς θεοὺς χαίρειν ταῖς δαπάναις τῶν θυομένων ἀλλὰ ταῖς εὐσεβείαις τῶν θυόντων· εἰθ' ὥς πολλὴν ἄνοιαν τούτων καὶ οἱ θεοὶ καὶ οἱ ἄνθρωποι κατα-*  
 30 *κρίνουσιν ὅσοι παρὰ δύναμιν τι ποιούσιν· ἔπειθ' ὅτι οὐκ ἐπὶ τοῖς ἀνθρώποις μόνον ἀλλὰ καὶ ἐπὶ ταῖς εὐπραγίαις καὶ κακοπραγίαις ἐστὶ τὰ περὶ τὰς πολιτικὰς δαπάνας. ἀφορμὰς μὲν οὖν ταύτας καὶ τὰς ὁμοιοτρόπους ταύταις ὑπὲρ τῶν περὶ τὰς θυσίας προθέσεων ἔξομεν· ἵνα δὲ καὶ τὰ κατὰ τὴν*  
 35 *κρατίστην θυσίαν εἰδῶμεν εἰσηγεῖσθαι καὶ νομοθετεῖν, ὀρισώμεθα καὶ ταύτην. ἔστι γὰρ κρατίστη θυσία πασῶν ἣτις ἂν ἔχοι πρὸς μὲν τοὺς θεοὺς ὁσίως,<sup>1</sup> πρὸς δὲ τὰς δαπάνας μετρίως, πρὸς δὲ πόλεμον ὠφελίμως, πρὸς δὲ τὰς θεωρίας λαμπρῶς. ἔξει δὲ πρὸς μὲν τοὺς θεοὺς ὁσίως ἔαν τὰ πάτρια*  
 1424 a *μὴ καταλύηται, πρὸς δὲ τὰς δαπάνας μετρίως ἔαν μὴ πάντα τὰ πεμπόμενα καταναλίσκηται, πρὸς δὲ τὰς θεωρίας λαμπρῶς ἔαν χρυσῶ καὶ τοῖς τοιούτοις ἂ μὴ συναναλίσκεται δαψιλῶς τις χρήσῃται, πρὸς*  
 5 *δὲ τοὺς πολέμους ὠφελίμως ἔαν ἵππεῖς καὶ ὀπλίται διεσκευασμένοι συμπομπεύωσιν.*

Τὰ μὲν δὴ περὶ τοὺς θεοὺς ἐκ τούτων κάλλιστα κατασκευάσομεν, ἐκ δὲ τῶν πρότερον εἰρημένων καθ' οὓς ἐνδέχεται τρόπους δημηγορεῖν περὶ ἐκάστης ἱεροποιίας εἰσόμεθα.

Περὶ δὲ νόμων πάλιν καὶ τῆς πολιτικῆς κατα-  
 10 *σκευῆς ὁμοιοτρόπως διέλθωμεν. εἰσὶ δὲ νόμοι συλ-*

<sup>1</sup> Bekker: ὁσίως καὶ θείως.

on the other hand, we are advocating a reduction to a more modest form, we must first (1) direct our remarks to the condition of the times and show how the public are less prosperous now than they were previously ; then argue (2) that probably it is not the cost of the sacrifices but the piety of those who offer them that give pleasure to the gods ; (3) that people who do a thing that is beyond their capacity are judged by both gods and men to be guilty of great folly ; (4) that questions of public expenditure turn not only on the human factor but also on the good or bad state of finance. These, then, and similar lines of argument will be available to support our proposals with regard to sacrifices. Let us now define what is the best form of sacrifice, in order that we may know how to frame proposals and pass laws for its regulation. The best of all sacrificial ceremonies is one organized in a manner that is pious towards the gods, moderate in expense, of military benefit, and brilliant as a spectacle. It will show piety to the gods if the ancestral ritual is preserved ; it will be moderate in expense if not all the offerings carried in procession are used up ; brilliant as a spectacle if lavish use is made of gold and things of that sort which are not used up in the celebration ; of military advantage if cavalry and infantry in full array march in the procession.

These considerations will provide us with the finest ways of organizing the ceremonies of religion ; and what has been said before will inform us of the lines that may be followed in public speeches about the various forms of religious celebration.

Let us next in a similar manner discuss the subject of law and the constitution of the state. Laws may

1424 a

λήβδην μὲν εἰπεῖν ὁμολογήματα κοινὰ πόλεως, ἃ διὰ γραμμάτων ὀρίζει καὶ προστάττει πῶς χρή ἕκαστα πράττειν.

Δεῖ δὲ αὐτῶν τὴν θέσιν ἐν μὲν ταῖς δημοκρατίαις τὰς μικρὰς ἀρχὰς καὶ τὰς πολλὰς κληρωτὰς ποιεῖν (ἀστασίαστον γὰρ τοῦτο), τὰς δὲ μεγίστας χειρο-  
 15 τονητὰς ὑπὸ<sup>1</sup> τοῦ πλήθους· οὕτω γὰρ ὁ μὲν δῆμος κύριος ὦν διδόναι τὰς τιμὰς οἷς ἂν ἐθέλῃ τοῖς λαμβάνουσιν αὐτὰς οὐ φθονήσει, οἱ δ' ἐπιφανέστεροι μᾶλλον τὴν καλοκάγαθίαν ἀσκήσουσιν, εἰδότες ὅτι τὸ παρὰ τοῖς πολίταις εὐδοκιμεῖν οὐκ ἄλυσι-  
 20 ἐν τῇ δημοκρατίᾳ οὕτω δεῖ νομοθετεῖν· περὶ δὲ τὴν ἄλλην διοίκησιν καθ' ἐν μὲν ἕκαστον διελθεῖν πολὺ ἂν ἔργον εἴη, συλλήβδην δὲ δεῖ παραφυλάττειν ὅπως οἱ νόμοι τὸ μὲν πλήθος ἀποτρέψωσι τοῖς τὰς οὐσίας ἔχουσιν ἐπιβουλεύειν, τοῖς δὲ πλουτοῦσιν  
 25 εἰς τὰς κοινὰς λειτουργίας δαπανᾶν<sup>2</sup> φιλοτιμίαν ἐμποιήσωσιν. τοῦτο δὲ οὕτως ἂν κατασκευάσαιεν, εἰ τοῖς μὲν τὰς οὐσίας ἔχουσιν ἀντὶ τῶν εἰς τὸ κοινὸν δαπανωμένων τιμαὶ τινες [ἀπὸ τῶν νόμων]<sup>3</sup> ἀφωρισμέναι τυγχάνοιεν, τῶν δὲ πενομένων τοὺς τὴν χώραν ἐργαζομένους καὶ τοὺς<sup>4</sup> ναυτικούς<sup>5</sup> τῶν ἀγο-  
 30 ραίων μᾶλλον προτιμῶεν, ὅπως οἱ μὲν πλουτοῦντες ἐκόντες τῇ πόλει λειτουργήσωσι, τὸ δὲ πλήθος οὐ συκοφαντίας ἀλλ' ἐργασίας ἐπιθυμήσῃ. δεῖ δὲ πρὸς τούτοις καὶ περὶ τοῦ μήτε χώραν ποιεῖν ἀνάδαστον μήτε δημεύειν τὰς οὐσίας τῶν τελευτῶντων<sup>6</sup> ἰσχυροὺς κείσθαι νόμους, καὶ μεγάλας ἐπικεῖσθαι  
 35 τιμωρίας τοῖς παραβαίνουσιν ταῦτα. χρή δὲ τοῖς ἐν

<sup>1</sup> Sp.: ἀπό.<sup>2</sup> δαπανᾶν II: ἐκουσίαν ἄπασαν cet.<sup>3</sup> ἀπὸ τῶν νόμων om. M.<sup>4</sup> τοὺς add. Rac.

be briefly described as common agreements of a state, defining and prescribing in writing various rules of conduct.

In democracies legislation should make the general run of minor offices elected by lot (for that prevents party faction) but the most important offices elected by the vote of the community ; under this system the people having sovereign power to bestow the honours on whom they choose will not be jealous of those who obtain them, while the men of distinction will the more cultivate nobility of character, knowing that it will be advantageous for them to stand in good repute with their fellow-citizens. This is how the election of officials should be regulated by law in a democracy. A detailed discussion of the rest of the administration would be a laborious task ; but to speak summarily, precautions must be taken to make the laws deter the multitude from plotting against the owners of landed estates and engender in the wealthy an ambition to spend money on the public services. This the law might effect if some offices were reserved for the propertied classes, as a return for what they spent on public objects, and if among the poorer people the laws paid more respect to the tillers of the soil and the sailor class than to the city rabble, in order that the wealthy may be willing to undertake public services and the multitude may devote itself to industry and not to cadging. In addition to this there should be strict laws laid down prohibiting the distribution of public lands and the confiscation of property on the decease of the owners, and severe penalties should be imposed on those who transgress these

<sup>6</sup> ναυτικούς II corr. Blass: ναυκληροῦντας cet.

<sup>6</sup> τῶν ἰδιωτῶν Usener.



1424 a

πολέμῳ τελευτῶσιν εἰς ταφήν τι χωρίον δημόσιον ἐν καλῷ πρὸ τῆς πόλεως ἀφωρίσθαι, καὶ τοῖς παισὶν αὐτῶν ἕως ἡβῆς δημοσίαν τροφήν δίδοσθαι. τῶν μὲν οὖν ἐν τῇ δημοκρατίᾳ νόμων τὴν θέσιν τοιαύτην δεῖ ποιεῖσθαι.

Περὶ δὲ τὰς ὀλιγαρχίας, τὰς μὲν ἀρχὰς δεῖ τοὺς  
 40 νόμους ἀπονέμειν ἐξ ἴσου πᾶσι τοῖς τῆς πολιτείας  
 1424 b μετέχουσι, τούτων δὲ εἶναι τὰς μὲν πλείστας κλη-  
 ρωτάς, τὰς δὲ μεγίστας κρυπτῇ ψήφῳ μεθ' ὄρκων  
 καὶ πλείστης ἀκριβείας διαψηφιστάς. δεῖ δὲ τὰς  
 ζημίας ἐν τῇ ὀλιγαρχίᾳ μεγίστας ἐπικεῖσθαι τοῖς  
 ὑβρίζειν τινὰς τῶν πολιτῶν ἐπιχειροῦσιν· τὸ γὰρ  
 5 πλῆθος οὐχ οὕτω τῶν ἀρχῶν ἀγανακτεῖ στερού-  
 μενον ὥς ἔχει βαρέως ὑβριζόμενον. χρή δὲ καὶ τὰς  
 διαφορὰς τῶν πολιτῶν ὅτι τάχιστα διαλύειν καὶ μὴ  
 χρονίζεσθαι· μηδὲ συνάγειν ἐκ τῆς χώρας ἐπὶ τὴν  
 πόλιν τὸν ὄχλον, ἐκ γὰρ τῶν τοιούτων συνόδων  
 συστρέφεται τὰ πλήθη καὶ καταλύει τὰς ὀλιγ-  
 10 αρχίας.

Καθόλου δὲ εἰπεῖν, δεῖ τοὺς νόμους ἐν μὲν  
 ταῖς δημοκρατίαις κωλύειν τοὺς πολλοὺς ταῖς τῶν  
 πλουσίων οὐσίαις ἐπιβουλεύειν, ἐν δὲ ταῖς ὀλιγαρ-  
 χίαις ἀποτρέπειν τοὺς τῆς πολιτείας μετέχοντας  
 ὑβρίζειν τοὺς ἀσθενεστέρους καὶ συκοφαντεῖν τοὺς  
 πολίτας. ὧν μὲν οὖν ὀρέγεσθαι δεῖ τοὺς νόμους  
 15 καὶ τὴν πολιτικὴν κατασκευὴν, ἐκ τούτων οὐκ  
 ἀγνοήσεις.

Δεῖ δὲ τὸν συναγορεύειν ἐθέλοντα νόμῳ δεικνύειν  
 τοῦτον ἴσον ὄντα τοῖς πολίταις ὁμολογούμενόν τε  
 τοῖς ἄλλοις νόμοις, καὶ συμφέροντα τῇ πόλει  
 μάλιστα μὲν πρὸς ὁμόνοιαν, εἰ δὲ μή, πρὸς τὴν τῶν

## RHETORIC TO ALEXANDER, II.

enactments. A public burial-ground in a fine situation outside the city should be assigned to those who fall in war, and their sons should receive public maintenance till they come of age. Such should be the nature of the legal system enacted in a democracy.

In the case of oligarchies, the laws should assign the offices on an equal footing to all those sharing in citizenship. Election to most of the offices should be by lot, but for the most important it should be by vote, under oath, with a secret ballot and very strict regulations. The penalties enacted for those attempting to insult any of the citizens should in an oligarchy be very heavy, as the multitude resents insolent treatment more than it is annoyed by exclusion from office. Also differences between the citizens should be settled as quickly as possible and not allowed to drag on; and the mob should not be brought together from the country to the city, because such gatherings lead to the masses making common cause and overthrowing the oligarchies.

And, speaking generally, the laws in a democracy should hinder the many from plotting designs upon the property of the wealthy, and in an oligarchy they should deter those who have a share in the government from treating the weaker men with insolence and toadying to their fellow-citizens. These considerations will inform you of the objects at which the laws and framework of the constitution of the state should aim.

One who wishes to advocate a law has to prove that it will be equal for the citizens, consistent with the other laws, and advantageous for the state, best of all as promoting concord, or failing that, as contributing

1424 a  
35

1424 b

10

1424 b

20 πολιτῶν καλοκάγαθίαν ἢ πρὸς τὰς κοινὰς προσ-  
 ὁδους ἢ πρὸς εὐδοξίαν τῷ κοινῷ τῆς πόλεως ἢ  
 πρὸς τὴν πολιτικὴν δύναμιν ἢ πρὸς ἄλλο τι τῶν  
 τοιούτων. ἀντιλέγοντα δὲ δεῖ<sup>1</sup> σκοπεῖν πρῶτον μὲν  
 εἰ μὴ κοινὸς ὁ νόμος, ἔπειτα εἰ μὴ τοῖς ἄλλοις  
 ὁμολογῶν ἄλλ' ὑπεναντίος ἔσται, ἐπὶ τούτοις εἰ μὴ  
 25 πρὸς μηδὲν τῶν εἰρημένων συμφέρων ἀλλὰ τού-  
 ναντίον βλαβερὸς.

Περὶ μὲν οὖν νόμων καὶ τῆς κοινῆς κατασκευῆς  
 ἐντεῦθεν καὶ τιθέσθαι καὶ λέγειν εὐπορήσομεν.

Περὶ δὲ συμμαχιῶν<sup>2</sup> καὶ τῶν πρὸς τὰς ἄλλας  
 πόλεις συμβολαίων διελθεῖν ἐπιχειρήσομεν. τὰ μὲν  
 οὖν συμβόλαια κατὰ<sup>3</sup> τάξεις ἀναγκαῖον καὶ<sup>4</sup> συνθήκας  
 30 κοινὰς γίνεσθαι, συμμάχους δὲ ποιεῖσθαι κατὰ τοὺς  
 καιροὺς τούτους ὅταν τινὲς καθ' ἑαυτοὺς ὦσιν  
 ἀσθενεῖς ἢ πόλεμός τις ἢ προσδόκιμος, ἢ διὰ τοῦτο  
 ποιήσασθαι συμμαχίαν πρὸς τινὰς<sup>5</sup> ὅτι πολέμου  
 ἀποστήσειν τινὰς νομίζουσιν. αἰτίαι μὲν οὖν αὗται  
 καὶ παραπλήσιαι ταύταις ἄλλαι πλείους τοῦ ποιεῖ-  
 35 σθαι συμμάχους εἰσίν· δεῖ δέ, ὅταν συναγορεύειν  
 βούλη τῇ γινομένη συμμαχίᾳ, τὸν καιρὸν τοιοῦτον  
 ὑπάρχοντα ἐμφανίζειν, καὶ δεικνύναι τοὺς τὴν  
 συμμαχίαν ποιουμένους μάλιστα μὲν δικαίους ὄντας  
 καὶ πρότερόν τι τῇ πόλει ἀγαθὸν πεποιηκότας καὶ  
 40 δύναμιν μεγάλην ἔχοντας καὶ πλησίον τοῖς τόποις  
 κατοικοῦντας, εἰ δὲ μή, τούτων ἅπερ ἂν ὑπάρχη,  
 1425 a ταῦτα συνάγειν. ὅταν δὲ διακωλύης τὴν συμ-  
 μαχίαν, ἐμφανίζειν ἐνδέχεται πρῶτον μὲν ὥς οὐκ  
 ἀνάγκη ποιεῖσθαι νῦν αὐτήν, ἔπειθ' ὥς οὐ δίκαιοι  
 τυγχάνουσιν ὄντες, εἴθ' ὥς πρότερον ἡμᾶς κακῶς

<sup>1</sup> δὲ δεῖ Rac.: δὲ aut δεῖ (in uno cod. δεῖ cum δὲ supra-  
 scripto).

<sup>2</sup> Sp.: συμμάχων.

to the noble qualities of the citizens or to the public revenues or to the good repute of the commonwealth or the power of the state or something else of the kind. In speaking against a proposal the points to consider are, first, is the law not impartial? next, will it be really at variance with the other laws and not in agreement with them? and in addition, instead of promoting any of the objects stated, will it on the contrary be detrimental to them? 25

This will supply us with plenty of material for making proposals and speeches about laws and the constitution of the commonwealth.

We will proceed to the consideration of alliances and covenants with other states. Covenants must necessarily be framed in accordance with regulations and common agreements; and it is necessary to secure allies on occasions when people by themselves 30 are weak or when a war is expected, or to make an alliance with one nation because it is thought that this will deter another nation from war. These and a number of additional similar reasons are the grounds for making allies; and when one wishes to support the formation of an alliance it is necessary to show 35 that the situation is of this nature, and to prove if possible that the contracting nation is reliable in character, and has done the state some service previously, and is very powerful and a near neighbour, or 40 failing this, you must collect together whichever of 1425 a these advantages do exist. When you are opposing the alliance you can show first that it is not necessary to make it now, secondly that the proposed allies are not really reliable, thirdly that they have treated

<sup>3</sup> κατὰ Sp.: καὶ τὰ.

<sup>4</sup> καὶ τὰ Sp.: κατὰ.

<sup>5</sup> [ποιήσασθαι . . . πρὸς τινος] Usener.

1425 a

πεπονηκότες, εἰ δὲ μή, ὥς μακρὰν τοῖς τόποις  
 5 ἀπέχοντες καὶ οὐχ ὑπάρχοντες δυνατοὶ κατὰ τοὺς  
 προσήκοντας παραγενέσθαι καιροῦς. ταῖς μὲν οὖν  
 ἀντιλογίαις καὶ ταῖς συνηγορίαις ταῖς περὶ τῶν  
 συμμαχιῶν<sup>1</sup> ἐκ τούτων καὶ τῶν τούτοις ὁμοιο-  
 τρόπων εὐπορήσομεν χρῆσθαι.

Περὶ εἰρήνης δὲ πάλιν καὶ πολέμου τὸν αὐτὸν  
 10 τρόπον τὰς μεγίστας ἰδέας ἐκλάβωμεν. προφάσεις  
 μὲν οὖν εἰσὶ τοῦ πόλεμον ἐκφέρειν πρὸς τινὰς  
 αὐταί· δεῖ πρότερον ἀδικηθέντας νῦν καιρῶν παρα-  
 πετωκότων ἀμύνασθαι τοὺς ἀδικήσαντας, ἢ νῦν  
 ἀδικουμένους ὑπὲρ ἑαυτῶν πολεμεῖν ἢ ὑπὲρ συγ-  
 γενῶν ἢ ὑπὲρ εὐεργετῶν, ἢ συμμαχοῖς ἀδικουμένοις  
 15 βοηθεῖν, ἢ τοῦ τῇ πόλει συμφέροντος ἕνεκεν ἢ εἰς  
 εὐδοξίαν ἢ εἰς εὐπορίαν ἢ εἰς δύναμιν ἢ εἰς ἄλλο τι  
 τῶν τοιούτων. ὅταν μὲν οὖν ἐπὶ τὸ πολεμεῖν  
 παρακαλῶμεν, τούτων τε τῶν προφάσεων ὅτι  
 πλείστας συνακτέον, καὶ μετὰ ταῦτα δεικτέον, ἔξ  
 ὧν ἔστι περιγενέσθαι τῷ πολέμῳ, ὅτι τὰ πλείστα  
 20 τούτων τοῖς παρακαλουμένοις ὑπάρχοντά ἐστιν.  
 περιγίνονται δὲ πάντες ἢ διὰ τὴν τῶν θεῶν εὐνοίαν,  
 ἢν εὐτυχίαν<sup>2</sup> προσαγορεύομεν, ἢ διὰ σωμάτων  
 πλῆθος καὶ ῥώμην, ἢ διὰ χρημάτων εὐπορίαν, ἢ διὰ  
 στρατηγοῦ φρόνησιν, ἢ διὰ συμμαχῶν ἀρετήν, ἢ  
 διὰ τόπων εὐφυΐαν. τούτων οὖν καὶ τῶν τοιούτων  
 25 τὰ τοῖς πράγμασιν οἰκειότατα<sup>3</sup> λαμβάνοντες ἐμ-  
 φανιοῦμεν ὅταν ἐπὶ τὸ πολεμεῖν παρακαλῶμεν, τὰ  
 μὲν τῶν ἐναντίων ταπεινοῦντες, τὰ δ' ἡμέτερα ταῖς<sup>4</sup>  
 αὐξήσεσι μεγάλα καθιστῶντες.

<sup>1</sup> Rac.: συμμαχῶν.

<sup>2</sup> v.l. εὐψυχίαν (Usener add. ἢ δι' εὐψυχίαν post προσ-  
 αγορεύομεν).

us badly before, or if not, that they are remote in locality and not really able to come to our assistance <sup>5</sup> on the suitable occasions. From these and similar considerations we shall be well supplied with arguments to use in opposing and in advocating alliances.

Again, let us in the same manner pick out the most important considerations on the question of peace and war. The following are the arguments for <sup>10</sup> making war on somebody: that we have been wronged in the past, and now that opportunity offers ought to punish the wrongdoers; or, that we are being wronged now, and ought to go to war in our own defence—or in defence of our kinsmen or of our benefactors; or, that our allies are being wronged and we ought to go to their help; or, that it is to the advantage of <sup>15</sup> the state in respect of glory or wealth or power or the like. When we are exhorting people to go to war we should bring together as many of these arguments as possible, and afterwards show that most of the factors on which success in war depends are on the side of <sup>20</sup> those whom we are addressing. Success is always due either to the favour of the gods which we call good fortune, or to man-power and efficiency, or financial resources, or wise generalship, or to having good allies, or to natural advantages of locality. When exhorting people to war we shall select and put forward <sup>25</sup> those among these and similar topics that are most relevant to the situation, belittling the resources of the adversaries and magnifying and amplifying our own.

<sup>3</sup> Sp.: οἰκεῖα αὐτ οἰκειότερα.

<sup>4</sup> ταῖς om. v.l.



1425 a

Ἐὰν δὲ πόλεμον μέλλοντα γίνεσθαι διακωλύειν ἐπιχειρῶμεν, πρῶτον μὲν διὰ<sup>1</sup> προφάσεων δεικτέον ἢ παντέλως οὐδεμίαν ὑπάρχουσαν ἢ μικρὰς καὶ ταπεινὰς οὐσας τὰς δυσχερείας, ἔπειθ' ὥς οὐ συμφέρει πολεμεῖν, διεξιόντας<sup>2</sup> τὰ κατὰ τὸν πόλεμον ἀτυχήματα τοῖς ἀνθρώποις, πρὸς δὲ τούτοις τὰ πρὸς νίκας συντείνοντα τοῦ πολέμου τοῖς ἐναντίοις ὑπάρχοντα μᾶλλον δεικτέον (ταῦτα δ' ἐστὶν ἅπερ ἀρτίως  
 30 κατηρίθμηται). γίνεσθαι μὲν οὖν μέλλοντα πόλεμον ἐκ τούτων ἀποτρεπτέον· ἥδη δ' ἐνεστῶτα παύειν ἐπιχειροῦντας, ἂν μὲν κρατῶσιν οἱ συμβουλευόμενοι, αὐτὸ τοῦτο πρῶτον λεκτέον, ὅτι δεῖ τοὺς νοῦν ἔχοντας μὴ περιμένειν ἕως ἂν πέσωσιν<sup>3</sup> ἀλλ' ἐν τῷ κρατεῖν ποιεῖσθαι τὴν εἰρήνην, ἔπειτα διότι  
 40 πέφυκεν ὁ πόλεμος καὶ τῶν εὐτυχούντων ἐν αὐτῷ πολλοὺς ἀπολλύναι, ἣ δ' εἰρήνη τοὺς μὲν ἡττωμένους σώζειν, τοὺς δὲ νικῶντας ὧν ἕνεκεν ἐπολέμησαν παρέχειν ἀπολαύειν· διεξιτέον δὲ τὰς μεταβολὰς τὰς ἐν τῷ πολέμῳ, ὥς πολλαὶ καὶ παράλογοι γίνονται. τοὺς μὲν οὖν ἐν τῷ πολέμῳ  
 5 κρατοῦντας ἐκ τῶν τοιούτων ἐπὶ τὴν εἰρήνην παρακλητέον, τοὺς δ' ἐπταικότας ἐξ αὐτῶν τε τῶν συμβάντων, καὶ ἐκ τοῦ μὴ παροξύνεσθαι τοῖς προαδικήσασιν ταῖς συμφοραῖς πειθομένους, καὶ ἐκ τῶν κινδύνων τῶν γεγεννημένων ἐκ τοῦ<sup>4</sup> μὴ ποιήσασθαι τὴν εἰρήνην, καὶ ἐκ τοῦ κρεῖττον εἶναι τοῖς κρεῖττοις μέρος τι τῶν ὑπαρχόντων προέσθαι ἢ πολέμῳ  
 10 κρατηθέντας αὐτοὺς αὐτοῖς κτήμασιν ἀπολέσθαι.

<sup>1</sup> διὰ: τῶν Sp.<sup>2</sup> Sp.: διεξιόντα.<sup>3</sup> πατίσωσιν Finckh.<sup>4</sup> ἐκ τοῦ Halm: τοῦ (τῷ Kayser).

If, on the other hand, we are trying to prevent a war that is impending, we must first employ arguments to prove either that no grievance exists at all or that the 30 grievances are small and negligible; next we must prove that it is not expedient to go to war, by enumerating the misfortunes that befall mankind in war, and in addition we must show that the factors conducive to victory in war (which are those that were enumerated just above) are more to be found on the side of the enemy. These are the considerations to be employed to avert a war that is impending. 35 When we are trying to stop a war that has already begun, if those whom we are advising are getting the upper hand, the first thing to say is that sensible people should not wait till they have a fall but should make peace while they have the upper hand, and next that it is the nature of war to ruin 40 many even of those who are successful in it, whereas it is the nature of peace to save the vanquished while 1425 b allowing the victors to enjoy the prizes for which they went to war; and we must point out how many and how incalculable are the changes of fortune that occur in war. Such are the considerations to be employed in exhorting to peace those who are gaining 5 the upper hand in a war. Those who have encountered a reverse we must urge to make peace on the ground of what has actually happened to them, and on the ground that they ought to learn from their misfortunes not to be exasperated with their wrongful aggressors, and because of the dangers that have already resulted from not making peace, and because it would be better to sacrifice a portion of their pos- 10 sessions to the stronger power than to be vanquished in war and lose their lives as well as their property.

1425 b

συλλήβδην δὲ τοῦθ' ἡμᾶς εἰδέναι δεῖ, ὅτι τότε πάντες ἄνθρωποι τοὺς πολέμους εἰώθασι διαλύεσθαι πρὸς ἀλλήλους ὅταν ἢ τὰ<sup>1</sup> δίκαια ἀξιοῦν τοὺς ἐναντίους ὑπολαμβάνωσιν ἢ διενεχθῶσι τοῖς συμμάχοις  
 15 ἢ τῷ πολέμῳ καμῶσιν<sup>2</sup> ἢ φοβηθῶσι τοὺς ἐναντίους ἢ στασιάζωσι πρὸς σφᾶς αὐτούς.

Ὡστε τούτων τε πάντων καὶ τῶν τούτοις ὁμοιοτρόπων τὰ τοῖς πράγμασιν οἰκειότατα συνάγων οὐκ ἀπορήσεις ὅθεν χρῆναι περὶ πολέμου δημηγορεῖν καὶ εἰρήνης.

Λέγεται δ' ἡμᾶς ἔτι περὶ πόρου χρημάτων  
 20 διελθεῖν. πρῶτον μὲν οὖν σκεπτέον εἴ τι τῶν τῆς πόλεως κτημάτων ἡμελημένον ἐστὶ καὶ μήτε πρόσ-  
 οδον ποιεῖ μήτε τοῖς θεοῖς ἐξαίρετόν ἐστιν. λέγω δ' οἷον τόπους τινὰς δημοσίους ἡμελημένους ἐξ ὧν τοῖς ἰδιώταις ἢ πραθέντων ἢ μισθωθέντων πρόσσόδος ἂν τις τῇ πόλει γίγνοιτο· κοινότατος γὰρ ὁ τοιοῦτος  
 25 πόρος ἐστίν. ἂν δὲ μηδὲν ἢ τοιοῦτον, ἀπὸ τιμημάτων ἀναγκαῖον ποιήσασθαι τὰς εἰσφοράς, ἢ τοῖς μὲν πένησι τὰ σώματα παρέχειν εἶναι προστεταγμένον εἰς τοὺς κινδύνους, τοῖς δὲ πλουτοῦσι τὰ χρήματα, τοῖς δὲ τεχνίταις ὅπλα. συλλήβδην δὲ δεῖ<sup>3</sup> περὶ πόρων εἰσηγούμενον<sup>4</sup> φάναι<sup>5</sup> αὐτοὺς ἴσους  
 30 τοῖς πολίταις καὶ πολυχρονίους καὶ μεγάλους<sup>6</sup> ὄντας, τοὺς δὲ τῶν ἐναντίων τὰ ἐναντία τούτοις ἔχοντας.

Τὰς μὲν οὖν προθέσεις περὶ ὧν δημηγορήσομεν, καὶ τὰ μέρη τούτων ἐξ ὧν τοὺς λόγους συστήσομεν καὶ προτρέποντες καὶ ἀποτρέποντες, ἐκ τῶν εἰρη-

<sup>1</sup> ἢ τὰ Sp.: ἦτοι.

<sup>2</sup> Rac.: κάμνωσιν.

<sup>3</sup> δεῖ add. Sp.

<sup>4</sup> v.l. εἰσηγούμενος.

<sup>5</sup> ἀποφῆναι Wurm.

<sup>6</sup> <μῆ> μεγάλους Sp.

And briefly, we have to realize that it is the way of all mankind to bring their wars with one another to an end either when they think that their adversaries' claims are just, or when they quarrel with their allies or grow tired of the war or afraid of the enemy, or 15 when internal faction breaks out among them.

Consequently if you collect those among all of these and similar points that are most closely related to the facts, you will not be at a loss for appropriate matter for a speech about war and peace.

It still remains for us to discuss finance. The first 20 thing to be considered is whether any part of the national property has been neglected, and is neither producing revenue nor set apart for the service of religion. I refer, for example, to neglect of some public places the sale or lease of which to private citizens might bring revenue to the state ; for that is a very common source of income. If nothing of this sort is available, it is necessary to have a system of 25 taxation based on property qualifications, or for the poor to be under the duty of rendering bodily service in emergencies while the rich furnish money and the craftsmen arms. To put it briefly, when introducing financial proposals one must say that they are fair to the citizens, permanent and productive, and that the 30 plans of the opposition have the opposite qualities.

What has been said has shown us the subjects that we shall employ in parliamentary speeches, and the portions of those subjects that we shall use in composing speeches of exhortation and of dissuasion. Next

1425 b

μένων ἴσμεν· προθέμενοι δὲ πάλιν ἐφεξῆς τό τε  
 35 ἐγκωμιαστικὸν εἶδος καὶ τὸ ψεκτικὸν περιλάβωμεν.

III. Συλλήβδην μὲν οὖν ἐστὶ τὸ<sup>1</sup> ἐγκωμιαστικὸν  
 εἶδος προαιρέσεων καὶ πράξεων καὶ λόγων ἐνδόξων  
 αὐξήσις καὶ μὴ προσόντων συνοικείωσις, ψεκτικὸν  
 δὲ τὸ ἐναντίον τούτῳ, τῶν μὲν ἐνδόξων ταπεινώσις,  
 40 τῶν δὲ ἀδόξων αὐξήσις. ἐπαινετὰ μὲν οὖν ἐστὶ πράγ-  
 1426 a ματα<sup>2</sup> τὰ δίκαια καὶ τὰ νόμιμα καὶ τὰ συμφέροντα  
 καὶ τὰ καλὰ καὶ τὰ ἡδέα καὶ τὰ<sup>3</sup> ῥάδια πραχθῆναι  
 (ταῦτα δὲ αὐτά τε οἶά ἐστι καὶ ὅθεν αὐτὰ<sup>4</sup> πολλὰ  
 ποιήσομεν ἐν τοῖς πρὸ τούτων εἴρηται). δεῖ δὲ  
 τὸν εὐλογοῦντα δεικνύειν τοῖς λόγοις ὡς τούτῳ τῷ  
 5 ἀνθρώπῳ ἢ τοῖς πράγμασιν ὑπάρχει τι τούτων ὑπ'  
 αὐτοῦ κατεργασθὲν ἢ δι' αὐτοῦ πορισθὲν ἢ ἐκ  
 τούτου ἐπισυμβαῖνον<sup>5</sup> ἢ ἔνεκα τούτου γινόμενον ἢ  
 οὐκ ἄνευ τούτου ἐπιτελούμενον· ὁμοιοτρόπως δὲ καὶ  
 τῷ ψέγοντι τὰ ἐναντία τούτοις δεικτέον προσόντα  
 τῷ ψεγομένῳ. τὸ μὲν ἐκ τούτου, οἷον ἐκ τοῦ  
 10 φιλογυμναστεῖν τὸ σῶμα ὑγιαίνειν,<sup>6</sup> καὶ ἐκ τοῦ μὴ  
 φιλοπονεῖν ἐπ' ἀρρωστίαν ἐμπίπτειν, καὶ ἐκ τοῦ  
 φιλοσοφεῖν δεινότερον εἶναι περὶ φρόνησιν, καὶ ἐκ  
 τοῦ ἀμελεῖν ἐνδεᾶ τῶν ἀναγκαίων εἶναι· τὸ δ' ἔνεκα  
 τούτου, οἷον ἔνεκα τοῦ στεφανωθῆναι ὑπὸ τῶν  
 πολιτῶν πολλοὺς πόνους καὶ κινδύνους ὑπομένουσιν,  
 15 καὶ ἔνεκα τοῦ χαρίσασθαι τοῖς ἐρωμένοις τῶν ἄλ-  
 λων οὐδὲν φροντίζουσιν· τὸ δὲ μὴ ἄνευ τούτου, οἷον  
 οὐκ ἄνευ τῶν ναυτῶν ναυμαχιῶν νῆκαι, καὶ οὐκ  
 ἄνευ τοῦ πίνειν αἱ παροινίαι. τὰ τοιαῦτα δὲ τοῖς

<sup>1</sup> ἐστὶ τὸ Sp.: ἐστίν.<sup>2</sup> [πράγματα]? Rac.<sup>3</sup> τὰ οὐ ed. Basil.<sup>4</sup> Sp.: αὐτοί.<sup>5</sup> συμβαῖνον Sp.<sup>6</sup> ὑγιαίνειν Halm: αἱ νῆκαι.<sup>a</sup> Perhaps we should read 'not easy.'

let us put forward for our consideration the eulogistic 35  
and vituperative species of oratory.

III. The eulogistic species of oratory consists, to  
put it briefly, in the amplification of creditable pur- *Ceremonial*  
poses and actions and speeches and the attribution of *oratory: its*  
qualities that do not exist, while the vituperative *subjects.*  
species is the opposite, the minimization of creditable  
qualities and the amplification of discreditable ones.  
Praiseworthy things are those that are just, lawful, 40  
expedient, noble, pleasant and easy <sup>a</sup> to accomplish 1426 a  
(the exact nature of these qualities and where to find  
materials for enlarging on them has been stated in an  
earlier passage <sup>b</sup>). When eulogizing one must show  
in one's speech that one of these things belongs to the  
person in question or to his actions, as directly effected  
by him or produced through his agency or incidentally  
resulting from his action or done as a means to it or  
involving it as an indispensable condition of its per-  
formance ; and similarly in vituperating one must  
show that the qualities opposite to these belong to the  
person vituperated. Instances of incidental result  
are bodily health resulting from devotion to athletics, 10  
loss of health as a result of a neglect of exercise,  
increased intellectual ability resulting from the pur-  
suit of philosophy, destitution resulting from neglect  
of one's affairs. Examples of things done as a means  
are when men endure many toils and dangers for  
the sake of receiving a wreath of honour from their  
compatriots, or neglect everyone else for the sake  
of gratifying the persons they are in love with. 15  
Examples of indispensable conditions are a supply  
of sailors as indispensable for a naval victory and the  
act of drinking as indispensable for intoxication. By

<sup>b</sup> See 1421 b 35 ff.



προειρημένοις ὁμοιοτρόπως μετιῶν ἐγκωμίων καὶ ψόγων πολλῶν εὐπορήσεις.

- 20 Αὐξήσεις δὲ καὶ ταπεινώσεις συλλήβδην ἅπαντα τὰ τοιαῦτα τόνδε τὸν τρόπον μετιῶν, πρῶτον μὲν ἀποφαίνων,<sup>1</sup> ὥσπερ ἀρτίως μετῆλθον, ὑπὸ τουτουῖ πολλὰ γεγενῆσθαι ἢ κακὰ ἢ ἀγαθὰ. εἰς μὲν οὖν τρόπος τῆς αὐξήσεως οὗτος, δεύτερος δὲ κεκριμένον μεταφέρειν,<sup>2</sup> ἂν μὲν ἐπαινῆς, ἀγαθόν, ἂν δὲ ψέγῃς, 25 κακόν, εἴτα παριστάναι τὸ ὑπὸ σοῦ λεγόμενον, καὶ παραβάλλειν πρὸς ἄλληλα, τοῦ μὲν ὑπὸ σαιτουῦ λεγομένου τὰ μέγιστα διεξιῶν<sup>3</sup> τοῦ δ' ἑτέρου τὰ ἐλάχιστα, καὶ οὕτω μέγα φανῆναι.<sup>4</sup> τρίτος δὲ<sup>5</sup> πρὸς τὸ ὑπὸ σαιτουῦ λεγόμενον ἀντιπαραβάλλειν τοῦλάχιστον τῶν ὑπὸ τὴν αὐτὴν ἰδέαν πιπτόντων· 30 φανεῖται γὰρ οὕτω τὸ ὑπὸ σοῦ λεγόμενον μείζον, ὥσπερ οἱ μέτριοι τὰ μεγέθη φαίνονται μείζους ὅταν πρὸς βραχυτέρους παραστῶσιν. ἔσται δὲ καὶ ὧδε πάντως αὔξειν· εἰ κέκριται μέγα ἀγαθόν τοῦτο, τούτω τι<sup>6</sup> ἐναντίον ἔαν λέγῃς, μέγα κακόν φανεῖται· ὡσαύτως δὲ εἰ νομίζεται μέγα κακόν, ἔαν τὸ<sup>7</sup> 35 τούτω ἐναντίον λέγῃς, μέγα ἀγαθόν φανεῖται. ἔστι δὲ καὶ ὧδε μεγάλα ποιεῖν τὰγαθὰ ἢ τὰ κακὰ, ἔαν ἀποφαίνῃς αὐτὸν<sup>8</sup> ἐκ διανοίας, συμβιβάζων ὥς ἐκ πολλοῦ προενόησεν, ὥς πολλάκις<sup>9</sup> πράττειν ἐπεβάλετο, ὥς πολὺν χρόνον ἔπραττεν, ὥς οὐδεὶς ἄλλος πρότερον τούτοις ἐνεχείρησεν, ὥς μετὰ τού- 40 των ἔπραξε μεθ' ὧν οὐδεὶς ἄλλος, ὥς ἐπὶ τούτοις

<sup>1</sup> [ἀποφαίνων] Sp.

<sup>3</sup> διεξιόντα Sp.

<sup>5</sup> δὲ om. codd. pl.

<sup>7</sup> τὸ add. Rac.

<sup>2</sup> μέγα φέρειν Finckh.

<sup>4</sup> φανεῖται Sp.

<sup>6</sup> τὸ Sp.

<sup>8</sup> αἷτιον Usener.

<sup>9</sup> Rac.: πολλὰ.

pursuing such topics in the same manner as those discussed before you will have a good supply of matter for eulogy and vituperation.

To put it briefly, you will be able to amplify and minimize all such topics by pursuing the following method. First you must show, as I lately explained, that the actions of the person in question have produced many bad, or good, results. This is one method of amplification. A second method is to introduce a previous judgement—a favourable one if you are praising, an unfavourable one if you are blaming—and then set your own statement beside it and compare them with one another, enlarging on the strongest points of your own case and the weakest ones of the other and so making your own case appear a strong one. A third way is to set in comparison with the thing you are saying the smallest of the things that fall into the same class, for thus your case will appear magnified, just as men of medium height appear taller when standing by the side of men shorter than themselves. Also the following way of amplifying will be available in all cases. Supposing a given thing has been judged a great good, if you mention something that is its opposite, it will appear a great evil; and similarly supposing something is considered a great evil, if you mention its opposite, it will appear a great good. Another possible way of magnifying good or bad actions is if you prove that the agent acted intentionally, arguing that he had long premeditated doing the acts, that he repeatedly set about doing them, that he went on doing them a long time, that no one else had attempted them before, that he did them in conjunction with persons whom no one else had acted with or in succession to persons whom no

20 *Its methods.*

25

30

35

40

1426 b μεθ' οὓς οὐδείς ἕτερος, ὡς ἐκόν, ὡς ἐκ προνοίας, ὡς εἰ πάντες τούτῳ ἴσως ποιοῖμεν, εὐδαιμονοῖμεν ἢ φαύλως πράττοισιν. χρή δὲ καὶ εἰκάζοντα συμβιβάζειν, καὶ ἐποικοδομοῦντα τὸ ἕτερον ὡς<sup>1</sup> ἐπὶ τὸ ἕτερον αὖξιν τρόπῳ τοιῷδε· “ὅστις δὲ τῶν φίλων κήδεται, τοῦτον εἰκὸς καὶ τοὺς αὐτοῦ γονεῖς τιμᾶν· ὅς δὲ τοὺς γονεάς τιμᾶ, οὗτος καὶ τὴν πατρίδα τὴν ἑαυτοῦ εὖ ποιεῖν βουλήσεται.” συλλήβδην δέ, ἐὰν πολλῶν αἴτιον ἀποφαίνης, ἐὰν τε ἀγαθῶν ἐὰν τε κακῶν, μεγάλα<sup>2</sup> φανεῖται. σκοπεῖν δὲ καὶ πότερον μείζον φαίνεται τὸ πρᾶγμα<sup>3</sup> κατὰ μέρη<sup>4</sup> διαιρούμενον ἢ καθόλου λεγόμενον, καὶ ὁποτέρως ἂν μείζον ᾖ, τόνδε τὸν τρόπον αὐτὸ λέγειν. τὰς μὲν οὖν αὖξήσεις οὕτω μετιῶν πλείστας ποιήσεις καὶ μεγίστας.

Ταπεινώσεις δὲ τοῖς λόγοις καὶ τὰ ἀγαθὰ καὶ τὰ κακὰ τὸν ἐναντίον τρόπον μετιῶν ἢ<sup>5</sup> ὡς εἰρήκαμεν ἐπὶ τῶν μεγάλων, καὶ μάλιστα μὲν ἂν μηδενὸς αἴτιον ἐπιδεικνύης, εἰ δὲ μή, ὡς ἐλαχίστων καὶ μικροτάτων.

Ὡς μὲν οὖν ἐγκωμιάζοντες καὶ ψέγοντες αὖξήσομεν καὶ ταπεινώσομεν ἅπερ ἂν ἐκφέρωμεν,<sup>6</sup> ἐκ τούτων ἴσμεν· χρήσιμοι δὲ αἱ τῶν αὖξήσεων ἀφορμαὶ εἰσι καὶ ἐν τοῖς ἄλλοις εἶδεσιν, ἀλλ' ἢ πλείστη δύναμις αὐτῶν ἐστὶν ἐν τοῖς ἐγκωμίοις καὶ ἐν τοῖς ψόγοις. περὶ μὲν οὖν τούτων ἐντεῦθεν εὐπορήσομεν.

IV. Διέλωμεν<sup>7</sup> δὲ πάλιν ὁμοιοτρόπως τούτοις τὸ τε κατηγορικὸν καὶ τὸ ἀπολογητικὸν εἶδος, ὃ περὶ

<sup>1</sup> [ὡς] Sp.

<sup>2</sup> μέγα Sp.

<sup>3</sup> πότερον . . . πρᾶγμα Π: τὸ πρᾶγμα ὁποῖον φανεῖται cet.  
<sup>4</sup> κατὰ μέρη om. Π.

one else had followed, that he was acting willingly, 1426 b  
that he was acting deliberately, that we should all be  
happy, or unfortunate, if we all acted like him. One  
must also argue one's case by employing comparison,  
and amplify it by building up one point on another, as  
follows : ' It is probable that anybody who looks after 5  
his friends, also honours his own parents ; and any-  
body who honours his parents will also wish to benefit  
his own country.' And in brief, if you prove a man  
responsible for many things, whether good or bad,  
they will bulk large in appearance. You must also  
consider whether the matter bulks larger when  
divided up into parts or when stated as a whole, and 10  
state it in whichever way it makes a bigger show.  
By pursuing these methods in amplifications you will  
be able to make them most numerous and most  
effective.

To minimize either good points or bad ones by your  
speeches you will pursue the opposite method to that  
which we have described in the case of magnifying—  
best of all, if you prove the person not to be respon- 15  
sible at all, or failing that, only responsible for the  
fewest and smallest things possible.

These rules instruct us how we are to amplify or  
minimize whatever matters we are bringing forward  
for eulogy or vituperation. The materials for ampli-  
fication are useful in the other species of oratory as  
well, but it is in eulogy and vituperation that they are 20  
most efficacious. The above remarks will make us  
adequately equipped in regard to them.

IV. Let us next in a similar manner define the *Forensic*  
elements composing and the proper mode of employ- *oratory.*

<sup>5</sup> ἢ add. Rac. (vel οἷς pro ὡς).

<sup>7</sup> διέλθωμεν Sp.

<sup>6</sup> Π: ἐθέλωμεν cet.

1426 b

τὴν δικανικὴν ἐστὶ πραγματείαν,<sup>1</sup> αὐτὰ τε ἐξ ὧν  
 25 συνέστηκε, καὶ ὡς δεῖ αὐτοῖς χρῆσθαι. ἔστι δὲ τὸ  
 μὲν κατηγορικὸν συλλήβδην εἰπεῖν ἀμαρτημάτων  
 καὶ ἀδικημάτων ἐξάγγελσις, τὸ δ' ἀπολογητικὸν  
 ἀμαρτημάτων καὶ ἀδικημάτων κατηγορηθέντων ἢ  
 καθυποπτευθέντων διάλυσις. ἑκατέρου δὲ τῶν  
 εἰδῶν τὰς δυνάμεις ταύτας<sup>2</sup> ἔχοντος, κατηγοροῦντα  
 30 μὲν ἀναγκαῖον λέγειν, ὅταν μὲν εἰς πονηρίαν κατ-  
 ηγορήσ,<sup>3</sup> ὡς αἱ τῶν ἐναντίων πράξεις ἄδικοι καὶ  
 παράνομοι καὶ τῷ πλήθει τῶν πολιτῶν ἀσύμφοροι  
 τυγχάνουσιν οὔσαι, ὅταν δὲ εἰς ἀβελτερίαν, ὡς αὐτῷ  
 τε τῷ πράττοντι ἀσύμφοροι καὶ αἰσχυραὶ καὶ ἀηδεῖς  
 35 καὶ ἀδύνατοι ἐπιτελεσθῆναι. ταῦτα μὲν καὶ τὰ  
 τούτοις ὅμοια κατὰ τε τῶν πονηρῶν καὶ τῶν  
 ἀβελτέρων ἐπιχειρήματά ἐστιν. δεῖ δὲ καὶ τοῦτο  
 παρατηρεῖν τοὺς κατηγοροῦντας, ἐπὶ ποίοις τῶν  
 ἀδικημάτων οἱ νόμοι τὰς τιμωρίας τάττουσιν, καὶ  
 περὶ αὐτῶν ἀδικημάτων οἱ δικασταὶ τὰς ζημίας  
 40 ὀρίζουσιν. ὅταν μὲν οὖν ἢ νόμος διωρικῶς, τοῦτο  
 δεῖ μόνον σκοπεῖν τὸν κατήγορον, ὅπως ἂν ἐπιδείξῃ  
 1427 a τὸ πρᾶγμα γεγεννημένον. ὅταν δὲ οἱ δικασταὶ  
 τιμῶσι, πρῶτον μὲν ἀνάγκη ἐπιδείξαι τὰ κατ-  
 ηγορούμενα,<sup>4</sup> ἔπειτα<sup>5</sup> αὐξητέον ἐστὶ τὰ ἀδικήματα  
 καὶ τὰ τῶν ἐναντίων ἀμαρτήματα,<sup>6</sup> καὶ μάλιστα μὲν  
 δεικτέον ὡς ἐκὼν καὶ ἐκ προνοίας οὐ τῆς τυχούσης  
 5 ἀλλὰ μετὰ παρασκευῆς πλείστης ἡδίκησεν· εἰ δὲ  
 μὴ δυνατόν ἢ τοῦτο ποιεῖν, ἀλλὰ νομίξης δείξειν<sup>7</sup>  
 τὸν ἐναντίον ὡς ἡμαρτε τρόπον τινὰ ἢ ὅτι ταῦτα

<sup>1</sup> ὁ . . . πραγματείαν om. Π.<sup>2</sup> v.l. τὰς αὐτάς.<sup>3</sup> Rac.: κατηγορῇ αὐτὴν κατηγορῶ.<sup>4</sup> τιμῶσι . . . κατηγορούμενα Π: τὸ κατηγορούμενον εἰδῶσι cet.

ing the species of oratory used in accusation and defence—the oratory connected with forensic practice. 25 To put it briefly, the oratory of accusation is the recital of errors and offences, and that of defence the refutation of errors and offences of which a man is accused or suspected. These being the functions of each of these species, the line to take in accusing is to 30 say, in a case where your accusation refers to wickedness, that the actions of your adversaries are actually dishonest and illegal and detrimental to the mass of the citizens, and when it refers to folly, that they are detrimental to the agent himself, disgraceful, unpleasant and impracticable. These and similar 35 accusations are the line of attack against persons guilty of wickedness or folly. But accusers must also be careful to notice what are the kinds of offences for which there are punishments fixed by law and which are the offences in regard to which the penalties are decided by the jury. In cases where the law has determined the penalty, the accuser must direct his 40 attention solely to proving that the act has been committed. When the jury assess, he must amplify 1427 a the offences and the errors of his opponents, and if possible prove that the defendant committed the offence of his own free will, and not from a merely casual intention, but with a very great amount of preparation; 5 or if it is not possible to prove this, but you think the other side will try to prove that the accused made a mistake in some way, or that although intending

<sup>5</sup> ἔπειτα add. Forster.

<sup>6</sup> [καὶ τὰ . . . ἀμαρτήματα] Sauppe.

<sup>7</sup> v.l. δείξαι.



1427 a

πράξαι διανοηθεὶς καλῶς ἡτύχησε, περιαιρετέον τὴν  
 συγγνώμην λέγοντα τοῖς ἀκούουσιν ὥς οὐ δεῖ πρά-  
 ξαντας ἡμαρτηκέναι φάσκειν ἀλλὰ πρὶν πράττειν  
 10 εὐλαβεῖσθαι, ἔπειθ' ὥς εἰ καὶ ἐξήμαρτεν ἢ ἡτύχησεν  
 ἐκεῖνος, δεῖ διὰ τὰς ἀτυχίας καὶ τὰς ἀμαρτίας  
 ζημιωθῆναι μᾶλλον αὐτὸν ἢ τὸν μηδέτερον τούτων  
 ποιήσαντα· πρὸς δὲ τούτοις καὶ ὁ νομοθέτης  
 οὐκ ἀφῆκε τοὺς ἐξαμαρτάνοντας ἀλλ' ὑποδίκους  
 ἐποίησεν, ἵνα μὴ πάντες<sup>1</sup> ἐξαμαρτάνωσιν. λέγε δὲ  
 15 καὶ ὥς εἰ τὸν τὰ τοιαῦτα ἀπολογούμενον ἀπο-  
 δέξονται, πολλοὺς τοὺς ἀδικεῖν προαιρουμένους  
 ἔξουσιν· κατορθώσαντες μὲν γὰρ ἅπερ ἂν ἐθέλωσι  
 πράξουσιν, ἀποτυχόντες δὲ φάσκοντες ἡτυχηκέναι  
 τιμωρίαν οὐχ ὑφέξουσιν. τοῖς μὲν οὖν κατηγοροῦ-  
 σιν ἐκ τῶν τοιούτων ἢ συγγνώμη περιαιρετέα· καὶ  
 20 ὥς πρότερον εἴρηται, διὰ τῶν αὐξήσεων πολλῶν  
 αἵτια κακῶν τὰ τῶν ἐναντίων ἔργα δεικτέον.

Τὸ μὲν οὖν κατηγορικὸν εἶδος διὰ τῶν μερῶν  
 ἀποτελεῖται τούτων.

Τὸ δὲ ἀπολογητικὸν διὰ τριῶν μεθόδων συν-  
 ἵσταται.<sup>2</sup> ἢ γὰρ ἀποδεικτέον τῷ ἀπολογουμένῳ ὥς  
 25 οὐδὲν τῶν κατηγορουμένων ἔπραξεν· ἢ εἰ ἀναγκά-  
 ζηται ὁμολογεῖν, πειρατέον δεικνύναι ἔννομον καὶ  
 δίκαιον καὶ καλὸν καὶ συμφέρον τῇ πόλει τὸ πε-  
 πραγμένον· εἰ δὲ μὴ τοῦτο δύνηται ἀποδείξαι, εἰς  
 ἀμάρτημα ἢ εἰς ἀτύχημα ἄγοντα τὰς πράξεις καὶ  
 μικρὰς βλάβας<sup>3</sup> ἀπ' αὐτῶν γεγενημένας<sup>4</sup> ἀποφαί-  
 30 νοντα συγγνώμης τυχεῖν πειρατέον. ἀδικίαν δὲ

<sup>1</sup> v.l. πᾶσιν: πάλιν Sauppe.

<sup>2</sup> v.l. συνίσταται πόθεν ἂν τις ἀπολογήσαιτο (οἶμαι τοῦτο  
 εἶναι σχόλιον Victorius).

<sup>3</sup> v.l. τὰς βλαβὰς: τὰς βλαβας <τὰς>? Rac.

to act honourably in the matter he failed by bad luck, you must dissipate compassion by telling your audience that men have no business to act first and afterwards say they have made a mistake, but that they ought to look before they leap; and next, that even if the defendant really did <sup>10</sup> make a mistake or have bad luck, it is more proper for him to be punished for his failures and mistakes than a person who has committed neither; moreover, the lawgiver did not let off people who make mistakes but made them liable to justice, or else everybody would be making mistakes. Also say that if they listen to a man who puts up a de- <sup>15</sup> fence of that sort, they will have many people doing wrong on purpose, as if they bring it off they will be able to do whatever they like, and if they fail they will escape being punished by saying that it was an accident. This is the sort of argument which accusers must employ to dissipate compassion; and, as has been said before, they must employ amplification to <sup>20</sup> show that their opponents' actions have been attended by many bad consequences.

These, then, are the divisions composing the species of oratory used in accusation.

The defensive species comprises three methods. A defendant must either prove that he did none of the <sup>25</sup> things he is charged with; or if he is forced to admit them, he must try to show that what he did was lawful and just and noble and to the public advantage; or if he cannot prove this, he must attempt to gain forgiveness by representing his acts as an error or misfortune, and by showing that only small mischief has resulted from them. You must distinguish between injustice, <sup>30</sup>

<sup>4</sup> v.l. γενομένης.

1427 a

καὶ ἀμάρτημα καὶ ἀτυχίαν ὧδε διόριζε<sup>1</sup>. τὸ μὲν ἐκ  
 προνοίας κακόν τι ποιεῖν ἀδικίαν τίθει, καὶ φάθι  
 δεῖν τιμωρίαν ἐπὶ τοῖς τοιούτοις τὴν μεγίστην  
 λαμβάνειν· τὸ δὲ δι' ἄγνοιαν βλαβερόν τι πράττειν  
 35 ἀμαρτίαν εἶναι φατέον· τὸ δὲ μὴ δι' ἑαυτὸν ἀλλὰ δι'  
 ἑτέρους τινὰς ἢ διὰ τύχην μηδὲν ἐπιτελεῖν τῶν  
 βουλευθέντων καλῶς ἀτυχίαν τίθει. καὶ φάθι τὸ  
 μὲν ἀδικεῖν εἶναι τῶν πονηρῶν ἀνθρώπων ἴδιον, τὸ  
 δ' ἐξαμαρτεῖν καὶ περὶ τὰς πράξεις ἀτυχεῖν οὐ  
 μόνου<sup>2</sup> εἶναι σεαυτοῦ<sup>3</sup> ἴδιον, ἀλλὰ καὶ κοινὸν καὶ τῶν  
 40 δικαζόντων καὶ τῶν ἄλλων ἀνθρώπων· ἀξίου δὲ  
 συγγνώμην ἔχειν ἀναγκασθεῖς τι ὁμολογεῖν τῶν  
 τοιούτων αἰτιῶν, κοινὸν τοῖς ἀκούουσι ποιῶν τὸ  
 1427 b ἀμαρτάνειν καὶ τὸ ἀτυχεῖν. δεῖ δὲ τὸν ἀπολογού-  
 μενον πάντα θεωρεῖν ἐφ' οἷς τῶν ἀδικημάτων οἱ τε  
 νόμοι τὰς τιμωρίας ἔταξαν καὶ οἱ δικασταὶ τὰς<sup>4</sup>  
 5 ζημίας τιμῶσιν, καὶ ὅταν ὁ νόμος ὀρίζη τὰς τι-  
 μωρίας, δεικτέον ὥς οὐκ ἐποίησε τὸ παράπαν ἢ ὥς  
 ἔννομα καὶ δίκαια ἐποίησεν, ὅτε δὲ οἱ δικασταὶ  
 καθεστήκασιν τιμηταὶ τῆς ζημίας, ὁμοίως πάλιν οὐ  
 φατέον ὅτι ταῦτα οὐκ ἐποίησεν, ἀλλὰ μικρὰ  
 βεβλαμμένον τὸν ἐναντίον καὶ ἀκούσια ἀποφαίνειν  
 πειρατέον.

Ἐκ τούτων μὲν οὖν καὶ τῶν τούτοις ὁμοιο-  
 10 τρόπων ἐν ταῖς κατηγορίαις καὶ ταῖς ἀπολογίαις  
 εὐπορήσομεν· λείπεται δ' ἡμῖν ἔτι διεξελθεῖν τὸ  
 ἐξεταστικὸν εἶδος.

V. Ἐν κεφαλαίῳ μὲν οὖν εἰπεῖν, ἡ ἐξέτασις ἐστι  
 προαιρέσεων ἢ πράξεων ἢ λόγων πρὸς ἄλληλα ἢ  
 πρὸς τὸν ἄλλον βίον ἐναντιουμένων ἐμφάνις, δεῖ  
 15 δὲ τὸν ἐξετάζοντα ζητεῖν εἴ που ἢ ὁ λόγος ὢν

<sup>1</sup> Sp.: ὀρίζεις αὐτ -οις αὐτ -ειν.<sup>2</sup> Rac.: μόνον.

error, and misfortune: define injustice as the deliberate commission of evil, and say that for offences of that sort the severest penalties should be inflicted; declare that a harmful action done unwittingly is an error; and class a failure to carry out some honourable intention, if it is not due to oneself but to other people or to luck, as misfortune. Also say that unjust conduct is peculiar to wicked people, but that error and misfortune in one's actions is not peculiar to yourself alone but is common to all mankind, including the members of the jury. You must claim to receive compassion for being forced to plead guilty to a charge of that sort, making out that error and misfortune are shared by your hearers. A defendant must have in view all the offences for which the laws have fixed the punishments and for which the jury assesses the penalties; and in a case where the law fixes the punishments he should show that he did not commit the act at all or that his conduct was lawful and right, whereas when the jury has been made the assessor of the penalty, he should not in the same way deny having committed the act, but try to show that he did his adversary little damage and that that was involuntary.

These and similar arguments will supply us with plenty of material in accusations and defences. It still remains for us to discuss the species of oratory employed in investigation.

V. Investigation may be summarily defined as the exhibition of certain intentions or actions or words as inconsistent with one another or with the rest of someone's conduct. The investigator must try to find some

*Investigational oratory.*

<sup>3</sup> Rac.: ἐαυτῶ.

<sup>4</sup> τὰς add. Kayser.

1427 b

ἐξετάζει ἢ αἱ πράξεις τοῦ ἐξεταζομένου ἢ αἱ προ-  
 αιρέσεις ἐναντιοῦνται ἀλλήλαις. ἡ δὲ μέθοδος ἥδε,  
 σκοπεῖν ἐν τῷ παροιχομένῳ χρόνῳ εἴ πως πρῶτόν  
 τινος φίλος γενόμενος πάλιν ἐχθρὸς ἐγένετο καὶ  
 πάλιν φίλος τῷ αὐτῷ τούτῳ, ἢ τι ἄλλο ἐναντίον εἰς  
 20 μοχθηρίαν φέρον ἔπραξεν, ἢ ἔτι πράξει, ἐὰν οἱ  
 καιροὶ παραπέσοιεν αὐτῷ, ἐναντίον τοῖς πρότερον  
 ὑπ' αὐτοῦ πεπραγμένοις. ὡσαύτως δὲ ὄρα καὶ εἴ  
 τι εἰπὼν νῦν λέγει ἐναντίον τοῖς πρότερον αὐτῷ  
 εἰρημένοις<sup>1</sup> [ἢ εἴ τι εἴποι ἐναντίον τοῖς λεγομένοις  
 ἢ τοῖς πρότερον εἰρημένοις]<sup>2</sup>. ὡσαύτως δὲ καὶ  
 25 εἴ τι προεῖλετο ἐναντίον τοῖς πρότερον εἰρημένοις  
 ὑπ' αὐτοῦ, ἢ προέλοιτ' ἂν καιρῶν παραπεσόντων.  
 ὁμοιοτρόπως δὲ τούτοις λαμβάνειν καὶ πρὸς τὰ  
 ἄλλα ἔνδοξα ἐπιτηδεύματα τὰς ἐν τῷ τοῦ ἐξεταζο-  
 μένου βίῳ ἐναντιώσεις. τὸ μὲν οὖν ἐξεταστικὸν  
 εἶδος οὕτω μετιὼν οὐδένα παραλείψεις τρόπον τῆς  
 30 ἐξετάσεως.

Ἀπάντων δὲ τῶν εἰδῶν ἤδη διηρημένων, δεῖ καὶ  
 χωρὶς τούτων ἐκάστω, ὅταν ἀρμότῃ, χρῆσθαι, καὶ  
 κοινῇ, συμμιγνύντα τὰς δυνάμεις αὐτῶν. ταῦτα  
 γὰρ ἔχει μὲν διαφορὰς εὐμεγέθεις, ἐπικοινωνοῦσι  
 μέντοι κατὰ τὰς χρήσεις ἀλλήλοις, καὶ ταῦτὸ  
 35 πεπόνθασι τοῖς τῶν ἀνθρώπων εἶδεσιν· καὶ γὰρ  
 οὔτοι τῇ μὲν ὅμοιοι τῇ δὲ ἀνόμοιοι τὰς ὄψεις καὶ  
 τὰς αἰσθήσεις εἰσίν.

Οὕτω δὲ τῶν εἰδῶν διωρισμένων, καὶ ὧν προσ-  
 δέονται κοινῇ πάλιν ἐξαριθμήσωμεν καὶ διεξ-  
 ἔλθωμεν ὥς αὐτοῖς δεῖ χρῆσθαι.

VI. Πρῶτον μὲν οὖν καὶ τὸ δίκαιον καὶ τὸ νόμι-

<sup>1</sup> προηρημένοις Sp.

<sup>2</sup> [ἢ . . . εἰρημένοις] Buhl.

point in which either the speech that he is investigating is self-contradictory or the actions or the intentions of the person under investigation run counter to one another. This is the procedure—to consider whether perhaps in the past after having first been a friend of somebody he afterwards became his enemy and then became the same man's friend again ; or committed 20 some other inconsistent action indicating depravity ; or is likely in the future, should opportunities befall him, to act in a manner contrary to his previous conduct. Similarly observe also whether something that he says when speaking now is contrary to what he has said before ; and likewise also whether he has 25 ever adopted a policy contrary to his previous professions, or would do so if opportunities offered. And on similar lines you should also take the features in the career of the person under investigation inconsistent with his other habits of conduct that are estimable. By thus pursuing the investigational species of oratory there is no method of investiga- 30 tion that you will leave out.

All the species of oratory have now been distinguished. They are to be employed both separately, when suitable, and jointly, with a combination of their qualities—for though they have very considerable differences, yet in their practical application they overlap. In fact the same is true of them as of the 35 various species of human beings ; these also are partly alike and partly different in their appearance and in their perceptions.

Having thus defined the various species of oratory, let us next enumerate their common requirements, and discuss their proper mode of employment.

VI. In the first place, although the just, the lawful,

*Elements  
common to  
all species  
of oratory.*



1427 b

40 μον καὶ τὸ συμφέρον καὶ τὸ καλὸν καὶ τὸ ἡδὺ καὶ  
τὰ τούτοις ἀκόλουθα, καθάπερ ἐν ἀρχῇ διειλόμην,  
1428 a κοινὰ πᾶσι τοῖς εἶδεσιν ἐστι, μάλιστα δ' αὐτοῖς τὸ  
προτρεπτικὸν<sup>1</sup> προσχρῆται. δεύτερον δὲ τὰς αὐ-  
ξήσεις καὶ τὰς ταπεινώσεις χρησίμους ἀναγκαῖον  
εἶναι παρὰ τὰ λοιπὰ<sup>2</sup> πάντα, μάλιστα δ' αὐτῶν ἐν  
τῷ ἐγκωμίῳ<sup>3</sup> καὶ τοῖς ψόγοις αἱ χρήσεις. τρίτον  
5 δὲ πίστεις, αἷς ἀνάγκη μὲν πρὸς πάντα τὰ μέρη<sup>4</sup>  
τῶν λόγων χρῆσθαι, χρησιμώταται δ' εἰσὶν ἐν  
ταῖς κατηγορίαις καὶ ταῖς ἀπολογίαις· αὗται<sup>5</sup> γὰρ  
πλείστης ἀντιλογίας δέονται. πρὸς δὲ τούτοις  
προκαταλήψεις καὶ αἰτήματα καὶ παλιλλογίαι καὶ  
μῆκος λόγου καὶ μετριότης μήκους καὶ βραχυλογία  
10 καὶ ἐρμηνεία· ταῦτα γὰρ καὶ τὰ τούτοις ὅμοια  
κοινὰς ἔχει πᾶσι τοῖς εἶδεσι τὰς χρήσεις.

Περὶ μὲν οὖν τῶν δικαίων καὶ τῶν νομίμων καὶ  
τῶν τούτοις ὁμοιοτρόπων πρότερον διωρισάμην καὶ  
τὴν χρῆσιν αὐτῶν διεξῆλθον, καὶ περὶ<sup>6</sup> τῶν αὐ-  
15 ξήσεων καὶ ταπεινώσεων εἶπον. νῦν δὲ περὶ τῶν  
ἄλλων δηλώσω, πρῶτον ἀπὸ τῶν πίστεων ἀρξάμενος.

VII. Εἰσὶ δὲ δύο τρόποι τῶν πίστεων. γίνονται  
γὰρ αἱ μὲν ἐξ αὐτῶν τῶν λόγων καὶ τῶν πράξεων  
καὶ<sup>7</sup> τῶν ἀνθρώπων, αἱ δ' ἐπίθετοι τοῖς λεγομένοις  
καὶ τοῖς πραττομένοις· τὰ μὲν γὰρ εἰκότα καὶ  
20 παραδείγματα καὶ τεκμήρια καὶ ἐνθυμήματα καὶ  
αἱ<sup>8</sup> γινώμαι καὶ τὰ σημεῖα καὶ οἱ ἔλεγχοι πίστεις  
ἐξ αὐτῶν τῶν λόγων καὶ τῶν ἀνθρώπων καὶ τῶν

<sup>1</sup> προτρεπτικὸν (καὶ ἀποτρεπτικὸν) Sp.

<sup>2</sup> [τὰ λοιπὰ] Sp. (v.l. πάντα τὸν λόγον).

<sup>3</sup> τοῖς ἐγκωμίοις Sp.

<sup>4</sup> μέρη (καὶ εἶδη) Sp.

<sup>5</sup> αὗται Sp.: ταῦτα.

<sup>6</sup> Sp.: περὶ μὲν.

<sup>7</sup> [καὶ] Sp., sed cf. b 17.

<sup>8</sup> αἱ add. Sp.

the expedient, the honourable, the pleasant and the  
 other topics in the list are, as I defined at the begin-  
 ning,<sup>a</sup> common to all the species, they are specially  
 employed by the oratory of exhortation. Secondly,  
 amplification and minimization, although bound to be  
 useful for all the rest of the species, are specially  
 employed in eulogy and vituperation. Thirdly, there  
 are proofs, which, though it is necessary to use them  
 for all the departments of oratory, are most useful  
 in accusations and defences, since these require the  
 most employment of refutation. In addition there  
 are anticipations of one's opponents' arguments,  
 postulation, recapitulation, prolixity, moderation in  
 length, brevity, interpretation; the employment of  
 these and similar devices is common to all the species  
 of oratory. 1427 b  
40  
1428 a

I have previously defined the just, the lawful and  
 similar topics, and have explained the mode of em-  
 ploying them; and I have discussed amplification and  
 minimization. I will now explain the other topics,  
 beginning with proofs. 15

VII. Of proofs there are two modes: some proofs  
 are drawn from words and actions and persons them-  
 selves, others are supplementary to what the persons  
 say and do. Probabilities, examples, tokens, enthy-  
 memes,<sup>b</sup> maxims, signs<sup>c</sup> and refutations are proofs  
 drawn from actual words and persons and actions; the  
*Modes of  
proof:  
(a) direct:*

<sup>a</sup> See 1421 b 24 ff.

<sup>b</sup> Or 'considerations,' syllogisms employing premisses that  
 are probable but not certain.

<sup>c</sup> Σημείον in Aristotelian logic means a probable indica-  
 tion, τεκμήριον, 'token,' a certain proof.

1428 a

πραγμάτων εἰσίν, ἐπίθεται δὲ <δόξα τοῦ λέγοντος,><sup>1</sup>  
μαρτυρίαι, βάσανοι, ὅρκοι.<sup>2</sup> δεῖ δὴ<sup>3</sup> τούτων ἐκάστην  
αὐτὴν τε συνιέναι ποία τίς ἐστι, καὶ πόθεν τῶν εἰς  
25 αὐτὴν λόγων εὐπορήσομεν, καὶ τί ἀλλήλων δια-  
φέρουσιν.

Εἰκὸς μὲν οὖν ἐστὶν οὗ λεγομένου παραδείγματα  
ἐν ταῖς διανοαῖς ἔχουσιν οἱ ἀκούοντες· λέγω δ' οἷον  
εἴ τις φαίη τὴν πατρίδα βούλεσθαι μεγάλην εἶναι  
καὶ τοὺς οἰκείους εὖ πράττειν καὶ τοὺς ἐχθροὺς  
ἀτυχεῖν καὶ τὰ τούτοις ὅμοια συλλήβδην, εἰκότα  
30 δόξειεν ἄν<sup>4</sup>. ἕκαστος γὰρ τῶν ἀκούοντων σύνοιδεν  
αὐτὸς αὐτῷ περὶ τούτων καὶ τῶν τούτοις ὁμοιο-  
τρόπων ἔχοντι τοιαύτας ἐπιθυμίας. ὥστε τοῦτο δεῖ  
παρατηρεῖν ἡμᾶς ἐν τοῖς λόγοις αἰεὶ, εἰ τοὺς ἀκού-  
οντας συνειδότας ληψόμεθα περὶ τοῦ πράγματος οὗ<sup>5</sup>  
λέγομεν· τούτοις γὰρ αὐτοὺς εἰκὸς ἐστὶ μάλιστα  
πιστεύειν. τὸ μὲν οὖν εἰκὸς τοιαύτην ἔχει φύσιν,  
διαιροῦμεν δὲ αὐτὸ εἰς τρεῖς ἰδέας. μία μὲν οὖν  
ἐστὶ τὸ τὰ πάθη τὰ κατὰ φύσιν ἀκολουθοῦντα τοῖς  
ἀνθρώποις τοῖς<sup>6</sup> λόγοις συμπαραλαμβάνειν ἐν τῷ  
κατηγορεῖν ἢ ἀπολογεῖσθαι· οἷον ἐὰν τύχῃσιν τινες  
καταφρονήσαντές τινα ἢ δείσαντες, ἢ καὶ αὐτοῖ<sup>7</sup>  
τοῦτο τὸ πρᾶγμα πολλάκις πεποιηκότες,<sup>8</sup> ἢ πάλιν  
1428 b ἡσθέντες ἢ λυπηθέντες, ἢ ἐπιθυμήσαντες<sup>9</sup> ἢ πεπau-  
μένοι τῆς ἐπιθυμίας,<sup>10</sup> ἢ<sup>11</sup> τι τοιοῦτον ἕτερον πε-  
πονθότες πάθος ταῖς ψυχαῖς ἢ τοῖς σώμασιν ἢ τινι  
τῶν ἄλλων αἰσθήσεων οἷς συμπάσχομεν· ταῦτα γὰρ  
5 καὶ τὰ τούτοις ὅμοια, κοινὰ τῆς ἀνθρωπείας φύσεως

<sup>1</sup> add. Sp., cf. 1431 b 9.

■ Sp.: μάρτυρες, ὅρκοι, βάσανοι (αὐτ καὶ βάσανοι).

■ v.l. δε.

<sup>4</sup> Sp.: δόξειεν αὐτ δόξειαν.

<sup>5</sup> ὁ vel περὶ οὗ? Rac.

<sup>6</sup> <ἐν> τοῖς] Finckh.

opinion of the speaker, the evidence of witnesses, evidence given under torture, oaths are supplementary. We ought, then, to understand the exact nature of each of these, and the sources that will supply us with arguments for each, and the differences between them.

A probability is a statement supported by examples present in the minds of an audience. I mean, for instance, if a person said that he desired his country to be great, his friends prosperous and his enemies unfortunate, and things like these in general, the statements would seem probable, because each member of the audience is personally conscious of having corresponding desires about these and similar matters himself. Consequently we must always pay attention in our speeches to the question whether we shall find our hearers possessed of a personal knowledge of the thing we are speaking of, as that is the sort of statement they are most likely to believe. Such being the nature of the probable, we divide it into three classes. One is when in accusing or defending we call in to aid our argument those emotions that human beings naturally experience—if, for instance, it happens that certain persons despise or fear someone, or have often done the thing in question themselves, or again feel a pleasure or a pain or a desire, or have ceased to feel the desire, or have experienced in mind or body or any other field of sensation some other feeling of the sort that we jointly experience; for these and similar feelings being common experiences

(1) Probabilities.

1428 b

<sup>7</sup> Rac.: αὐτό.

<sup>8</sup> [ἢ καὶ αὐτό . . . πεποιηκότες] Finckh.

<sup>9</sup> v.l. ἐπιθυμοῦντες.

<sup>10</sup> v.l. τῶν ἐπιθυμιῶν.

<sup>11</sup> v.l. add. πλουτοῦντες ἢ (παροικοῦντες ἢ Usener, cf. 1429 a 19).

1428 b

ὄντα πάθη, γνώριμα τοῖς ἀκούουσιν ἔστιν. τὰ μὲν οὖν κατὰ φύσιν εἰθισμένα τοῖς ἀνθρώποις γίνεσθαι τοιαῦτά ἐστιν· ἃ φάμεν δεῖν συμπαραλαμβάνειν τοῖς<sup>1</sup> λόγοις. ἕτερον δὲ μέρος ἐστὶ τῶν εἰκότων ἔθος,<sup>2</sup> ὃ κατὰ συνήθειαν ἕκαστοι ποιοῦμεν. τρίτον δὲ κέρδος·  
 10 πολλάκις γὰρ διὰ τούτου τὴν φύσιν βιασάμενοι καὶ τὰ ἥθη προειλόμεθα πράττειν.<sup>3</sup>

Οὕτω δὲ τούτων διωρισμένων, ἐν μὲν ταῖς προτροπαῖς καὶ ταῖς ἀποτροπαῖς δεικτέον ὑπὲρ τῶν ζητουμένων ὅτι τοῦτο τὸ πρᾶγμα ἐφ' ὃ ἡμεῖς παρακαλοῦμεν ἢ ᾧ ἀντιλέγομεν αὐτὸ ὡς ἡμεῖς  
 15 φάμεν γίνεται, εἰ δὲ μή, ὅτι τὰ τούτῳ τῷ πράγματι ὅμοια τοῦτον τὸν τρόπον γίνεται ὃν ἡμεῖς φάμεν ἢ τὰ πλείστα ἢ τὰ πάντα. κατὰ μὲν οὖν τῶν πραγμάτων οὕτω τὸ εἰκὸς ληπτέον· κατὰ δὲ τῶν ἀνθρώπων ἐν μὲν<sup>4</sup> ταῖς κατηγορίαις, ἐὰν ἔχῃς, ἐπιδείκνυε τὸ αὐτὸ τοῦτο πρᾶγμα πολλάκις πε-  
 20 ποιηκότα πρότερον, εἰ δὲ μή, ὅμοια τούτῳ. πειρῶ δὲ ἀποφαίνειν καὶ ὡς λυσιτελὲς ἦν αὐτῷ ταῦτα ποιεῖν· οἱ γὰρ πλείστοι τῶν ἀνθρώπων αὐτοὶ τὸ λυσιτελὲς μάλιστα προτιμῶντες καὶ τοὺς ἄλλους νομίζουσιν ἔνεκα τούτου πάντα πράττειν. ἂν μὲν οὖν ἔχῃς ἀπὸ τῶν ἀντιδίκων αὐτῶν τὸ εἰκὸς λαμ-  
 25 βάνειν, οὕτως αὐτὸ σύναγε,<sup>5</sup> εἰ δὲ μή, ἀπὸ τῶν ὁμοίων τὰ εἰθισμένα φέρε. λέγω δ' οἶον, εἰ<sup>6</sup> νέος ἐστὶν οὗ κατηγορεῖς, εἰ οἷα περὶ τὴν ἡλικίαν ταύτην ὄντες πράττουσιν ταῦτα λέγεις πεποιηκέναι αὐτόν· πιστευθήσεται γὰρ κατὰ τὴν ὁμοιότητα καὶ<sup>7</sup> κατὰ τούτου λεγόμενα. τὸν αὐτὸν δὲ τρόπον καὶ ἐὰν

<sup>1</sup> Rac. (cf. a 37): ἐν τοῖς.<sup>2</sup> [ἔθος] ? Rac.<sup>3</sup> <τι> πράττειν Kayser.<sup>4</sup> [μὲν] Kayser.<sup>5</sup> Halm: συνάγεται αὐτὸ συνάγαγε.

of human nature are intelligible to the audience. Such are the experiences customary to man by nature; and these we say should be called in to support our arguments. Another division of the probable is custom—that which the various classes among us are in the habit of doing. A third is profit, for the sake of which we frequently choose to act in a manner that does violence to our nature and our character.

These definitions having been made, in exhortations and dissuasions it has to be proved about the matter under consideration that the line of action which we are urging or opposing itself has the effect that we assert it has; or if not, that actions resembling this <sup>15</sup> line of action generally or invariably turn out in the way that we assert. This is how the argument from probability is to be taken in regard to actions. With regard to persons, in accusations prove if you can that the party has often committed the same act before, or if not, actions like it. Also try to show that it was <sup>20</sup> profitable to him to do it, because as most men set the highest value on profit themselves they think that everybody else too always acts from motives of profit. This is how you must bring in the argument from probability if you are able to derive it from your opponents personally; failing that, infer what is <sup>25</sup> normally the case from people resembling them. I mean, for example, if, supposing the person you are accusing is a young man, you say that he has acted as persons of that age usually do act, for the allegations will be believed against him too on the ground of similarity. In the same way also if you show his

<sup>6</sup> εἰ add. Rac.

<sup>7</sup> v.l. καὶ τὰ.



1428 b

80 τοὺς ἐταίρους αὐτοῦ δεικνύης τοιούτους ὄντας οἷον  
 σὺ τοῦτον φῆς· καὶ γὰρ διὰ τὴν πρὸς ἐκείνους  
 συνήθειαν δόξει τὰ αὐτὰ τοῖς φίλοις ἐπιτηδεύειν.  
 τοὺς μὲν οὖν κατηγοροῦντας οὕτω χρή μετιέναι τὸ  
 εἰκός.

Τοῖς δὲ ἀπολογουμένοις μάλιστα δεικτέον ὥς  
 οὐδεπώποτε τῶν κατηγορουμένων τι πρότερον οὔτε  
 85 αὐτοὶ οὔτε τῶν φίλων οὐδείς οὔτε τῶν ὁμοίων  
 αὐτοῖς ἔπραξέ τις, οὐδ' ἐλυσιτέλησε<sup>1</sup> τοιαῦτα πράτ-  
 τειν. ἂν δὲ φανερός ᾖς ταῦτ' οὗτο πρότερον  
 πεποιηκώς, αἰτιατέον τὴν ἡλικίαν, ἢ τινα πρόφασιν  
 ἄλλην<sup>2</sup> οἰστέον<sup>3</sup> δι' ἣν εἰκότως ἐξήμαρτες τότε,  
 λέγε δὲ καὶ ὥς οὔτε ταῦτα τότε σοι πράξαντι

40 συνήνεγκεν οὔτε νῦν ἐλυσιτέλησεν ἂν. ἂν δέ σοι

1429 a μηδὲν ἢ πεπραγμένον τοιοῦτον, τῶν δὲ φίλων σου  
 τινες τυγχάνωσι τοιαῦτα πεποιηκότες, χρή λέγειν  
 ὥς οὐ δίκαιόν ἐστι δι' ἐκείνους αὐτὸν<sup>4</sup> διαβάλλεσθαι,  
 καὶ δεικνύναι τῶν σαυτῶ<sup>5</sup> συνήθων ἑτέρους ἐπι-  
 5 εικεῖς ὄντας· οὕτω γὰρ ἀμφίβολον ποιήσεις τὸ κατ-  
 ηγορούμενον. ἂν δὲ τῶν ὁμοίων δεικνύωσί τινας  
 ταῦτ'· πεποιηκότας, ἄτοπον εἶναι φάσκει<sup>6</sup> διότι  
 ἕτεροὶ τινες ἐξαμαρτάνοντες φαίνονται πίστιν εἶναι<sup>7</sup>  
 ὅτι τῶν ἐγκαλουμένων τι καὶ σὺ πεποιήκας. ἂν  
 μὲν οὖν ἕξαρνος ᾖς μὴ πεποιηκέναι τὴν κατηγορου-  
 μένην πράξιν, οὕτως ἐκ τῶν εἰκότων χρή σε ἀπο-  
 10 λογεῖσθαι· ἀπίθανον γὰρ ποιήσεις τὴν κατηγορίαν.  
 ἂν δὲ ὁμολογεῖν ἀναγκάζῃ, τοῖς τῶν πολλῶν ἡθεσιν<sup>8</sup>  
 ἀφομοίου τὰς σαυτοῦ πράξεις ὅτι μάλιστα, λέγων

<sup>1</sup> ἐλυσιτέλησεν ἂν? Rac., cf. l. 40.

<sup>2</sup> v.l. ἄλλην τοιαύτην.

<sup>3</sup> εἰσοιστέον? Rac., cf. l. 25.

<sup>4</sup> v.l. σαυτὸν.

<sup>5</sup> v.l. αὐτῶ.

<sup>6</sup> Sp.: φάσκε εἰ.

<sup>7</sup> πιστεύεται Kayser

companions to be the same sort of persons that you <sup>1428 b</sup>  
 say that he is, since it will be supposed that he follows <sup>30</sup>  
 the same pursuits as his friends on account of his  
 association with them. This is how the argument  
 from probability should be pursued by those accusing.

The best line for those on their defence is to show  
 that neither they themselves nor any of their friends  
 or their class have ever previously committed any of <sup>35</sup>  
 the actions of which they are accused, and that it  
 would not have paid them to commit such actions.  
 If it is notorious that you have done the same thing  
 before, you must plead your youth, or bring forward  
 some other excuse that made it natural for you to go  
 astray at the time, and say that you gained nothing  
 by doing it then, nor would it have paid you to do it <sup>40</sup>  
 now. If you have never done anything of the kind  
 but some of your friends happen to have done things <sup>1429 a</sup>  
 like it, you must say that it is not fair that you yourself  
 should be discredited on their account, and must  
 prove that others of your associates are respectable  
 persons, as by these means you will make the  
 accusation seem doubtful. If they prove that some <sup>5</sup>  
 people of your class have done the same things,  
 declare it to be absurd that the fact that certain others  
 are seen to do wrong is to be a proof that you too have  
 committed any of the offences of which you are  
 accused. That is how you must base your defence on  
 the argument from probability if your case is a flat  
 denial of having done the thing of which you are  
 accused, because this line will make the accusation  
 unconvincing. If you are obliged to admit the <sup>10</sup>  
 charge, do your best to show that your own conduct  
 resembles the habits of the mass of mankind, by

<sup>8</sup> v.l. ἔθεσιν.

1429 a

ὥς οἱ πλείστοι καὶ<sup>1</sup> οἱ πάντες τοῦτο καὶ τὰ τοιαῦτα  
 πράττουσιν οὕτως ὥς σοὶ τυγχάνει πεποιημένον.  
 15 ἂν δὲ μὴ δυνατόν ἢ τοῦτο δεῖξαι, καταφευκτέον ἐπὶ  
 τὰς ἀτυχίας ἢ τὰς ἁμαρτίας, καὶ συγγνώμης πει-  
 ρατέον τυγχάνειν παραλαμβάνοντα τὰ κοινὰ τῶν  
 ἀνθρώπων γινόμενα πάθη δι' ὧν ἐξιστάμεθα τοῦ  
 λογισμοῦ· ταῦτα δ' ἐστὶν ἔρως ὀργὴ μέθη φιλοτιμία  
 καὶ τὰ τούτοις ὁμοιότροπα. τὸ μὲν οὖν εἰκὸς διὰ  
 20 ταύτης τῆς μεθόδου τεχνικώτατα μέτιμεν.

VIII. Παράδειγματα δ' ἐστὶ πράξεις ὁμοιαὶ γε-  
 γενημέναι καὶ ἐναντίαι ταῖς νῦν ὑφ' ἡμῶν λεγο-  
 μέναις. τότε δὲ χρηστέον αὐταῖς ἐστὶν ὅτε ἄπιστον  
 ὢν τὸ ὑπὸ σοῦ λεγόμενον εἶναι<sup>2</sup> φανερόν ποιῆσαι  
 25 θέλεις ἂν διὰ τοῦ εἰκότος μὴ πιστεῦνται, ὅπως  
 πρᾶξιν ὁμοίαν ἑτέραν τῇ ὑπὸ σοῦ λεγομένῃ κατα-  
 μαθόντες<sup>3</sup> οὕτω πεπραγμένην ὥς σὺ φῆς γεγενῆ-  
 σθαι,<sup>4</sup> μᾶλλον πιστεύσωσι τοῖς ὑπὸ σοῦ λεγομένοις.

Εἰσὶ δὲ τῶν παραδειγμάτων δύο τρόποι· τὰ μὲν  
 γὰρ τῶν πραγμάτων γίνεται κατὰ λόγον τὰ δὲ παρὰ  
 30 λόγον, ποιεῖ δὲ τὰ μὲν κατὰ λόγον γινόμενα πιστεύε-  
 σθαι, τὰ δὲ μὴ κατὰ λόγον ἀπιστεῖσθαι. λέγω δ'  
 οἷον εἴ τις φάσκει<sup>5</sup> τοὺς πλουσίους δικαιότερους  
 εἶναι τῶν πενομένων, καὶ φέρει<sup>6</sup> τινὰς πράξεις  
 πλουσίων ἀνδρῶν δικαίας· τὰ μὲν οὖν τοιαῦτα τῶν  
 παραδειγμάτων κατὰ λόγον εἶναι δοκεῖ· τοὺς γὰρ  
 35 πλείστους ἔστιν ἰδεῖν νομίζοντας τοὺς πλουτοῦντας  
 δικαιότερους εἶναι τῶν πενομένων. εἰ δέ τις πάλιν  
 ἀποφαίνοι τινὰς τῶν πλουσίων ἐπὶ χρήμασι ἀδι-  
 κήσαντας, τῷ παρὰ τὸ εἰκὸς γεγενημένῳ παρα-

<sup>1</sup> ἢ Finckh.<sup>2</sup> v.l. μαθόντες.<sup>3</sup> v.l. φάσκοι.<sup>4</sup> [εἶναι] Sp.<sup>5</sup> v.l. πεπρᾶχθαι.<sup>6</sup> v.l. φέροι.

saying that most men, indeed all men, do the thing in question and things like it in the same manner in which it happens to have been done by you. If you are unable to prove this, you must take refuge in pleas of 15 misfortune or error, and try to gain pardon by bringing in the passions to which all mankind are liable, that divert us from rational calculation—namely love, anger, intoxication, ambition and the like. This is the most skilful way of developing the argument from 20 probability.

VIII. Examples are actions that have occurred (2) *Ex-* previously and are similar to, or the opposite of, *amples.* those which we are now discussing. They should be employed on occasions when your statement of the case is unconvincing and you desire to illustrate it, if it cannot be proved by the argument from probability, in order that your audience may be more ready to 25 believe your statements when they realize that another action resembling the one you allege has been committed in the way in which you say that it occurred.

There are two modes of examples. This is because some things happen according to reasonable expectation, others against reasonable expectation; and those happening according to expectation cause 30 credit, those not according to expectation incredulity. I mean, for instance, if somebody asserts that the rich are more honest than the poor, and produces cases of honest conduct on the part of rich men: examples of this sort appear to be in accordance with reasonable expectation, because most people obviously think 35 that those who are rich are more honest than those who are poor. If, on the other hand, one were to produce instances of rich men acting dishonestly for money, by employing this example of something that

- 1429 a δείγματι χρώμενος ἀπίστους ἂν ποιοῖ τοὺς πλου-  
τοῦντας· ὡσαύτως δὲ καὶ εἴ τις φέρει παράδειγμα τῶν
- 1429 b κατὰ λόγον εἶναι δοκούντων, διότι<sup>1</sup> Λακεδαιμόνιοί  
ποτε ἢ Ἀθηναῖοι πολλῶ πλήθει χρώμενοι συμμάχων  
κατεπολέμησαν τοὺς ἐναντίους, καὶ προτρέπει<sup>2</sup> τοὺς  
ἀκούοντας πολλοὺς συμμάχους ποιεῖσθαι. τὰ μὲν δὴ  
τοιαῦτα παραδείγματα κατὰ λόγον ἐστίν· ἅπαντες  
5 γὰρ νομίζουν ἐν τοῖς πολέμοις τὸ πλήθος οὐ  
μετρίαν ῥοπήν ἔχειν πρὸς τὴν νίκην. εἰ δέ τις  
ἀποφαίνειν ἐθέλοι μὴ τοῦτ' αἴτιον τοῦ νικᾶν, τοῖς  
παρὰ τὸ εἰκὸς γεγενημένοις πράγμασι χρήσαιτ' ἂν  
παραδείγμασι, λέγων ὡς οἱ μὲν Ἀθήνησι φυγάδες  
10 τὸ πρῶτον μετὰ πεντήκοντα ἀνδρῶν Φυλὴν τε  
καταλαβόντες καὶ πρὸς τοὺς ἐν ἄστει πολλῶ  
πλείους ὄντας καὶ συμμάχοις Λακεδαιμονίοις χρω-  
μένους πολεμήσαντες κατῆλθον εἰς τὴν ἰδίαν πόλιν.  
Θηβαῖοι δὲ Λακεδαιμονίων καὶ σχεδὸν ἀπάντων  
Πελοποννησίων εἰς τὴν Βοιωτίαν ἐμβαλόντων  
15 μόνοι περὶ τὰ Λεῦκτρα παραταξάμενοι τὴν Λακε-  
δαιμονίων δύναμιν ἐνίκησαν· Δίων δὲ ὁ Συρα-  
κούσιος μετὰ τρισχιλίων ὀπλιτῶν εἰς Συρακούσας  
πλεύσας Διονύσιον πολλαπλάσιον ἔχοντα δύναμιν  
κατεπολέμησεν· ὡσαύτως δὲ Κορίνθιοι Συρακου-  
σίοις ἐννέα τριήρεσι βοηθήσαντες Καρχηδονίους  
20 ἑκατὸν καὶ πεντήκοντα ναυσὶν ἐπὶ τοῖς λιμέσι τῶν  
Συρακουσίων ἐφορμοῦντας τὴν δὲ πόλιν ἅπασαν  
πλὴν τῆς ἀκροπόλεως ἔχοντας οὐδὲν ἤττον κατε-  
πολέμησαν. συλλήβδην δὲ ταῦτα καὶ τὰ τούτοις  
ὅμοια παρὰ λόγον πραχθέντα τὰς κατὰ τὸ εἰκὸς  
γινόμενας συμβουλάς ἀπίστους ποιεῖν εἴωθεν. τῶν  
25 μὲν οὖν παραδειγμάτων τοιαύτη τις ἢ φύσις ἐστί.

<sup>1</sup> οἷον ὅτι ? Rac.<sup>2</sup> v.l. προτρέποι.



has happened contrary to probability he would cause  
the rich to be discredited ; and similarly if one pro-  
duces an example of things that seem to be in accord- 1429 a  
ance with general expectation, arguing that on one 1429 b  
occasion Sparta, or Athens, defeated its adver-  
saries in war by employing a large number of allies,  
and so disposes his hearers to secure many allies.  
Examples of this sort are according to expectation,  
because everybody thinks that numbers in war have 5  
great importance for victory. But if one wanted to  
prove that numbers are not the cause of victory, one  
would use as examples events that have happened  
contrary to probability : one would tell how the exiles  
at Athens with fifty men to start with captured Phyle  
and fought the far more numerous party in the city with 10  
their Spartan allies, and so got back to their own city ;  
and how the Thebans, when Boeotia was invaded by the  
Spartans and almost the whole of the Peloponnesians,  
took the field at Leuctra single-handed and defeated 15  
the Spartan forces ; and how the Syracusan Dion  
with 3000 heavy infantry sailed to Syracuse and waged  
a victorious war against Dionysius who had a force  
many times as large ; and similarly how the Corin-  
thians coming to the aid of the Syracusans with nine  
triremes defeated the Carthaginians in spite of the  
fact that they were blockading the harbours of Syracuse 20  
with 150 vessels and held the whole of the city except  
the citadel.<sup>a</sup> To sum up, these and similar instances  
of actions accomplished against reasonable expecta-  
tion usually succeed in discrediting counsels of policy  
that are based on probability. Such is the nature of 25  
examples.

<sup>a</sup> See Introd. p. 258 note a.



Χρηστέον δ' αὐτῶν ἐκατέρῳ τρόπῳ, ὅταν μὲν ἡμεῖς λέγωμεν τὰ κατὰ λόγον γινόμενα, δεικνύντας ὡς ἐπὶ τὸ πολὺ τοῦτον τὸν τρόπον ἐπιτελουμένας τὰς πράξεις, ὅταν δὲ τὰ παρὰ λόγον γινόμενα, φέροντας ὅσα παρὰ λόγον δοκοῦντα γενέσθαι τῶν  
 30 πραγμάτων εὐλόγως ἀποβέβηκεν· ὅταν δ' οἱ ἐναντίοι λέγωσι τοῦτο, χρή δεικνύειν ὡς εὐτυχήματα ταῦτα συνέβη, καὶ λέγειν ὅτι αἱ τοιαῦται πράξεις ἐν τῷ σπανίῳ γεγονάσιν, οἷας δὲ σὺ λέγεις, πολ-  
 λάκις. τοῖς μὲν οὖν παραδείγμασιν οὕτω χρηστέον·  
 85 ὅταν γε μὴν τὰ παρὰ λόγον γινόμενα φέρωμεν, χρή συνάγειν αὐτῶν ὅτι πλείστα, καὶ καταλέγειν<sup>1</sup> ὡς οὐδὲν μᾶλλον ἐκεῖνα τούτων εἶωθε γίνεσθαι. δεῖ δὲ χρῆσθαι τοῖς παραδείγμασι μὴ μόνον ἐκ τούτων<sup>2</sup> ἀλλὰ καὶ ἐκ τῶν ἐναντίων· λέγω δ' οἶον ἔαν ἀποφαίνης τινὰς πλεονεκτικῶς τοῖς συμμάχοις χρωμένους καὶ διὰ τοῦτο λυθείσαν αὐτῶν τὴν  
 1430' a φιλίαν, καὶ λέγῃς<sup>3</sup> “ ἡμεῖς δέ, ἂν ἴσως καὶ κοινῶς πρὸς αὐτοὺς προσφερώμεθα, πολὺν χρόνον τὴν συμμαχίαν φυλάξομεν”· καὶ πάλιν, ἂν τινὰς ἐτέρους ἀπαρασκευάστως<sup>4</sup> πολεμήσαντας καὶ διὰ τοῦτο  
 5 καταπολεμηθέντας ἀποφαίνης, εἰτα λέγῃς “ ἂν παρασκευασάμενοι πολεμῶμεν, βελτίους ἂν περὶ τῆς νίκης τὰς ἐλπίδας ἔχοιμεν.” πολλὰ δὲ λήψη παραδείγματα διὰ τῶν προγεγενημένων πράξεων καὶ διὰ τῶν νῦν γινομένων· τὰ γὰρ πλείστα τῶν ἔργων τῇ μὲν ὁμοίᾳ τῇ δὲ ἀνόμοιᾳ ἀλλήλοις ἐστίν,  
 10 ὥστε διὰ τὴν αἰτίαν ταύτην καὶ παραδειγμάτων εὐπορήσομεν καὶ τοῖς ὑπὸ τῶν ἄλλων λεγομένοις οὐ χαλεπῶς ἀντεροῦμεν.

<sup>1</sup> [κατα]λέγειν Finckh.<sup>2</sup> τοιούτων ? Rac.<sup>3</sup> λέγῃς v.l. om.<sup>4</sup> ἀπαρασκευάστους ? Rac.

The way to employ either mode of example is—  
 when we are proposing what may reasonably be  
 expected to happen, to show that operations are  
 usually carried through successfully in this way ; but  
 when we are foretelling an unexpected result, to pro-  
 duce all the cases of things that have turned out  
 satisfactorily though seeming to have been contrary 30  
 to reasonable expectation. When your opponents  
 take this line, you must show that their instances  
 were lucky accidents, and say that such occurrences  
 are a rarity, whereas such as you specify have often  
 occurred. This is how to employ examples. Of  
 course when we are bringing forward things counter  
 to expectation, we must collect as many examples 35  
 of these as possible and go through them to show  
 that unexpected occurrences are just as common  
 as ones that were expected. And we must draw  
 examples not only from similar cases but also from the  
 opposite : I mean, for instance, if you produce a case  
 of people overreaching their allies and their friendship  
 consequently being dissolved, and say ' But for our 1430 a  
 part we shall keep their alliance for a long time if we  
 deal with them fairly and on terms of partnership ' ;  
 and again, if you produce an instance of other people  
 who went to war without preparation and who were  
 consequently defeated, and then say ' We should have 5  
 better hope of victory provided we are prepared for  
 war.' The events of the past and those occurring  
 now will supply you with many examples ; most  
 actions are partly like and partly unlike one another,  
 so that for this reason we shall be well supplied with  
 examples, and also shall have no difficulty in counter- 10  
 ing those put forward by the other side.

Τῶν μὲν οὖν παραδειγμάτων τοὺς τε τρόπους ἴσμεν, καὶ ὥς αὐτοῖς χρῆσόμεθα, καὶ ὅθεν πολλὰ ληψόμεθα.

IX. Τεκμήρια δ' ἐστὶν ὅσα ἂν ἐναντίως ἢ πε-  
 15 πραγμένα τῷ περὶ οὗ ὁ λόγος καὶ<sup>1</sup> ὅσα ὁ λόγος αὐτὸς ἐαυτῷ ἐναντιοῦται. τῶν γὰρ ἀκουόντων οἱ πλείστοι τοῖς συμβαίνουσι περὶ τὸν λόγον ἢ τὴν πρᾶξιν ἐναντιώμασι τεκμαίρονται μηδὲν ὑγιὲς εἶναι μήτε τῶν λεγομένων μήτε τῶν πραττομένων. πολλὰ δὲ λήψῃ τεκμήρια σκοπῶν εἴτε ὁ λόγος τοῦ  
 20 ἐναντίου αὐτὸς αὐτῷ<sup>2</sup> ἐναντιοῦται, εἴτε ἡ πρᾶξις αὐτοῦ<sup>3</sup> ἐναντία τῷ λόγῳ ἐστίν.

Τὰ μὲν οὖν τεκμήρια τοιαῦτά ἐστι, καὶ οὕτως αὐτὰ πλείστα ποιήσεις.

X. Ἐνθυμήματα δ' ἐστὶν οὐ μόνον τὰ τῷ λόγῳ καὶ τῇ πράξει ἐναντιούμενα, ἀλλὰ καὶ τοῖς ἄλλοις  
 25 ἅπασιν. λήψῃ δὲ πολλὰ μετιῶν ὥς ἐν τῷ ἐξετα-  
 στικῷ εἶδει εἴρηται, καὶ σκοπῶν εἴ πῃ ὁ λόγος ἐαυτῷ ἐναντιοῦται, ἢ τὰ πεπραγμένα τοῖς δικαίοις ἢ τῷ νόμῳ ἢ τῷ συμφέροντι ἢ τῷ καλῷ ἢ τῷ δυνατῷ ἢ τῷ ῥαδίῳ ἢ τῷ εἰκότι ἢ τῷ ἥθει τοῦ λέγοντος ἢ τῷ ἔθει<sup>4</sup> τῶν πραγμάτων. τὰ μὲν οὖν  
 30 τοιαῦτα τῶν ἐνθυμημάτων κατὰ τῶν ἐναντίων ἐκκληπτέον, τὰ δ' ἐναντία τούτοις ὑπὲρ ἡμῶν αὐτῶν δεῖ λέγειν, ἀποφαίνοντας τὰς πράξεις τὰς ἡμετέρας καὶ τοὺς λόγους ἐναντιουμένους τοῖς ἀδίκοις καὶ τοῖς ἀνόμοις καὶ τοῖς ἀσυμφόροις καὶ τοῖς τῶν

<sup>1</sup> καὶ <καθ'> Usener.

<sup>3</sup> Finckh: αὐτῇ.

<sup>2</sup> Buhl: αὐτῷ τῷ πράγματι.

<sup>4</sup> v.l. ἥθει.

<sup>a</sup> i.e. infallible signs, contrasted with mere signs, which are fallible: cf. *infra* c. xii. The limitation of the term to negative proofs is peculiar to this passage.

We now know what kinds of examples there are, and how they are to be employed, and where we can obtain a good supply of them.

IX. Tokens <sup>a</sup> are previous facts running counter to (3) *Tokens.* the fact asserted in the speech, and points in which <sup>15</sup> the speech contradicts itself. For most hearers infer from inconsistencies occurring in connexion with a speech or action that the line of argument or conduct taken is entirely unsound. You will obtain a good supply of tokens by considering whether your ad- <sup>20</sup> versary's speech contradicts itself, or whether his conduct contradicts his words.

Such is the nature of tokens and the way in which you will make a very large supply of them.

X. Considerations <sup>b</sup> are (1) facts that run counter to (4) *Considerations.* the speech or action in question, and also (2) those that run counter to anything else. You will obtain a <sup>25</sup> good supply of them by pursuing the method described under the investigatory species of oratory,<sup>c</sup> and by considering whether the speech contradicts itself in any way, or the actions committed run counter to the principles of justice, law, expediency, honour, feasibility, facility or probability, or to the character of the speaker or the usual course of events. This is the sort of consideration to be chosen as a point to use <sup>30</sup> against our opponents. In support of our own case we must state the opposite ones, proving our actions and words to be exactly contrary to those that are unjust, unlawful and inexpedient, and to the usual

<sup>b</sup> As a technical term of Aristotelian logic an enthymeme is a syllogism drawing its conclusion from premisses that are statements of probabilities. In rhetoric it denotes any syllogism of which one premiss is not stated but left to be understood.

<sup>c</sup> See 1421 b 10, 1427 b 12.

1430 a

35 ἀνθρώπων τῶν πονηρῶν ἔθеси<sup>1</sup> καὶ συλλήβδην τοῖς  
μοχθηροῖς νομιζομένοις εἶναι. δεῖ δὲ τούτων  
ἕκαστα<sup>2</sup> συναγαγεῖν<sup>3</sup> ὡς εἰς βραχύτατα,<sup>4</sup> καὶ φρά-  
ζειν ὅτι μάλιστα ἐν ὀλίγοις τοῖς<sup>5</sup> ὀνόμασιν.

Τὰ μὲν οὖν ἐνθυμήματα τοῦτον τὸν τρόπον πολλὰ  
ποιήσομεν, καὶ οὕτως αὐτοῖς ἄριστα χρησόμεθα.

40 XI. Γνώμη δ' ἐστὶ μὲν ἐν κεφαλαίῳ καθ' ὅλων  
1430 b τῶν πραγμάτων δόγματος ἰδίου δήλωσις, δύο δὲ  
τρόποι τῶν γνωμῶν εἰσίν, ὁ μὲν ἔνδοξος ὁ δὲ  
παράδοξος. ὅταν μὲν οὖν ἔνδοξον λέγῃς, οὐδὲν δεῖ  
τὰς αἰτίας φέρειν, οὔτε γὰρ ἀγνοεῖται τὸ λεγόμενον  
5 οὔτ' ἀπιστεῖται· ὅταν δὲ παράδοξον λέγῃς, χρὴ  
φράζειν τὰς αἰτίας συντόμως, ἵνα τὴν ἀδολεσχίαν  
καὶ τὴν ἀπιστίαν διαφύγῃς. δεῖ δὲ τὰς γνώμας  
οἰκείας φέρειν τῶν πραγμάτων,<sup>6</sup> ἵνα μὴ σκαιὸν καὶ  
ἀπηρητημένον φαίνεται τὸ λεγόμενον. πολλὰς δὲ  
ποιήσομεν αὐτὰς ἢ ἐκ τῆς ἰδίας φύσεως ἢ ἐξ  
10 ὑπερβολῆς ἢ ἐκ παρομοιώσεως. αἱ μὲν οὖν ἐκ  
τῆς ἰδίας φύσεως τοιαῖδε τινές εἰσιν· “ οὐκ εἶναί  
μοι δοκεῖ δεινὸν γενέσθαι στρατηγὸν” πραγμάτων  
ἄπειρον ὄντα”· ἑτέρα δ' ἐστὶν ἡδε· “ νοῦν ἔχόντων  
ἀνδρῶν ἐστὶ τοῖς τῶν προγεγενημένων παραδείγ-  
μασι χρωμένους πειρᾶσθαι διαφυγεῖν τὰς ἐκ τῆς  
15 ἀβουλίας ἀμαρτίας.” ἐκ μὲν οὖν τῆς ἰδίας φύσεως  
τοιαύτας ποιήσομεν γνώμας, ἐξ ὑπερβολῆς δὲ  
τοιαύδε· “ δεινότερά μοι δοκοῦσιν οἱ κλέπτοντες  
τῶν ληϊζομένων ποιεῖν· οἱ μὲν γὰρ λαθραίως οἱ δὲ  
φανερῶς τὰ χρήματα περιαρροῦνται.” τὰς μὲν οὖν

<sup>1</sup> Rac.: ἡθεσι.

<sup>2</sup> v.l. ἐκάστοις.

<sup>3</sup> Casaubon: συνηγορεῖν.

<sup>4</sup> v.l. βραχύτητα (fortasse ἐκάστοις συνηγορεῖν ὡς βρα-  
χύτατα Rac.).

<sup>5</sup> ὀλιγίστοις Sp.

<sup>6</sup> τῷ πράγματι Sp.

<sup>7</sup> στρατηγὸν (τόν) ? Rac.

conduct of bad men—in brief to the things deemed to be evil. We must condense each of these topics into the briefest possible shape, and express them in as few words as we can.

This is the way in which we shall make a large supply of considerations, and this is how we shall best employ them.

XI. A maxim may be summarily defined as the expression of an individual opinion about general matters of conduct. Maxims have two modes, one agreeing with accepted opinion and the other running counter to it. When you say something that is usually accepted, there is no need to produce reasons because what you say is not unfamiliar and does not meet with incredulity ; but when what you say is paradoxical, you must specify the reasons briefly, so as to avoid prolixity and not arouse incredulity. The maxims that you produce should be related to the matter in hand, in order that what you say may not seem clumsy and irrelevant. We shall make a supply of maxims either from the particular nature of the case or by using hyperbole or by drawing a parallel. Instances of maxims drawn from the particular nature of the case are as follows : ‘ I do not think it possible for a man to become an able general if he is without experience of affairs ’ ; and another : ‘ It is characteristic of sensible people to use the examples of their predecessors and to endeavour so to escape the errors arising out of imprudence.’ Such are the maxims that we shall construct from the particular nature of the case. The following is a specimen of those based on hyperbole : ‘ I think that thieves commit worse outrages than highwaymen, because the former rob us of our property by stealth, the latter openly.’

1430 a

35

40

(5) *Maxims.*

1430 b

5

10

15



1430 b

ἐξ ὑπερβολῆς γνώμας τὸν τρόπον τοῦτον πολλὰς  
 20 ποιήσομεν, αἱ δ' ἐκ παρομοιώσεως τοιαῖδε εἰσίν·  
 “ὁμοιότατόν μοι δοκοῦσιν οἱ τὰ χρήματα ἀπο-  
 στεροῦντες τοῖς τὰς πόλεις προδιδούσι ποιεῖν·  
 πιστευθέντες γὰρ ἀμφότεροι τοὺς πιστεύσαντας  
 ἀδικοῦσιν”. ἑτέρα δέ “παραπλήσιόν μοι δοκοῦσι  
 ποιεῖν οἱ ἀντίδικοι<sup>1</sup> τοῖς τυράννοις· ἐκεῖνοί τε γὰρ  
 25 ὦν μὲν αὐτοὶ ἀδικοῦσιν οὐκ ἀξιοῦσι διδόναι δίκας,  
 ὦν δὲ τοῖς ἄλλοις ἐγκαλοῦσιν ἀνυπερβλήτως τι-  
 μωροῦνται· οὗτοί τε εἰ μὲν τι αὐτοὶ τῶν ἐμῶν  
 ἔχουσιν οὐκ ἀποδιδόασιν, εἰ δέ τι ἐγὼ τούτων  
 ἔλαβον, καὶ αὐτὸ καὶ τοὺς τόκους οἶονται δεῖν  
 κομίσασθαι.”

Γνώμας μὲν οὖν τὸν τρόπον τοῦτον μετιόντες  
 πολλὰς ποιήσομεν.

- 30 XII. Σημεῖον δ' ἐστὶν ἄλλο ἄλλου, οὐ τὸ τυχὸν  
 τοῦ τυχόντος οὐδ' ἅπαν ἅπαντος,<sup>2</sup> ἀλλὰ τό γ'  
 εἰθισμένον γίνεσθαι πρὸ τοῦ πράγματος ἢ ἅμα τῷ  
 πράγματι ἢ μετὰ τὸ πρᾶγμα. ἔστι δὲ σημεῖον τό  
 τε<sup>3</sup> γενόμενον μὴ μόνον τοῦ γενομένου ἀλλὰ καὶ  
 35 τοῦ μὴ γενομένου, ὡσαύτως δὲ καὶ τὸ μὴ γεγονὸς  
 οὐ μόνον τοῦ μὴ ὄντος ἀλλὰ καὶ τοῦ ὄντος. ποιεῖ  
 δὲ τῶν σημείων τὸ μὲν οἶεσθαι τὸ δ' εἰδέναι·  
 κάλλιστον δὲ τὸ εἰδέναι ποιοῦν, δεύτερον δὲ τὸ  
 δόξαν πιθανωτάτην ἐργαζόμενον. πολλὰ δὲ ποιή-  
 40 σομεν σημεία συλλήβδην εἰπεῖν ἐξ ἐκάστου τῶν  
 πεπραγμένων καὶ λεγομένων καὶ ὁρωμένων, καθ'  
 1431 a τῆς σμικρότητος τῶν ἀποβαινόντων κακῶν ἢ  
 ἀγαθῶν· ἔτι δὲ ἐκ τῶν μαρτύρων<sup>4</sup> καὶ ἐκ τῶν

<sup>1</sup> v.l. ἄδικοι.<sup>2</sup> τό γε vel τὸ [τε]? Sp.<sup>3</sup> Sp.: παντός.<sup>4</sup> Sp.: μαρτυριῶν.

This is how we shall make a large supply of maxims based on hyperbole. Those made by drawing a parallel are such as the following : ‘ I think that those who cheat people out of money act exactly like those who betray their country, because both of them after being trusted rob those who have trusted them ’ ; and another : ‘ I think that my opponents are acting very like tyrants, because the latter claim not to be punished for the wrongs committed by themselves but exact unequalled penalties for the offences of which they accuse others, while the former, if they themselves have something that belongs to me, do not return it, but if I have taken something of theirs, think that they ought to get it back and receive interest into the bargain.’

By following this method we shall make a large supply of maxims.

XII. One thing is a sign of another—not any casual thing of any other casual thing, nor everything whatever of everything whatever, but only a thing that normally precedes or accompanies or follows a thing. Something happening may be a sign not only of something happening but also of something not happening, and something that has not happened may be a sign not only that something is not a fact but also that something is a fact. A sign may produce either opinion or full knowledge ; the best kind of sign is one that produces knowledge, but one that causes an extremely probable opinion is the second best kind. We shall construct a large supply of signs from everything (to put it summarily) that has been done or said or seen, taking each thing separately, and also from the magnitude or smallness of the evil or good that results from them ; also from witnesses and

30  
(6) *Signs.*

35

40  
1431 a

1481 a

μαρτυρουμένων, καὶ ἐκ τῶν συμπαρόντων ἡμῖν ἢ τοῖς ἐναντίοις, καὶ ἐξ αὐτῶν ἐκείνων, καὶ ἐκ τῶν  
 5 προκλήσεων, καὶ ἐκ τῶν χρόνων, καὶ ἐξ ἄλλων πολλῶν. τῶν μὲν οὖν σημείων ἐντεῦθεν εὐπορήσομεν.

XIII. Ἐλεγχος δ' ἐστὶ μὲν ὁ μὴ δυνατόν ἄλλως ἔχειν ἄλλ' οὕτως<sup>1</sup> ὥς ἡμεῖς λέγομεν· λαμβάνεται δὲ ἐκ τῶν φύσει ἀναγκαίων ἢ ἀναγκαίων<sup>2</sup> ὥς ἡμεῖς λέγομεν,<sup>3</sup> καὶ ἐκ τῶν κατὰ φύσιν ἀδυνάτων<sup>4</sup> ἢ  
 10 ἀδυνάτων ὥς οἱ ἐναντίοι λέγουσιν. κατὰ φύσιν μὲν οὖν ἀναγκαῖόν ἐστιν οἷον τοὺς ζῶντας σιτίων δεῖσθαι, καὶ τὰ τούτοις ὅμοια· ὥς δ' ἡμεῖς λέγομεν ἔστιν ἀναγκαῖον τοὺς μεμαστιγωμένους ὁμολογεῖν ἅπερ οἱ μαστιγοῦντες κελεύουσιν. κατὰ φύσιν δὲ πάλιν ἀδύνατόν ἐστι παιδάριον μικρὸν  
 15 κλέψαι τοσοῦτον ἀργύριον ὅσον μὴ δυνατόν φέρειν καὶ οἷχεσθαι τοῦτο φέρον· ὥς δ' ἂν ὁ ἐναντίος λέγοι ἔσται ἀδύνατον, ἂν φάσκη μὲν ἐν χρόνοις τισὶν Ἀθήνησι ποιήσασθαι τὸ συμβόλαιον, ἡμεῖς δ' ἔχωμεν ἐπιδείξαι τοῖς ἀκούουσιν ὥς κατὰ τοὺς τότε καιροὺς ἀπεδημοῦμεν ἐν ἑτέρᾳ πόλει τινί.  
 20 τοὺς μὲν οὖν ἐλέγχους ἐκ τούτων καὶ ἐκ τῶν τούτοις ὁμοιοτρόπων ποιησόμεθα.

Συλλήβδην δὲ τὰς ἐξ αὐτοῦ τοῦ λόγου καὶ τῶν πράξεων καὶ τῶν ἀνθρώπων πίστεις ἀπάσας διεληλύθαμεν· σκεψώμεθα δὲ καὶ τί ἀλλήλων διαφέρουσιν.

XIV. Τὸ μὲν τοίνυν εἰκὸς τοῦ παραδείγματος  
 25 ταύτῃ διαφέρει, διότι τοῦ μὲν εἰκότος ἔχουσιν

<sup>1</sup> [οὕτως] ? Rac.<sup>2</sup> ἢ ἀναγκαίων add. Sp.<sup>3</sup> v.l. λέγομεν ἢ ὁ ἀντιλέγων.<sup>4</sup> Sp.: δυνατῶν.

evidence, and from those who take our side or that of our opponents, from our opponents themselves, and from the challenges made by the parties, and from dates, and from many other things. These will provide us with a plentiful supply of signs.

XIII. A refutation<sup>a</sup> is something that cannot be otherwise than as we say it is. It is based on some necessity in the nature of things, or something necessary as alleged by us, or on something impossible in the nature of things, or impossible as alleged by our opponents. Instances of things necessary by nature are 'Living men require food,' and propositions of that sort; a thing necessary as alleged by us is 'Men being scourged confess exactly what the people scourging them tell them to.' Again, a thing impossible by nature is 'A little boy stole a sum of money larger than he could carry and went off with it'; and it will be a thing impossible as alleged by our opponent if he avers that at a certain date we made the contract in question at Athens, whereas we are able to prove that during the period indicated we were away in some other city. We shall form our refutations from these and similar materials.

(7) *Refutations.*

We have summarily gone through all the forms of proof derived from actual words and from deeds and from persons. Let us consider how they differ from one another.

XIV. The differences between a probability and an example is that a probability is a thing of which the

<sup>25</sup>  
*Differences between these varieties of direct proof.*

\* *Elenchus* in Aristotle's logic is 'the proof of the contradictory of a given thesis,' *Soph. Elench.* 170 b 1: but the technical sense is ignored or at all events not developed here.

1431 a

αὐτοὶ οἱ ἀκούοντες ἔννοιαν, τὰ δὲ παραδείγματα  
 \* \* \*<sup>1</sup> καὶ ἐκ τῶν ἐναντίων καὶ ἐκ τῶν ὁμοίων  
 φέρειν ἔστιν, τὰ δὲ τεκμήρια μόνον ἐκ τῶν περὶ τὸν  
 λόγον καὶ τὴν πρᾶξιν ἐναντίων συντίθεται. καὶ  
 μὴν ἐνθύμημα τεκμηρίου ταύτην τὴν διαφορὰν  
 80 ἔσχηκεν, ὅτι τὸ μὲν τεκμήριον περὶ τὸν λόγον καὶ  
 τὴν πρᾶξιν ἐναντιώσεις ἐστὶ, τὸ δ' ἐνθύμημα καὶ  
 τὰς περὶ τὰς ἄλλας ἰδέας ἐναντιώσεις ἐξείληφεν,  
 ἥ καὶ διότι τὸ μὲν τεκμήριον οὐκ ἐφ' ἡμῖν ἐστὶ  
 λαμβάνειν ἂν μὴ περὶ τὰ πράγματα καὶ τοὺς λόγους  
 ἐναντιώσεις τις ὑπάρχη, τὸ δ' ἐνθύμημα πολλὰ χό-  
 85 θεν οἷόν τε πορίζεσθαι τοῖς λέγουσιν. γινώμαι δ'  
 ἐνθυμημάτων διαφέρουσιν ἢ τὰ μὲν ἐνθυμήματα  
 μόνον ἐκ τῶν ἐναντιώσεων σύγκειται, τὰς δὲ  
 γνώμας καὶ μετὰ τῶν ἐναντιώσεων καὶ ἀπλῶς  
 αὐτὰς καθ' αὐτὰς δυνατόν ἐστιν ἐμφανίζειν. τὰ  
 δὲ σημεία τῶν γνωμῶν καὶ τῶν προειρημένων  
 40 ἀπάντων ταύτῃ διαφέρουσιν, ὅτι τὰ μὲν ἄλλα  
 πάντα οἷσιν ἐμποιεῖ τοῖς ἀκούουσιν, τῶν δὲ  
 σημείων ἓνα καὶ σαφῶς εἰδέναι ποιήσει τοὺς  
 κρίνοντας, καὶ διότ' τῶν μὲν ἐτέρων<sup>2</sup> οὐκ ἔστιν  
 1431 b αὐτοὺς πορίσασθαι τὰ πλεῖστα, τῶν δὲ σημείων  
 πολλὰ ῥαδίως ἔστι ποιήσασθαι. καὶ μὴν ἔλεγχος  
 σημείου ταύτῃ διαφέρει, διότι τῶν μὲν σημείων  
 ἓνα μόνον οἶεσθαι ποιεῖ τοὺς ἀκούοντας, ἔλεγχος  
 δὲ πᾶς τὴν ἀλήθειαν διδάσκει τοὺς κρίνοντας.  
 5 Ὡστε τὰς μὲν ἐκ<sup>3</sup> τῶν λόγων καὶ τῶν πράξεων  
 πίστεις, οἰαί τ' εἰσὶ καὶ ὅθεν αὐτῶν εὐπορήσομεν  
 καὶ τίνι ἀλλήλων διαφέρουσιν, ἐκ τῶν προειρη-

<sup>1</sup> Lacunam Sauppe (παρ' ἡμῶν εἰσφέρομεν. τὰ δὲ παραδείγματα διαφέρει τῶν τεκμηρίων ὅτι τὰ μὲν παραδείγματα).

<sup>2</sup> Usener tr. τῶν μὲν ἐτέρων πολλὰ ῥαδίως ἔστι ποιήσα-



hearers themselves have some notion, but examples  
 <are produced from our own resources. Examples  
 differ from tokens because examples><sup>a</sup> can be drawn  
 both from contrary and from similar things, whereas  
 tokens are constructed only from contrarieties in  
 word and deed. Moreover, a consideration possesses  
 this difference from a token, that whereas a token is <sup>30</sup>  
 a contrariety in word or deed, a consideration also  
 selects contrarieties in regard to other forms of things;  
 that is to say, that whereas we cannot obtain tokens  
 unless there exists some contrariety in regard to deeds  
 or words, speakers can produce a consideration from  
 many sources. Maxims differ from considerations, <sup>35</sup>  
 in that, whereas considerations can only be con-  
 structed from contrarieties, maxims can be exhibited  
 both in connexion with contraries and simply by  
 themselves. What distinguishes signs from maxims  
 and all the other proofs already mentioned is that <sup>40</sup>  
 whereas all the others create in their hearers an  
 opinion, certain of the signs will cause those who  
 judge to have clear knowledge ; and that whereas it  
 is impossible for us to supply most of the other proofs <sup>1431 b</sup>  
 for ourselves, many signs can easily be constructed.  
 Moreover, a refutation differs from a sign because  
 some signs only cause the hearers to think, whereas  
 every refutation teaches the judges the truth.

Thus what has been said before has informed us of <sup>5</sup>  
 the nature of the proofs derived from words and  
 actions, the sources from which we shall obtain a  
 supply of them, and the difference that exists between

<sup>a</sup> These words are a conjectural addition to the Greek.

σθαι, τῶν δὲ σημείων οὐκ ἔστιν αὐτοὺς πορίσασθαι τὰ  
 πλείστα.

<sup>1</sup> ἐκ add. Sp.



1431 b

μένων ἴσμεν· τῶν δ' ἐπιθέτων ἐκάστην πάλιν δι-  
έλθωμεν.

- Ἡ μὲν οὖν δόξα τοῦ λέγοντός ἐστι τὸ τὴν αὐτοῦ  
10 διάνοιαν ἐμφανίζειν κατὰ τῶν πραγμάτων. δεῖ δ'  
ἐμπειρον ἀποφαινέειν ἑαυτὸν περὶ ὧν ἂν λέγῃ, καὶ  
ἐπιδεικνύναι ὥς συμφέρει τἀληθῇ λέγειν περὶ  
τούτων, τὸν δ' ἀντιλέγοντα μάλιστα δεικνύναι  
μηδεμίαν ἐμπειρίαν ἔχοντα τὸν ἐναντίον περὶ ὧν  
15 ἀποφαίνεται τὴν δόξαν ὁμῶς.<sup>1</sup> ἂν δὲ τοῦτο μὴ  
δυνατὸν ᾗ, δεικτέον ὥς καὶ οἱ ἐμπειροὶ πολλάκις  
ἐξαμαρτάνουσιν· ἂν δὲ τοῦτο μὴ ἐνδέχῃται, λέγειν  
ὥς ἀσύμφορόν ἐστι τοῖς ἐναντίοις τἀληθῇ περὶ  
τούτων εἰπεῖν. ταῖς μὲν οὖν δόξαις τοῦ λέγοντος  
οὕτω χρῆσόμεθα, καὶ αὐτοὶ ἀποφαινόμενοι καὶ  
ἐτέροις ἀντιλέγοντες.  
20 XV. Μαρτυρία δ' ἐστὶν ὁμολογία συνειδότος  
ἐκόντος. ἀναγκαῖον δ' εἶναι τὸ μαρτυρούμενον ἢ  
πιθανὸν ἢ ἀπίθανον ἢ ἀμφίβολον πρὸς πίστιν,  
ὡσαύτως δὲ καὶ τὸν μάρτυρα ἢ<sup>2</sup> πιστὸν ἢ ἄπιστον  
ἢ ἀμφίδοξον. ὅταν μὲν οὖν τὸ μαρτυρούμενον ἢ  
πιθανὸν καὶ ὁ μάρτυς ἀληθινός, οὐδὲν δέονται αἱ  
25 μαρτυρίαι ἐπιλόγων, εἰ μὴ βούλῃ γνώμην ἢ  
ἐνθύμημα συντόμως εἰπεῖν τοῦ ἀστείου ἕνεκεν.  
ὅταν δὲ ὑποπτεύηται ὁ μάρτυς, ἀποδεικνύειν δεῖ  
ὥς οὔτε χάριτος ἕνεκεν οὔτε τιμωρίας ἢ κέρδους  
ὁ τοιοῦτος ἂν τὰ ψευδῇ μαρτυρήσειεν· δεῖ δὲ καὶ  
διδάσκειν ὅτι οὐ συμφέρει τὸ ψεῦδος μαρτυρεῖν·  
30 αἱ μὲν γὰρ ὠφέλειαι μικραὶ τὸ δ' ἐξελεγχθῆναι  
χαλεπόν,<sup>3</sup> γνωσθέντα δ' οὐ μόνον εἰς ἀργύριον  
οἱ νόμοι ζημιοῦσιν ἀλλὰ καὶ εἰς δόξαν καὶ εἰς

<sup>1</sup> Forster: τὴν τε δόξαν ὁμοίως.

<sup>2</sup> ἢ add. Sp.

<sup>3</sup> (οὐ) χαλεπόν Finckh.

them. Let us next discuss the various supplementary proofs.

The opinion of the speaker is the pronouncement of his own view about things. He must show that he is experienced in the matters about which he is talking, and must further prove that it is to his interest to speak the truth about them ; and one who is contradicting must, if possible, prove that his adversary has no experience of the matters about which he is nevertheless pronouncing an opinion. If this is not possible, he must show that even experts are often quite mistaken ; and should this not be feasible, he must say that it is against his opponents' interest to speak the truth about the matter in question. This is how we shall use the opinions expressed by the speaker, both when declaring our own and when contradicting other people.

XV. Evidence is an admission voluntarily made by one who knows the facts. What is stated in evidence must necessarily be either probable or improbable or of doubtful credit, and similarly the witness must be either trustworthy or untrustworthy or questionable. When the thing stated is probable and the witness truthful, there is no need of further comment on the evidence, unless for the sake of style you choose briefly to introduce a maxim or consideration. When the witness is suspected, you must declare that a man of that sort would not give false testimony either as a favour or for the sake of revenge or gain ; you must also explain that it does not pay to give false testimony, because the profits are small and it is a serious matter to be found out, and when detected in it a man not only incurs a pecuniary penalty under the laws but also suffers in reputation and in loss of credit.

1431 b

ἀπιστίαν. τοὺς μὲν οὖν μάρτυρας οὕτω πιστοὺς ποιήσομεν.

Ἀντιλέγοντας δὲ μαρτυρίᾳ δεῖ τὸν τρόπον τοῦ μάρτυρος διαβάλλειν ἂν ἢ πονηρός, ἢ τὸ μαρ-  
 35 τυρούμενον ἐξετάζειν ἂν ἀπίθανον ὃν<sup>1</sup> τυγχάνη,  
 ἢ καὶ συναμφοτέροις τούτοις ἀντιλέγειν, συν-  
 ἄγοντας<sup>2</sup> τὰ φαυλότατα τῶν ἐναντίων εἰς ταυτό.  
 σκεπτέον δὲ καὶ εἰ φίλος ἐστὶν ὁ μάρτυς ᾧ μαρτυρεῖ,  
 ἢ εἰ μέτεστί ποθεν αὐτῷ τοῦ πράγματος, ἢ ἐχθρός  
 ἐστὶν οὗ καταμαρτυρεῖ, ἢ πένης· τούτων γὰρ οἱ  
 40 μὲν διὰ χάριν, οἱ δὲ διὰ τιμωρίαν, οἱ δὲ διὰ κέρδος  
 ὑποπτεύονται τὰ ψευδῇ μαρτυρεῖν. καὶ τὸν τῶν  
 ψευδομαρτυριῶν νόμον ἐπὶ τούτοις τεθεικέναι  
 φήσομεν τὸν νομοθέτην· ἄτοπον οὖν εἶναι τοῦ  
 1432 a νομοθέτου τοῖς μάρτυσι μὴ πιστεύσαντος τοὺς  
 κρίνοντας πιστεύειν αὐτοῖς τοὺς<sup>3</sup> κατὰ τοὺς νόμους  
 κρίνειν<sup>4</sup> ὁμωμοκότας. τοὺς μὲν οὖν μάρτυρας  
 οὕτως ἀπιθάνους ποιήσομεν.

Ἔστι δὲ καὶ κλέπτειν τὴν μαρτυρίαν τρόπῳ  
 τοιῷδε· “Μαρτύρησόν μοι, ᾧ Καλλίκλεις.” “Μὰ  
 5 τοὺς θεοὺς οὐκ οὖν ἔγωγε· κωλύοντος γὰρ ἐμοῦ  
 ταῦτ’ ἔπραξεν οὗτος.” καὶ διὰ τούτου ἐν ἀπο-  
 φάσει ψευδομαρτυρήσας ψευδομαρτυρίας<sup>5</sup> δίκην  
 οὐχ ὑφέξει. τοιγαροῦν ὅταν μὲν ἡμῖν συμφέρῃ  
 κλέπτειν τὴν μαρτυρίαν, οὕτως αὐτῇ χρησόμεθα·  
 εἰ δὲ οἱ ἐναντίοι τοιοῦτόν τι ποιήσωσιν, ἐμ-

<sup>1</sup> ὃν add. Sp. (v.l. ἂν ἢ πιθανόν).

<sup>2</sup> Sp.: συνάγοντα.

<sup>3</sup> τοὺς add. Sp.

<sup>4</sup> Sp.: κρίνειν.

<sup>5</sup> v.l. Λυσικλῆς.

<sup>6</sup> Sp.: ψευδομάρτυρος.

<sup>a</sup> If a witness gave false evidence, the injured party could sue him for damages; but it is here implied that proceedings

This is how we shall make out the witnesses to be trustworthy.

1481 b

When contradicting evidence we must run down the character of the witness if he is a rascal, or subject his evidence to examination if it is improbable, or <sup>35</sup> even speak against both the person and his evidence together, collecting under one head the worst points in our adversaries' case. Another thing to consider is whether the witness is a friend of the man for whom he is giving evidence, or in some way connected with his act, or whether he is an enemy of the person against whom he is giving evidence, or a poor man ; because witnesses in these circumstances are suspected of giving false testimony, from motives <sup>40</sup> in the one case of favour, in the other of revenge, and in the other of gain. We shall say that it was to deal with these cases that the lawgiver has enacted the law as to false witness, so that it would be strange <sup>1432 a</sup> that those judging the case, who have sworn to give judgement according to the law, should trust the witnesses when the lawgiver did not trust them. This is how we shall throw discredit on the witnesses.

It is also possible to get evidence by a trick, in such a way as this : ' Callicles, bear me witness '— ' No, by heaven I will not, because the man did <sup>5</sup> commit the crime in spite of my endeavour to prevent him.' By these means in the form of a refusal to give evidence he will have given false evidence without being liable to prosecution for that offence.<sup>a</sup> So this is the way in which we shall manage the evidence when it is to our advantage to procure it by a trick. If our opponents do something of the sort,

could not be taken if the false statement was thrown in incidentally, and not as part of the evidence.

1432 a

10 φανιοῦμεν τὴν κακοποιίαν αὐτῶν καὶ συγγραψα-  
μένους μαρτυρεῖν κελεύσομεν.

Μάρτυσι μὲν οὖν καὶ μαρτυρίαις ἐκ τούτων  
ἴσμεν ὡς δεῖ χρήσασθαι.

XVI. Βάσανος δ' ἐστὶ μὲν ὁμολογία παρὰ  
συνειδότος ἄκοντος δέ. ὅταν μὲν οὖν συμφέρῃ  
ἡμῖν ποιεῖν αὐτὴν ἰσχυράν, λεκτέον ὡς οἱ τε<sup>1</sup>  
15 ἰδιῶται περὶ τῶν σπουδαιοτάτων καὶ αἱ πόλεις  
περὶ τῶν μεγίστων ἐκ βασάνων τὰς πίστεις  
λαμβάνουσι, καὶ διότι πιστότερόν ἐστι βάσανος  
μαρτύρων, τοῖς μὲν γὰρ μάρτυσι συμφέρει πολ-  
λάκις ψεύσασθαι, τοῖς δὲ βασανιζομένοις λυσιτελεῖ  
τὰληθῇ λέγειν· οὕτω γὰρ παύσονται τάχιστα τῆς  
20 κακοπαθείας. ὅταν δὲ βούλῃ τὰς βασάνους ἀ-  
πίστους ποιεῖν, πρῶτον μὲν λεκτέον ὡς οἱ βασανι-  
ζόμενοι τοῖς ἐκδοῦσι πολέμιοι γίνονται καὶ διὰ  
τοῦτο πολλοὶ τῶν δεσποτῶν καταψεύδονται, ἔπειθ'  
ὅτι πολλάκις τοῖς βασανίζουσιν ὁμολογοῦσιν οὐ  
τὰς ἀληθείας, ἢ ὡς τάχιστα τῶν κακῶν παύσωνται.  
25 δεικτέον δ' ὅτι καὶ τῶν ἐλευθέρων πολλοὶ ἤδη  
βασανιζόμενοι καθ' ἑαυτῶν ἐψεύσαντο, βουλόμενοι  
τὴν παραυτίκα κακοπάθειαν ἐκφυγεῖν, ὥστε πολὺ  
μᾶλλον εὐλογον τοὺς δούλους ψευσαμένους κατὰ  
τῶν δεσποτῶν βούλεσθαι τὴν αὐτῶν τιμωρίαν  
ἐκφυγεῖν, ἢ πολλὰς κακοπαθείας τοῖς σώμασι καὶ  
30 ταῖς ψυχαῖς ὑπομείναντας ἢ ἕτεροι μηδὲν πάθωσιν  
αὐτοὺς βούλεσθαι<sup>2</sup> μὴ ψεῦδος εἰπεῖν.

Τὰς μὲν οὖν βασάνους ἐκ τῶν τοιούτων καὶ τῶν  
τούτοις ὁμοιοτρόπων πιθανὰς καὶ ἀπιθάνους κατα-  
στήσομεν.

<sup>1</sup> Sp.: γε.

<sup>2</sup> [αὐτοὺς βούλεσθαι] Sp.

we shall expose their malpractice, and call upon them <sup>1432 a</sup>  
to produce written depositions. <sup>10</sup>

These suggestions inform us of the proper way in which to handle witnesses and evidence.

XVI. Evidence under torture is a confession of <sup>(3) Evidence</sup>  
complicity unwillingly given. When it is to our <sup>under</sup>  
advantage to make it carry weight, we must say that <sup>torture.</sup>  
private individuals employ torture as a means to  
obtain proofs about very important matters, and so  
do governments about affairs of the greatest magni- <sup>15</sup>  
tude ; and that torture is more reliable than ordinary  
evidence, because it is often to the interest of wit-  
nesses to lie, whereas it pays men being tortured to  
tell the truth because in that way they will most  
speedily obtain release from their suffering. When  
you want to discredit torture, you must say in the first <sup>20</sup>  
place that persons under torture become hostile to  
the people who handed them over for it, and on that  
account in many cases make false statements against  
their masters ; secondly that those under torture  
often make confessions that are not true in order to  
bring their sufferings to an end as quickly as possible ;  
and you must point out that even free men before <sup>25</sup>  
now have often under torture made false statements  
against themselves, in their desire to escape from the  
agony of the moment, so that it is much more probable  
that slaves should wish to escape being punished  
themselves by telling lies against their masters, than  
that when enduring great agony of body and mind  
they should not be willing to tell a lie themselves in <sup>30</sup>  
order to save others from suffering.

By means of such arguments and similar ones we shall secure credit or discredit for evidence given under torture.



1432 a

XVII. Ὁρκος δ' ἐστὶ μετὰ θείας παραλήψεως φάσις ἀναπόδεικτος. δεῖ δ' αὐτὸν<sup>1</sup> ὅταν μὲν αὔξειν  
 35 ἐθέλωμεν, λέγειν οὕτως "οὐδεὶς ἂν ἐπιорκεῖν βούλοιο, φοβούμενος τὴν τε παρὰ τῶν θεῶν τιμωρίαν καὶ τὴν παρὰ τοῖς ἀνθρώποις αἰσχύνην," καὶ διεξιέναι ὅτι τοὺς μὲν ἀνθρώπους λαθεῖν ἔστι, τοὺς δὲ θεοὺς οὐκ ἔστιν. ὅταν δὲ οἱ ἐναντίοι καταφύγωσιν εἰς ὄρκον καὶ βουλώμεθα ταπεινοῦν αὐτόν,  
 40 δεικτέον ὥς τῶν αὐτῶν ἐστὶν ἀνθρώπων τὰ πονηρὰ

1432 b πράττειν καὶ μὴ φροντίζειν ἐπιорκοῦντας· ὅστις γὰρ κακουργῶν οἶεται λανθάνειν τοὺς θεοὺς, οὗτος οὐδὲ ἐπιорκῶν τιμωρίας οἶεται τεύξεσθαι. καὶ περὶ μὲν τῶν ὄρκων ὁμοιοτρόπως τοῖς προειρημένοις μετιόντες λέγειν εὐπορήσομεν ὑπὲρ<sup>2</sup> αὐτῶν.

5 Συλλήβδην δὲ τὰς πάσας πίστεις ἤδη, καθάπερ ὑπεθέμεθα, διεξεληλύθαμεν, καὶ δεδηλώκαμεν<sup>3</sup> οὐ μόνον ἣν ἐκάστη αὐτῶν δύναμιν ἔσχηκεν ἀλλὰ καὶ τί ἀλλήλων διαφέρουσι καὶ πῶς αὐταῖς χρηστέον. νῦν δ' ὑπὲρ τῶν ὑπολοίπων, ἃ τῶν τριῶν<sup>4</sup> εἰδῶν ἐστὶ καὶ παρὰ πάντας τοὺς λόγους  
 10 χρήσιμα γίνεται, διδάσκειν ἐπιχειρήσομεν.

XVIII. Προκατάληψις μὲν οὖν ἐστὶ δι' ἧς τὰ τε τῶν ἀκουόντων ἐπιτιμήματα καὶ τοὺς τῶν ἀντιλέγειν μελλόντων λόγους προκαταλαμβάνοντες ὑπεξαιρήσομεν τὰς ἐπιφερομένας δυσχερείας. καὶ τὰς μὲν τῶν ἀκουόντων ἐπιτιμήσεις ὥδε χρή  
 15 προκαταλαμβάνειν· "ἴσως δέ τινες ὑμῶν θαυμάζουσιν ὅτι νέος ὢν οὕτω περὶ μεγάλων πραγμάτων

<sup>1</sup> αὐτὸν post μὲν Sp.<sup>2</sup> v.l. περὶ.<sup>3</sup> Sylberg: δεδώκαμεν.<sup>4</sup> τῶν ἑπτα Sylberg.

<sup>a</sup> At 1421 b 7 foll. oratory was divided into three genera and seven species.

## RHETORIC TO ALEXANDER, xvii.—xviii.

XVII. An oath is an unproved statement supported by an appeal to the gods. When we desire to uphold its validity we must say 'Nobody would be willing to commit perjury, as he would be afraid of punishment from the gods and discredit with men,' and we must enlarge on the point that although it is possible to escape being detected by men it is not possible to escape the notice of the gods. When our opponents have recourse to an oath and we want to depreciate it, we must point out that it belongs to the same persons to do wicked actions and not to mind perjuring themselves, because one who thinks that the gods do not notice his malpractices also thinks he will not meet with punishment if he commits perjury. We shall have plenty to say about oaths if we follow up the subject in a manner similar to what has been said already.

1432 a

(4) Evidence on oath.

1432 b

We have now carried out our intention of summarily reviewing all the kinds of proof, and have shown not only the capacity of each kind but also the differences between them and the proper method of employing them. Now we will endeavour to explain the remaining expedients which belong to the three species<sup>a</sup> of oratory and can be used in the course of speeches of all sorts.

XVIII. Anticipation is the device by which we shall remove ill-feeling that we encounter by anticipating the criticisms of our audience and the arguments of those who are going to speak on the other side. The way to anticipate the criticisms of the audience is this : ' But perhaps some of you will be surprised that a young man like me should have attempted to address the house on such important matters ' ; and

Anticipation.

ἐπεχείρησα δημηγορεῖν''. καὶ πάλιν “μηδεὶς ἀπαντήσῃ μοι δυσκόλως<sup>1</sup> ὅτι μέλλω συμβουλεύειν ὑμῖν περὶ ὧν ὀκνοῦσί τινες ἄλλοι παρρησιάζεσθαι πρὸς ὑμᾶς.” περὶ μὲν οὖν τῶν μελλόντων δυσ-  
 20 χεραίνεσθαι τοῖς ἀκούουσιν οὕτω δεῖ προκαταλαμ-  
 βάνοντα φέρειν αἰτίας παρ’ ἃς ὀρθῶς ποιεῖν δόξεις συμβουλεύων, δεικνύντα τὴν ἐρημίαν τῶν λεγόντων ἢ<sup>2</sup> τὸ μέγεθος τῶν κινδύνων ἢ τὸ τῷ κοινῷ συμ-  
 φέρον ἢ ἄλλην τινὰ<sup>3</sup> τοιαύτην αἰτίαν δι’ ἧς λύσεις  
 25 τὴν ἐπιφερομένην δυσχέρειαν. ἂν δὲ μηδὲν ἤττον  
 θορυβῶσιν οἱ ἀκούοντες, χρή λέγειν συντόμως ἢ  
 ὥς ἐν γνώμῃς ἢ ὥς ἐν<sup>4</sup> ἐνθυμήματος σχήματι,  
 διότι<sup>5</sup> πάντων ἀτοπώτατόν ἐστιν ἡκεῖν μὲν ὥς  
 περὶ τῶν πραγμάτων βουλευσομένους τὰ κράτιστα,  
 νῦν δὲ μὴ βουλομένους ἀκούειν τῶν λεγόντων  
 οἷεσθαι καλῶς ἂν βουλεύεσθαι, καὶ πάλιν ὅτι  
 30 καλόν ἐστιν ἢ αὐτοὺς ἀνισταμένους συμβουλεύειν  
 ἢ τῶν συμβουλευόντων ἀκούσαντας ἅπερ ἂν αὐτοῖς  
 δοκῇ χειροτονεῖν. ἐν μὲν οὖν ταῖς δημηγορίαις  
 οὕτω καὶ ταῖς προκαταλήψεσι χρηστέον καὶ τοῖς  
 θορύβοις ἀπαντητέον.

Ἐν δὲ ταῖς δικαιολογίαις προκαταληψόμεθα μὲν  
 35 ὁμοιοτρόπως τοῖς προειρημένοις, ἀπαντήσομεν δὲ  
 τοῖς θορύβοις, εἰ μὲν ἐν ἀρχαῖς γίνωνται τῶν  
 λόγων, ὧδέ· “πῶς οὐκ<sup>6</sup> ἄλογον οὖν<sup>7</sup> ἐστὶ τὸν μὲν  
 νομοθέτην προστάξαι δύο λόγους ἐκάστω τῶν  
 ἀντιδίκων ἀποδοῦναι, τοὺς δὲ δικάζοντας ὑμᾶς  
 ὁμωμοκέναι κατὰ τὸν νόμον κρίνειν, εἴτα μηδὲ τὸν  
 40 ἓνα λόγον ἀκοῦσαι βούλεσθαι; κακείνῳ μὲν ὑμῶν

<sup>1</sup> Sylberg: δύσκολος.<sup>2</sup> ἢ add. Rac.<sup>3</sup> v.l. om. τινὰ.<sup>4</sup> ἐν add. Finckh.<sup>5</sup> διότι (uel ὅτι) Bekker: διό.<sup>6</sup> Sic Sp.: ὧδέ πως· οὐκ alii.<sup>7</sup> [οὖν] ? Hammer.

again, ' Let no one meet me with resentment for proposing to offer you advice upon matters about which certain other persons are reluctant to speak freely to you.' This is how you must employ anticipa- 20 tion about matters that are likely to annoy the audience, by producing reasons that will make them think that you are acting rightly in offering your advice—you must point to the lack of speakers or the magnitude of the dangers, or to considerations of public interest, or to some other plea of that sort which will enable you to dissipate the ill-feeling that you encounter. If the audience still go on inter- 25 rupting none the less, you must make some brief remark in the form of a maxim or a consideration, to the effect that it is extremely odd of them to have come there for the purpose of taking the best counsel about the matter, and yet to fancy that they can take wise counsel if they refuse to listen to the speakers ; and again, that the proper course is 30 either to stand up and offer counsel themselves, or to listen to those who do so and then to express their own opinion by a show of hands. This is how to use anticipation and to meet interruptions in parliamentary speeches.

In addressing a court of law we shall anticipate our opponents' case by methods similar to those already stated ; and we shall meet interruptions, if they 35 occur at the beginning of our speeches, as follows : ' Now surely it is unreasonable that when the law-giver enjoined that every litigant should be allowed two speeches, and when you of the jury have sworn to try the case according to the law, you yet refuse to listen even to a single speech ; and that whereas he 40

- 1433 a τοσαύτην πρόνοιαν ἔχειν ὅπως ἀκούσαντες πάντων τῶν λεγομένων εὐόρκως θῆσθε<sup>1</sup> τὴν ψῆφον, ὑμᾶς δὲ περὶ τούτων οὕτως ὀλιγώρως ἔχειν ὥστε μηδὲ τὰς ἀρχὰς ὑπομείναντας αὐτὰς τῶν λόγων ἤδη νομίζειν ἀκριβῶς ἅπαντα γινώσκειν;" καὶ ἄλλως " πῶς οὐκ ἄλογόν ἐστι τὸν μὲν νομοθέτην τάξαι τῶν ψήφων ἴσων γινομένων τὸν φεύγοντα νικᾶν, ὑμᾶς δὲ οὕτως ἐναντίως γινώσκειν περὶ τούτων ὡς μηδὲ ἀπολογουμένων τῶν διαβεβλημένων ἀκούειν; καὶ κεῖνον μὲν διὰ τὸ μᾶλλον κινδυνεύειν τοὺς φεύγοντας ἀπονεύμαι ταύτην τὴν πλεονεξίαν αὐτοῖς ἐν ταῖς
- 10 ψήφοις, ὑμᾶς δὲ τοῖς μὲν ἀκινδύνως κατηγοροῦσι μὴ φιλονεικεῖν, τοὺς δὲ μετὰ φόβων καὶ κινδύνων περὶ τῶν κατηγορουμένων ἀπολογουμένους<sup>2</sup> θορυβοῦντας ἐκπλήττειν;" εἰ μὲν οὖν ἐν ἀρχαῖς οἱ θόρυβοι γίνωνται, τοῦτον τὸν τρόπον αὐτοῖς<sup>3</sup> ἀπαντητέον· εἰ δὲ προεληλυθότος τοῦ λόγου θορυ-
- 15 βῶσιν, εἰ μὲν ὀλίγοι τινὲς τοῦτο ποιῶσιν, ἐπιτιμητέον τοῖς θορυβοῦσι καὶ πρὸς αὐτοὺς λεκτέον ὅτι δίκαιον νῦν μὲν αὐτοὺς ἀκούειν ἐστίν, ἵνα μὴ κωλύσωσι τοὺς ἄλλους ὀρθῶς δικάζειν, ἐπὰν δὲ ἀκούσωσι, τότε ποιεῖν ὃ τι ἂν ἐθέλωσιν. εἰ δὲ τὸ πλῆθος θορυβῇ, μὴ τοῖς κρίνουσιν ἀλλὰ σαυτῷ
- 20 ἐπίπληξον· τὸ μὲν γὰρ ἐκείνοις ἐπιτιμᾶν ὀργὴν ἐργάζεται, τὸ δὲ σαυτῷ ἐπιπληῆξαι καὶ λέγειν<sup>4</sup> ἡμαρτηκέναι συγγνώμης ποιήσει τυχεῖν. δεῖ δὲ καὶ δεῖσθαι τῶν κρινόντων<sup>5</sup> εὐμενῶς σαυτοῦ<sup>6</sup> ἀκοῦσαι [τοῦ λόγου],<sup>7</sup> καὶ μὴ<sup>8</sup> περὶ ὧν μέλλουσι κρύβδην τὴν ψῆφον φέρειν, ἤδη τὴν διάνοιαν

<sup>1</sup> v.l. θήσεσθε.<sup>3</sup> αὐτοῖς v.l. om.<sup>5</sup> v.l. τῶν κριπτόνων.<sup>2</sup> v.l. ἀπολογουμένους ὡς.<sup>4</sup> v.l. λέγειν ἐν τῷ λέγειν.<sup>6</sup> Sauppe: αὐτοῦς.



made such careful provision for you so as to secure 1433 a  
 that you should give your vote according to your oath  
 after hearing all the speeches, you treat these regula-  
 tions with such contempt that you think you know  
 the whole of the facts perfectly already, without so  
 much as waiting for even the opening sentences of the  
 speeches.' And on another line : ' Surely it is un-  
 reasonable that whereas the lawgiver made the rule 5  
 that if the votes prove equal the defendant should  
 win the case, you take so opposite a view on these  
 matters that you will not even hear the defence of  
 persons who have been misrepresented ; and that  
 whereas he assigned the defendants this advantage  
 in the votes because their risk is the greater, you 10  
 raise no quarrel with the accusers who are running  
 no risk, but terrify with your uproar those who  
 in fear and peril are offering their defence on the  
 charges brought.' This is the way to meet inter-  
 ruptions if they occur at the start. If the audience  
 clamour when your speech has made some progress,  
 supposing the interrupters are few in number, you 15  
 must rebuke them and tell them that justice requires  
 them to give you a hearing now, so as not to prevent  
 the rest of the jury from forming a correct judgement,  
 but that when they have heard you they can do what  
 they please. If the uproar comes from the mass of  
 the audience, do not reproach the court but reproach  
 yourself, because to rebuke them would make them 20  
 angry but to reproach yourself and say you have  
 committed an error will bring you forgiveness. You  
 must also beg the judges to give you a gracious  
 hearing, and not to make public in advance their  
 opinion on the issue upon which they are about to give

<sup>7</sup> Rac.: v.l. τοὺς λόγους.

<sup>8</sup> μὴ add. Victorius.



1433 a

25 φανεράν τίθεσθαι. συλλήβδην δὲ τοῖς θορύβοις ἀπαντήσομεν κεφαλαιωδῶς ἢ γνώμαις ἢ ἐνθυμήμασι, δεικνύντες τοὺς θορυβοῦντας ἢ τοῖς δικαίοις ἢ τοῖς νόμοις ἢ τῷ συμφέροντι τῆς πόλεως ἢ τῷ καλῷ ἐναντιουμένους· ἐκ γὰρ τῶν τοιούτων ἔστιν ὅτι μάλιστα παῦσαι τοὺς ἀκούοντας θορυβοῦντας.

30 Ταῖς μὲν οὖν πρὸς τοὺς ἀκροατὰς προκαταλήψεσιν ὡς δεῖ χρησθαι, καὶ ὅπως τοῖς θορύβοις ἀπαντητέον, ἐκ τῶν προειρημένων ἴσμεν· τὰ δὲ ὑπὸ τῶν ἀνταγωνιστῶν ἐπίδοξα λέγεσθαι πάλιν ὡς δεῖ προκαταλαμβάνειν, ἀποδείξω.<sup>1</sup> “ἴσως οὖν ὀδυρεῖται τὴν<sup>2</sup> αὐτοῦ πενίαν, ἧς οὐκ ἐγὼ ἀλλ’ ὁ

35 τούτου τρόπος ὑπαίτιός ἐστι<sup>3</sup>.” καὶ πάλιν “πυνθάνομαι αὐτὸν τὸ καὶ τὸ μέλλειν λέγειν.” ἐν μὲν οὖν τοῖς προτέροις<sup>4</sup> λόγοις οὕτω δεῖ τὰ ἐπίδοξα λέγεσθαι ὑπὸ τῶν ἐναντίων προκαταλαμβάνοντας<sup>5</sup> διαλύειν καὶ ἀσθενῇ ποιεῖν· καὶ γὰρ καὶ πάνυ ἰσχυρὰ ἢ τὰ προδιαβεβλημένα,<sup>6</sup> οὐχ ὁμοίως φαί-

40 νεται μεγάλα τοῖς ἤδη προακηκοόσιν. εἰ δὲ τοὺς

1433 b ὑστέρους λόγους λέγωμεν<sup>7</sup> καὶ οἱ ἐναντίοι προκατειληφότες ὧσιν ἃ μέλλομεν λέγειν, ἀντιπροκαταληπτέον ἐστὶν αὐτὰ λύνοντας<sup>8</sup> τόνδε τὸν τρόπον· “οὗτος δ’ οὐ μόνον μου κατέψευσται πολλὰ πρὸς ὑμᾶς, ἀλλὰ καὶ σαφῶς εἰδὼς<sup>9</sup> ὅτι ἐξελέγξω αὐτόν, <sup>5</sup> προκατέλαβέ μου τὸν λόγον καὶ προδιέβαλεν,<sup>10</sup> ἵν’ ὑμεῖς μὴ ὁμοίως αὐτῷ προσέχητε ἢ ἐγὼ μὴ εἴπω πρὸς ὑμᾶς αὐτόν<sup>11</sup> διὰ τὸ διασεσύρθαι πρότερον ὑπὸ τούτου. ἐγὼ δ’ οἶμαι δεῖν τοὺς ἐμούς λόγους παρ’ ἐμοῦ πυνθάνεσθαι ὑμᾶς ἀλλὰ μὴ παρὰ τούτου, εἰ<sup>12</sup>

<sup>1</sup> Sp.: ὑποδείξω.<sup>2</sup> τὴν add. Sp.<sup>3</sup> Sp.: ἔσται.<sup>4</sup> v.l. πρότερον.<sup>5</sup> Sp.: προκαταλαμβάνοντα.<sup>6</sup> διαβεβλημένα Sp.<sup>7</sup> Sp.: ἔχωμεν.

a secret ballot. And in general, we shall meet inter-  
 rptions summarily with maxims or with considera-  
 tions, pointing out that those who clamour are running  
 counter to justice or law or public interest or morality;  
 such are the best means of stopping the audience  
 from interrupting.

The preceding remarks inform us how to employ  
 anticipation in relation to the audience and how to  
 meet interruptions. Next I will demonstrate how  
 we should anticipate the points that are likely to  
 be made by our opponents. 'Now perhaps he will  
 lament his poverty, the blame for which rests not with  
 me but with his own character'; and again, 'I am  
 told that he is going to say so and so.' This is how  
 when speaking first we must anticipate the things  
 that are probably going to be said by our opponents,  
 in order to discredit them and weaken their force;  
 arguments misrepresented in advance, even though  
 quite strong ones really, do not appear so important  
 to an audience that has heard them already. If we are  
 speaking after the other side and they have antici-  
 pated what we are going to say, we must counter their  
 anticipations by rebutting them in this way: 'My  
 opponent has not only told you a number of things  
 against me that are false, but also, as he knew quite  
 well that I should refute him, he anticipated my  
 argument and misrepresented it in advance, in order  
 that you may not pay the same attention to it, or that  
 I may not use it in my speech to you because it has  
 been discredited in advance by him. But my view is  
 that you ought to learn my arguments from me and

1433 a  
 25

1433 b

<sup>6</sup> Sp.: λύνοντα. <sup>9</sup> v.l. ἀφειδῶς: σάφ' εἰδῶς Sauppe.

<sup>10</sup> Sp.: διέβαλεν. <sup>11</sup> αὐτὸς? Hammer.

<sup>12</sup> v.l. εἰ δέ: (ᾧστ') εἰ καὶ . . . διέσυρε, λέξω Sauppe.

1438 b

καὶ ταῦθ' οὗτος προδιέστυρε λέγων ἃ φημι οὐ μικρὰ  
 10 σημεῖα εἶναι τοῦ μηδὲν ὑγιὲς τοῦτον λέγειν." κέχρηται δὲ καὶ Εὐριπίδης ἐν Φιλοκτῆτῃ τεχνικῶς  
 τούτῳ τῷ εἶδει διὰ τοῦδε·

λέξω δ' ἐγώ, καὶν μου διαφθεῖραι<sup>1</sup> δοκῇ  
 λόγους ὑποστὰς<sup>2</sup> αὐτὸς ἡδίκηκεναι·

ἀλλ' ἐξ ἐμοῦ γὰρ πράγματ' αὐτ' εἴσῃ<sup>3</sup> κλύων,  
 ὁ δ' αὐτὸς αὐτὸν ἐμφανίζετω<sup>4</sup> λέγων.

15 Ταῖς μὲν οὖν προκαταλήψεσιν ὥς δεῖ χρῆσθαι καὶ  
 πρὸς τοὺς κριτὰς<sup>5</sup> καὶ πρὸς τοὺς ἐναντίους, ἴσμεν  
 διὰ τούτων.

XIX. Αἰτήματα δ' ἐστὶν ἐν τοῖς λόγοις ἃ παρὰ  
 τῶν ἀκουόντων οἱ λέγοντες αἰτοῦνται. τούτων δ'  
 ἐστὶ τὰ μὲν ἄδικα τὰ δὲ δίκαια. δίκαιον μὲν οὖν  
 20 ἐστὶ τὸ<sup>6</sup> προσέχειν τοῖς λεγομένοις αἰτεῖσθαι καὶ  
 μετ' εὐνοίας ἀκούειν· δίκαιον δὲ καὶ τὸ κατὰ τοὺς  
 νόμους αὐτῷ βοηθῆσαι, καὶ τὸ μηδὲν παρὰ τοὺς  
 νόμους ψηφίσασθαι, καὶ τὸ τοῖς ἀτυχήμασι συγ-  
 γνώμην ἔχειν· ἐὰν δέ<sup>7</sup> ἢ παρὰ τοὺς νόμους, ἄδικον  
 [ἐὰν δὲ μή, δίκαιον]<sup>8</sup>. τὰ μὲν οὖν αἰτήματα ταῦτά  
 25 ἐστὶ, διειλόμεθα δ' αὐτῶν τὰς διαφοράς, ἵν' εἰδότες  
 τό τε δίκαιον καὶ τὸ ἄδικον χρώμεθα κατὰ τὸν  
 καιρόν, καὶ μὴ λανθάνωσιν ἡμᾶς οἱ ἐναντίοι ἄδικόν  
 τι αἰτοῦντες τοὺς δικάζοντας. καὶ περὶ μὲν τούτων  
 ἐκ τῶν εἰρημένων οὐκ ἀγνοήσομεν.

XX. Παλιλλογία δ' ἐστὶ<sup>9</sup> σύντομος ἀνάμνησις, δεῖ  
 30 δ' αὐτῇ χρῆσθαι καὶ παρὰ<sup>10</sup> τῶν μερῶν καὶ παρὰ<sup>10</sup>

<sup>1</sup> Rac.: διαφθείρας.

<sup>2</sup> ὑφιστὰς Ribbeck.

<sup>3</sup> Wecklein: γὰρ τὰμὰ μαθήσῃ.

Pflugk: ἐμφανιεῖ σοι (ἐμφανίζει σοι Finckh).

<sup>5</sup> ἀκροατὰς Sp.

<sup>6</sup> v.l. τό τε.

<sup>7</sup> v.l. μὲν.

<sup>8</sup> Secl. Sp.

<sup>9</sup> v.l. ἐστὶ μὲν.

<sup>10</sup> Sp.: περὶ bis.

not from him, even if he did try to discredit them by saying things that I declare to be no small indications that all that he says is unsound.' Also Euripides in *Philoctetes* has made skilful use of this species of argument by means of the following passage <sup>a</sup> :

I will speak, even though he think to have foiled  
My words by taking on himself the guilt.  
No, you shall learn from me the very facts—  
Let his own words show him for what he is.

These considerations show us how to employ anticipations both in regard to the court and in regard to our opponents. 15

XIX. Postulates<sup>b</sup> in speeches are demands made by the speakers on the audience. Some are justifiable, others not. It is just to demand that they shall attend to what is said and give a favourable hearing. It is also just to demand that they shall give one redress in accordance with the law, and not give any verdict that is contrary to law, and have compassion on misfortune ; but it is unjust to demand anything that is against the law. These then are postulates ; and we have distinguished their varieties in order that we may know which are justifiable and which not, and employ them appropriately, and in order that we may detect our opponents when they make a demand of the court that is unjust. From what has been said we shall not be ignorant on these matters. 20 25

XX. Recapitulation is a brief reminder. It should be employed both at the end of a division of a 30

<sup>a</sup> Euripides fr. 794 (Dindorf).

<sup>b</sup> In Aristotelian logic *αἴτημα* means a premiss assumed without proof, without the consent of the opponent (a premiss assumed with his consent being *ὑπόθεσις*); but the word is not used in that technical sense here.

1433 b

τῶν ὅλων λόγων τὰς τελευτάς. παλιλλογήσομεν δὲ ἐν κεφαλαίοις ἢ διαλογιζόμενοι ἢ προαιρούμενοι ἢ ἐπερωτῶντες<sup>1</sup> ἢ ἀπολογιζόμενοι.<sup>2</sup> δείξω δ' αὐτῶν οἷον ἕκαστόν ἐστιν. τὸ μὲν οὖν διαλογίζεσθαι

35 τοιόνδε τι ἐστίν· “ἀπορῶ δ' ἔγωγε τί ἂν ἐποίησαν οὗτοι, εἰ μὴ<sup>3</sup> φανεροὶ μὲν ἦσαν ἡμᾶς πρότερον ἐγκαταλελοιπότες, ἐξηλέγχοντο δὲ ἐπὶ τὴν πόλιν ἡμῶν στρατεύσαντες, οὐδὲν δὲ πώποτε ὦν ὠμολογήκασιν ποιήσαντες.” τὸ μὲν οὖν διαλογίζεσθαι τοιοῦτόν ἐστι, τὸ δὲ ἀπολογίζεσθαι τοιόνδε<sup>4</sup>.

40 “ἀπέδειξα δ' αὐτοὺς διαλύσαντας προτέρους τὴν συμμαχίαν, καὶ πρῶτον ἐπιθεμένους ἡμῖν ὅτε πρὸς

1434 a Λακεδαιμονίους ἐπολεμοῦμεν, καὶ μάλιστα σπουδάσαντας ἐξανδραποδίσασθαι τὴν πόλιν ἡμῶν.” τὸ μὲν οὖν ἀπολογίζεσθαι τοιοῦτό<sup>5</sup> ἐστί, τὸ δ' ἐκ προαιρέσεως ἀναμνησκειν τοιόνδε· “ἐνθυμῆσθαι  
5 δὲ δεῖ ὅτι συμβέβηκεν ἡμῖν, ἐξ ὅτου τὴν φιλίαν πρὸς τούτους ἐποιησάμεθα, μηδέποτε κακὸν ὑπὸ τῶν πολεμίων παθεῖν· βοηθήσαντες γὰρ ἡμῖν πολ-  
λάκις ἐκώλυσαν Λακεδαιμονίους τὴν χώραν ἡμῶν διαφθεῖραι, χρήματα δὲ πολλὰ καὶ νῦν φέροντες διατελοῦσιν.” ἐκ προαιρέσεως μὲν οὖν<sup>6</sup> οὕτως

10 ἀναμνήσομεν, ἐξ ἐπερωτήσεως δὲ τόνδε τὸν τρόπον· “ἡδέως δ' ἂν αὐτῶν πυθοίμην διὰ τί τὰς συντάξεις ἡμῖν οὐκ ἀποδιδόασιν. οὐ γὰρ ὡς ἀποροῦσιν εἰπεῖν ἂν τολμήσαιεν, οἳ τοσαῦτα χρήματα καθ' ἕκαστον ἐνιαυτὸν ἐκ τῆς χώρας ἐπιδεικνύονται λαμβάνειν,<sup>7</sup> οὐδ' αὖ φήσουσιν εἰς τὴν τῆς πόλεως διοίκησιν

<sup>1</sup> Rac.: προσερωτῶντες.

<sup>2</sup> v.l. add. ἢ ἐκ προαιρέσεως.

<sup>3</sup> μὴ (φίλοι ἀλλ' ἐχθροὶ ἡμῖν ἐγένοντο, οἱ) Sp.

<sup>4</sup> Sp.: τοιοῦτον.

<sup>5</sup> Sp.: τοιόνδε.



speech and at the end of the whole. In summing up we shall recapitulate either in the form of a calculation or of a proposal of policy or of a question or of an enumeration. I will show what is the nature of each of these. The following is an example of calculation : ' For my part I am at a loss to know what these 35 men would have done, if it were not manifest that they left us in the lurch on a former occasion, and if they were not proved to have marched against our city and to have never yet fulfilled a single one of their agreements.' Such is the nature of calculation. The following is an example of enumeration : ' I have shown that they were the first to break the treaty of 40 alliance, and attacked us first when we were at war 1433 a with Sparta, and displayed the greatest eagerness to reduce our city to absolute slavery.' That is the nature of enumeration. Reminder made by proposing a line of action is as follows : ' You must bear in mind that ever since we made friends with these people it 5 has never befallen us to suffer injury from our enemies, because they have frequently come to our assistance and prevented the Spartans from ravaging our country, and they continue even now to make large contributions to our funds.' That is how we shall make a reminder by proposing a line of action. We shall remind by interrogation as follows : ' I should 10 be glad if they would inform me why they do not pay us their assessments. They cannot venture to say they are short of funds, when it is proved that they draw such a large annual revenue from their land ; nor yet will they say they are spending a large amount on the administration of their city, since it is clear that

<sup>6</sup> οὖν add. Sp.

<sup>7</sup> v.l. λαμβάνοντες.



1434 a

15 πολλά δαπανᾶν, παντελῶς γὰρ ἐλάχιστα τῶν νησιωτῶν ἀναλίσκοντες φαίνονται.” ἐκ μὲν οὖν ἐπερωτήσεως οὕτω παλιλλογήσομεν.

XXI. Εἰρωνεία δ’ ἐστὶ λέγειν τι προσποιούμενον μὴ λέγειν ἢ<sup>1</sup> τοῖς ἐναντίοις ὀνόμασι τὰ πράγματα προσαγορεύειν. εἴη δ’ ἂν αὐτῆς τὸ σχῆμα τοιοῦτον  
 20 ἐν τῷ περὶ τῶν εἰρημένων συντόμως ἀναμιμνήσκειν. “οὐδὲν δ’ οἶμαι δεῖν λέγειν ὅτι οὗτοι μὲν οἱ φάσκοντες πολλά ἀγαθὰ πεποιηκέναι πλεῖστον φαίνονται τὴν πόλιν κεκακουργηκότες, ἡμεῖς δ’ οὗς οὗτοί φασιν ἀχαρίστους εἶναι, τούτοις τε πολλάκις βοηθήσαντες καὶ τοὺς ἄλλους οὐδὲν ἀδικοῦντες.”  
 25 τὸ μὲν οὖν ἐν προσποιήσει παραλείψεως λέγοντα συντόμως ἀναμιμνήσκειν τοιοῦτόν ἐστι, τὸ δὲ τοῖς ἐναντίοις ὀνόμασι προσαγορεύειν τὰ πράγματα πάλιν τοιόνδε<sup>2</sup>. “οὗτοι μὲν οἱ χρηστοὶ πολλά φαίνονται τοὺς συμμάχους κακὰ πεποιηκότες, ἡμεῖς δ’ οἱ φαῦλοι πολλῶν<sup>3</sup> ἀγαθῶν αὐτοῖς<sup>4</sup> αἵτιοι καταστάντες.”

30 Διὰ τούτων μὲν οὖν συντόμως ἀναμιμνήσκοντες ταῖς παλιλλογίαις χρῆσόμεθα καὶ παρὰ<sup>5</sup> τῶν μερῶν καὶ παρὰ<sup>5</sup> τῶν ὅλων λόγων τὰς τελευτάς.

XXII. Ὅθεν δ’ ἔστιν ἀστεῖα λέγειν καὶ τὰ<sup>6</sup> μήκη τῶν λόγων ποιεῖν ὅπως ἂν τις θέλῃ, τοῦτο διέξιμεν πάλιν.

35 Ἀστεῖα μὲν οὖν λέγειν ἐκ τούτου τοῦ τρόπου ἔστιν, οἷον τὰ ἐνθυμήματα λέγοντας ἡμίση,<sup>8</sup> ὥστε τὸ ἡμισυ αὐτοὺς ὑπολαμβάνειν τοὺς ἀκούοντας. δεῖ δὲ καὶ γνώμας συμπαραλαμβάνειν. χρῆ δὲ τούτων

<sup>1</sup> ἢ Finckh: ἢ ἐν.

<sup>2</sup> τοιόνδε c.j. Hammer: τοιοῦτον αὐτ τοιοῦτόν ἐστι.

<sup>3</sup> πολλῶν om. v.l.

<sup>4</sup> αὐτοῖς om. v.l.

they have absolutely the smallest expenditure of all <sup>15</sup> the islanders.' That is how we shall recapitulate by means of interrogation.

XXI. Irony is saying something while pretending *Irony.* not to say it, or calling things by the opposite of their real names. It may take the form of briefly recalling <sup>20</sup> things said before, as follows: 'I do not think that anything need be said to show that these men who profess to have done the state many services are seen to have done it a very great deal of harm, while we, whom they charge with ingratitude, are seen to have often given them assistance and to do no wrong to other people.' Such is a brief reminder conveyed under a pretence of passing the matter over. <sup>25</sup> The following illustrates the device of calling things by the opposite names: 'It appears that whereas these honourable gentlemen have done our allies a great deal of harm we base creatures have caused them many benefits.'

These are the means by which we shall employ <sup>30</sup> recapitulation in the form of a brief reminder, both at the end of the divisions of a speech and at the conclusion of the whole.

XXII. We will next explain how to obtain an agreeable style, and how to regulate the length of one's speeches as one may wish.

An agreeable style may be achieved by the follow- <sup>35</sup> ing method,—by stating half of a consideration so that the audience may understand the other half themselves. Also one must bring in maxims—one should *Elegancies of style.*

<sup>5</sup> παρὰ bis Sp.: περι. v.l. om. τῶν μερῶν...l. 33 μήκη: ? om. καὶ περὶ τῶν μερῶν...τελευτᾶς (cf. 1433 b 30) Rac. (v.l. καὶ περὶ τῶν λόγων καὶ τῶν μερῶν τελευτᾶς).

<sup>6</sup> τὰ v.l. om. <sup>7</sup> v.l. τόπου.

<sup>8</sup> ὅλα ἢ ἡμίση (aut ἡμίση) codd.: om. ὅλα ἢ Sp.

1434 a

κατὰ πάντα τὰ μέρη συγκαταλέγειν,<sup>1</sup> διαλλάττοντα τοὺς λόγους καὶ μηδέποτε ὁμοια εἰς τὸ αὐτὸ πολλὰ τιθέντα. καὶ οὕτως ὁ λόγος ἀστείος φανέται.

1434 b

Μηκύνειν δὲ τοὺς λόγους βουλόμενον δεῖ μερίζειν τὸ πρᾶγμα καὶ ἐν ἐκάστῳ μέρει τὰ ἐνόντα οἷα τέ ἐστὶν τὴν φύσιν διδάσκειν καὶ τὴν χρῆσιν καὶ ἰδίᾳ καὶ κοινῇ, καὶ τὰς προφάσεις αὐτῶν ἐκδιηγείσθαι. ἂν δὲ καὶ ἔτι μακρότερον θελήσωμεν τὸν λόγον  
5 ποιεῖν, δεῖ πολλοῖς ὀνόμασι περὶ ἐκάστου χρῆσθαι. χρὴ δὲ παρὰ μέρος ἕκαστον τοῦ λόγου παλιλλογεῖν, καὶ τὴν παλιλλογίαν σύντομον ποιεῖσθαι. ἐν δὲ τῇ τελευτῇ τοῦ λόγου ταῦτα περὶ ὧν καθ' ἕνα ἕκαστον εἴρηκας ἀθρόα συντιθέναι, καὶ περὶ ὅλων τῶν  
10 πραγμάτων λέγειν. τοῦτον μὲν οὖν τὸν τρόπον μῆκος ἔξουσιν οἱ λόγοι.

Βραχυλογεῖν δὲ βουλόμενος<sup>2</sup> ὅλον τὸ πρᾶγμα ἐνὶ ὀνόματι περιλαμβάνειν, καὶ τούτῳ ὃ ἂν ὑπάρχη βραχύτατον τῷ πράγματι· χρὴ δὲ καὶ συνδέσμους ὀλίγους ποιεῖν, τὰ πλείστα δὲ ζευγνύναι. ὀνομάζειν  
15 μὲν οὕτω, τῇ δὲ λέξει εἰς δύο χρῆσθαι<sup>3</sup>· καὶ παλιλλογίαν τὴν σύντομον ἐκ τῶν μερῶν ἀφαιρεῖν, ἐν δὲ ταῖς τελευταῖς μόνον παλιλλογεῖν. καὶ τοῦτον μὲν τὸν τρόπον βραχεῖς τοὺς λόγους ποιήσομεν.

Ἐὰν δὲ βούλῃ μέσως λέγειν, τὰ μέγιστα τῶν μερῶν ἐκλέγων περὶ τούτων ποιεῖσθαι τοὺς λόγους.  
20 χρὴ δὲ καὶ τοῖς ὀνόμασι τοῖς μέσοις χρῆσθαι, καὶ μήτε τοῖς μακροτάτοις μήτε τοῖς βραχυτάτοις μήτε

<sup>1</sup> συχνὰ ἐκλέγειν Kayser.

<sup>2</sup> Usener (cf. infra 18 et 1425 b 29): βουλόμενον.

<sup>3</sup> <μῆ> χρῆσθαι Kayser.

introduce a selection of these in all the divisions of a speech, varying the words and never putting several similar phrases in the same passage. In this way the 40 speech will have an agreeable effect. 1434 a

If you want to lengthen a speech, you must divide the subject up, and in each division explain the nature of the points that it contains and their particular and general application, and state fully the justifications for them. If we wish to make the speech still longer, 5 we must employ a number of words about each topic. At each division of the speech we should recapitulate, and we should make the recapitulation concisely. At the end of the speech you should gather together the topics with which you have dealt separately, and discuss the matter as a whole. This is the way in 10 which speeches will be given length. 1434 b  
Length.

If you wish to speak briefly, include the whole of an idea in a single word, and that the shortest that is appropriate to the idea ; and you must also use few connecting particles, and couple up most of the words into one clause.<sup>a</sup> That is how you must use words. Also make a vocable serve two purposes<sup>b</sup> ; and do 15 away with the concise recapitulation from the divisions, and only recapitulate at the end. In this way we shall make our speeches brief.

If you wish to speak at moderate length, pick out the most important of the divisions of your subject and make your speech about these. Also you must employ words of medium length, neither the longest 20 nor the shortest, nor yet several words, albeit of

<sup>a</sup> Cf. *Rhet.* 1407 b 38 where the instance given is *πορευθεὶς διελέχθην* (instead of *ἐπορεύθην καὶ διελέχθην*).

<sup>b</sup> Cf. *ibid.* 36 *τῆς ἡμετέρας γυναικός* (more concise than *τῆς γυναικὸς τῆς ἡμετέρας*).

1434 b

πολλοῖς περί γε ἑνὸς ἀλλὰ μετρίοις. χρὴ δὲ καὶ τοὺς ἐπιλόγους ἐκ τῶν ἀνὰ μέσον μερῶν μῆτε παντελῶς ἐξαιρεῖν μῆτε πᾶσι τοῖς μέρεσιν ἐπιφέρειν, ἀλλ' ἅπερ ἂν μάλιστα βούλῃ κατανοῆσαι  
 25 τοὺς ἀκούοντας, ἐπὶ τούτων μάλιστα παλλιλλογεῖν ἐπὶ τῇ τελευτῇ.<sup>1</sup>

Τὰ μὲν οὖν μῆκη τῶν λόγων ἐκ τούτων ποιήσομεν, ἥνικ' ἂν θέλωμεν.

Ἄν δὲ ἀστεῖον γράφειν θέλῃς λόγον, παραφύλαττε ὡς μάλιστα ὅπως τὰ ἦθη τῶν λόγων ὁμοιοῦν τοῖς ἀνθρώποις δυνήσῃ. τοῦτο δὲ ποιήσεις, ἂν ἐπιθεωρῇς  
 30 τὰ μεγάλα τῶν ἡθῶν καὶ τὰ ἀκριβῆ καὶ τὰ μέτρια.

Περὶ μὲν οὖν τούτων ἐντεῦθεν οὐκ ἀγνοήσεις, περὶ δὲ ὀνομάτων συνθέσεως<sup>2</sup> δηλώσωμεν· καὶ γὰρ τοῦτο τῶν ἀναγκαίων ἐστίν.

XXIII. Πρῶτον μὲν οὖν τρόποι ὀνομάτων εἰσὶ τρεῖς, ἀπλοῦς ἢ σύνθετος ἢ μεταφέρων. ὡσαύτως  
 35 καὶ συνθέσεις τρεῖς, μία μὲν εἰς φωνήεντα τελευτᾶν τὰς συμβολὰς<sup>3</sup> καὶ ἀπὸ φωνήεντος ἄρχεσθαι, δευτέρα δὲ ἀπὸ ἀφώνου ἀρξόμενον<sup>4</sup> εἰς ἄφωνον τελευτᾶν, τρίτη δὲ τὰ ἄφωνα πρὸς τὰ φωνήεντα συνδεῖν. τάξεις δὲ τέσσαρες, μία μὲν τὰ ὅμοια τῶν ὀνομάτων ἢ παράλληλα τιθέναι ἢ διασπείρειν, ἄλλη  
 40 δὲ ἡ<sup>5</sup> τοῖς αὐτοῖς ὀνόμασι χρῆσθαι ἢ μεταβάλλειν εἰς  
 1435 a ἕτερα, τρίτη δὲ ἡ<sup>5</sup> ἐνὶ ἡ πολλοῖς ὀνόμασι τὸ πρᾶγμα προσαγορεύειν, τετάρτη δὲ ἡ<sup>5</sup> ἐξῆς τὰ πραγματευθέντα<sup>6</sup> ὀνομάζειν ἢ ὑπερβιβάζειν.

<sup>1</sup> [ἐπὶ τῇ τελευτῇ] Kayser.

<sup>2</sup> περὶ δὲ ἐρμηνείας Usener.

<sup>3</sup> Rac.: ταῖς συμβολαῖς (v.l. συλλαβαῖς).

<sup>4</sup> Usener: ἀρξάμενον.

<sup>5</sup> ἡ tris add. Rac.

<sup>6</sup> v.l. πράγματα θέντα, πραχθέντα.

moderate length, to express one thing. You must not altogether omit the conclusions from all the intermediate divisions, nor yet append conclusions to all the divisions, but at the final conclusions devote your recapitulation particularly to the points to which you most desire your audience to direct their attention. 25

These rules will guide us in regulating the length of our speeches, when we may desire to do so.

If you wish to write a pleasing speech, be careful as far as possible to adapt the character of your speech to that of your public. You will achieve this if you observe their character—noble, petty 30 or average.

These considerations will inform you on these matters. We will now explain the putting together of words, for that is also an essential topic.

XXIII. In the first place there are three kinds *Diction.* of words,—simple, compound and metaphorical. So also are there three ways of putting words together—one for the juxtaposed words to end with a vowel 35 and begin with a vowel, the second to end with a consonant when an initial consonant is to follow, the third to connect consonants with vowels. And there are four questions as to arrangement<sup>a</sup>—one, whether to put similar words side by side or to keep them separate; another, whether to use the same words or to change to different ones; third, whether to designate a thing by one word or by many; 40 fourth, whether to mention the things treated of in 1435 a order or to transpose them.

<sup>a</sup> τὰξίς hardly describes the second and third of the questions that follow.



Ὅπως δὲ καλλίστην ποιήσεις τὴν ἐρμηνείαν νῦν δηλώσομεν.

XXIV. Πρώτον μὲν οὖν ὅπως<sup>1</sup> εἰς δύο ἐρμηνεύειν, εἴτα ὅπως<sup>2</sup> σαφῶς δεῖ λέγειν.

Σχήματα δ' ἐστὶ τοῦ εἰς δύο λέγειν τάδε, ἐν μὲν ὅτι αὐτὸς δύναται καὶ τοῦτο καὶ ἕτερον, δεύτερον δὲ ὅτι οὗτος<sup>3</sup> μὲν οὐ δύναται ἕτερος δὲ δύναται, τρίτον δὲ ὅτι οὗτος<sup>4</sup> καὶ τοῦτο καὶ ἕτερον δύναται, τέταρτον δὲ ὅτι οὗτ' αὐτὸς οὐθ' ἕτερος δύναται, πέμπτον δὲ ὅτι αὐτὸς μὲν οὐ<sup>5</sup> δύναται ἕτερος δὲ δύναται, ἕκτον δὲ ὅτι αὐτὸς μὲν ἕτερον δύναται, ἐκεῖνος δὲ οὐ δύναται ἕτερον. ἕκαστον δὲ τούτων ἐπὶ τῶνδε θεωρήσεις. ὅτι μὲν γὰρ αὐτὸς δύναται καὶ τοῦτο καὶ ἕτερον, τοιόνδε ἐστίν· “ἐγὼ δὲ οὐ μόνον τούτων αἴτιος ὑμῖν ἐγενόμην,<sup>6</sup> ἀλλὰ καὶ Τιμόθεον μέλλοντα στρατεύειν ἐφ' ὑμᾶς δι-  
 15 ἐκώλυσα.” ὅτι δὲ οὗτος<sup>7</sup> μὲν οὐ δύναται ἕτερος δὲ δύναται, τοιόνδε· “αὐτὸς μὲν<sup>8</sup> ἀδυνάτως ἔχει πρεσβεύειν ὑπὲρ ἡμῶν, οὗτος δὲ φίλος ἐστὶ τῇ πόλει τῶν Σπαρτιατῶν, καὶ μάλιστ' ἂν δυνηθεῖη πρᾶξαι ἅ βούλεσθε.” τὸ δὲ ὅτι οὗτος<sup>9</sup> καὶ τοῦτο καὶ ἕτερον δύναται, τοιόνδε· “οὐ μόνον δὲ ἐν τοῖς  
 20 πολέμοις εὖρωστον αὐτὸν παρέσχεν, ἀλλὰ καὶ βουλευσασθαι τῶν πολιτῶν οὐχ ἥκιστα δύναται.” τὸ δὲ ὅτι οὗτ' αὐτὸς οὐθ' ἕτερος δύναται, τοιόνδε· “οὗτ' ἂν αὐτὸς δυνηθεῖην<sup>10</sup> ὀλίγην δύναμιν ἔχων καταπολεμῆσαι τοὺς ἐναντίους, οὗτ' ἄλλος οὐδεὶς τῶν πολιτῶν.” τὸ δὲ ὅτι ἐκεῖνος μὲν δύναται  
 25 αὐτὸς δὲ οὐ δύναται, τοιόνδε· “οὗτος μὲν γὰρ

<sup>1</sup> ὅπως bis add. Usener.

<sup>3</sup> οὐ hic Ross: post ἕτερος δὲ.

<sup>6</sup> αὐτὸς? Rac.

<sup>2</sup> αὐτὸς bis? Rac.

<sup>4</sup> v.l. κατέστην.

<sup>8</sup> v.l. μὲν οὖν.

We will now show how you will make your statement most attractive.

XXIV. First then as to how to frame a statement with a twofold division, next how to express the meaning clearly.

The forms of a twofold statement are these : (1) to say that one can oneself do the thing in question and also something else, (2) that this man cannot do a thing but somebody else can, (3) that this man can do the thing in question and also something else, (4) that neither can one do a thing oneself nor can anyone else, (5) that one cannot do a thing oneself but someone else can, (6) that one can do one thing oneself but the other person cannot do something else. You will see each of these forms illustrated in the following examples : (1) An example of the statement that one can oneself do the thing and also something else is ' For my part I not only brought about these results for you, but also prevented Timotheus when he was going to lead his army against you.' (2) An example of the statement that this man cannot do a thing but another man can is ' He himself is incapable of going on a mission on our behalf, but this man is a friend of the Spartan government and would be very able to do what you want.' (3) That this man can do the thing in question and also something else is instanced by ' He not only showed himself a sturdy man in the wars, but is also not the least competent of our citizens to advise on policy.' (4) That neither can one do a thing oneself nor can anyone else is instanced by ' I could not myself defeat our adversaries with a small force, nor yet could any other of our citizens.' (5) That someone else can do it but one cannot oneself

*Method of statement.*

<sup>7</sup> αὐτὸς ? Rac.

<sup>\*</sup> Sp.: δυνηθείη.

1435 a

ἔρρωται τῷ σώματι, ἐγὼ δ' ἄρρωστών τυγχάνω.”  
τὸ δὲ ὅτι αὐτὸς μὲν ἕτερον δύναται, ἐκείνος δὲ οὐ  
δύναται ἕτερον, τοιόνδε· “ ἐγὼ μὲν γὰρ κυβερνῆσαι  
δυνατός εἰμι, οὗτος δὲ οὐδὲ κωπηλατῆσαι δύναται.”

Σχήματα μὲν οὖν τοῦ εἰς δύο ἐρμηνεύειν ὧδε  
80 ποιήσεις ἐπὶ τῶν πραγμάτων ἀπάντων τὸν αὐτὸν<sup>1</sup>  
τρόπον μετιών.

Σαφῶς δὲ ὅθεν δηλώσεις, τοῦτο πάλιν σκεπτέον.

XXV. Πρῶτον μὲν οὖν ὀνόμαζε τοῖς οἰκείοις  
ὀνόμασιν ὃ τι ἂν λέγῃς, διαφεύγων τὸ ἀμφίβολον.  
εὐλαβοῦ δὲ περὶ τὰ φωνήεντα τῶν γραμμάτων ὅπως  
85 μὴ ἐξῆς τεθήσεται.<sup>2</sup> πρόσεχε δὲ καὶ τοῖς καλου-  
μένοις ἄρθροις ὅπως ἐν τῷ δέοντι προστιθῇται.  
σκόπει δὲ καὶ τὴν σύνθεσιν τῶν ὀνομάτων ὅπως  
μήτε συγκεχυμένη μήθ' ὑπερβατὴ ἔσται· τὰ γὰρ  
οὕτω λεγόμενα δύσγνωστα συμβαίνει. μετὰ δὲ  
συνδέσμους οὓς ἂν προείπῃς, ἀποδίδου τοὺς  
40 ἀκολουθοῦντας. τὸ μὲν οὖν<sup>3</sup> συνδέσμους ἀπο-  
διδόναι τοὺς ἀκολουθοῦντας τοιόνδε ἐστίν· “ ἐγὼ  
1435 b μὲν παρεγενόμην οὗ ἔφην, σὺ δὲ φάσκων ἥξειν  
οὐκ ἦλθες.” πάλιν ὅταν ὁ αὐτὸς σύνδεσμος  
ἀκόλουθος<sup>4</sup> ᾖ, οἷον “ σὺ γὰρ κακείνων αἷτιος  
ἐγένου καὶ τούτων αἷτιος εἶ.”<sup>5</sup> περὶ μὲν οὖν τῶν  
συνδέσμων εἴρηται, καὶ ἀπὸ τούτων τεκμαίρεσθαι  
5 δεῖ καὶ περὶ τῶν ἄλλων.

Δεῖ δὲ καὶ τὴν σύνθεσιν τῶν ὀνομάτων μήτε  
συγκεχυμένην μήτε ὑπερβατὴν εἶναι.<sup>6</sup> τὸ μὲν γὰρ  
συγκεχυμένως τοιόνδε ἐστίν, ὥς ὅταν εἴπῃς

<sup>1</sup> τοῦτον τὸν Sp.

<sup>2</sup> Funckhaenel: τεθήσονται.

<sup>3</sup> v.l. οὖν τοὺς.

<sup>4</sup> v.l. αὐτὸς συνακόλουθος.

<sup>5</sup> v.l. σύ.

<sup>6</sup> v.l. ποιεῖν.

by ' Yes, he is of strong physique, but I as a matter of fact am not.' (6) That one can do the thing oneself but the other man cannot do another thing by ' Yes, I am a competent helmsman, but he cannot even row.'

This is how you will construct the forms of a twofold statement, pursuing the same method in all subjects. 30

Next we must consider how you will make your meaning clear.

XXV. First, call everything you speak of by its *Clarity*. proper name, avoiding ambiguity. Beware of putting vowels in juxtaposition.<sup>a</sup> Be careful to add the ' articles ' where necessary. Study the construction 35 of the sentence, so as to avoid both confusion and transposition of words, since these cause them to be difficult to catch. After employing introductory connecting particles put in following particles. An example of putting in a following particle to correspond 40 is : ' I on the one hand turned up where I said I 1435 b would, but you *on the other hand*, though you declared that you were going to be there, did not come.' Again, when the same particle follows, as : ' For you *both* were the cause of that *and* are the cause of this.' That is an account of connecting particles ; from the instances mentioned you must infer about the others 5 also.

The construction of words in the sentence must be neither confused nor transposed. An example of confused construction is : ' It is monstrous for this

<sup>a</sup> Perhaps the reference is to elisions that cause ambiguity, e.g. Theognis 112 μνήμα δὲ χοῦσι or μνήμα δ' ἔχουσι (Rhys Roberts quoted by Forster). Cf. Aristophanes, *Frogs* 1443 ὅταν τὰ νῦν ἄπιστα πίσθ' ἡγώμεθα, τὰ δ' ὄντα πίστ' ἄπιστα.

“δεινόν ἐστι τοῦτον τοῦτον τύπτειν”· ἄδηλον γὰρ<sup>1</sup>  
 ὁπότερος<sup>2</sup> ἦν ὁ τύπτων· ἐὰν δὲ εἴπῃς οὕτως,  
 10 δῆλον ποιήσεις· “δεινόν ἐστι τοῦτον ὑπὸ τούτου  
 τύπτεσθαι.” τὸ μὲν οὖν συγχεῖν τὴν σύνθεσιν τῶν  
 ὀνομάτων τοιούτων<sup>3</sup> ἐστίν.

Τὸ δὲ προσέχειν τοῖς ἄρθροις, ὅπως ἐν τῷ δέοντι  
 προστιθῇται, ἐπὶ τῶνδε ὄρα· “οὗτος ὁ ἄνθρωπος  
 τοῦτον τὸν ἄνθρωπον ἀδικεῖ.” νῦν μὲν οὖν ἐγγινό-  
 μενα τὰ ἄρθρα σαφῇ ποιεῖ τὴν λέξιν, ἐξαιρεθέντα  
 15 δὲ ἀσαφῇ ποιήσει. ἔσθ’ ὅτε δὲ συμβαίνει καὶ τὸ  
 ἀνάπαλιν. τὰ μὲν οὖν ἐν τοῖς ἄρθροις τοιαῦτά  
 ἐστίν.

Τὰ δὲ φωνήεντα μὴ τίθει παράλληλα, ἂν μὴ  
 ποτε ἄλλως ἀδύνατον ἦ δηλῶσαι, ἢ ἀνάπνευσις<sup>4</sup>  
 ἢ τις ἢ ἄλλη διαίρεσις.

Τὸ δὲ τὰ ἀμφίβολα διαφεύγειν τοιόνδε ἐστίν·  
 20 ἓν τῶν ὀνομάτων ταῦτα ἐπὶ πλείοσι πράγμασι  
 κεῖται, οἷον ὁδὸς τῶν θυρῶν καὶ ὁδὸς ἣν βαδίζουσιν·  
 δεῖ δὲ ἐπὶ τοῖς τοιούτοις τὸ ἴδιον αἰεὶ συμπαρα-  
 λαμβάνειν.

Καὶ σαφῶς μὲν ἐν<sup>5</sup> τοῖς ὀνόμασιν, ἂν ταῦτα  
 ποιῶμεν, διαλεξόμεθα· εἰς δύο δ’ ἐρμηνεύσομεν διὰ  
 τῆς προτέρας μεθόδου.

25 XXVI. Περὶ δὲ ἀντιθέτων καὶ παρισώσεων καὶ  
 ὁμοιοτήτων λέγωμεν ἤδη· δεησόμεθα γὰρ καὶ  
 τούτων.

Ἀντίθετον μὲν οὖν ἐστὶ τὸ ἐναντίαν τὴν ὀνο-

<sup>1</sup> Sp.: γὰρ ἦν.

<sup>2</sup> v.l. ὁπότερος αὖν.

<sup>3</sup> Sp.: τοιόνδε.

<sup>4</sup> Forster: ἀνάπτυξις.

<sup>5</sup> [ἐν] Finckh.

<sup>a</sup> The ambiguity caused by the Greek employment of an accusative as subject of an infinitive cannot be reproduced in

man to strike this man ' <sup>a</sup>—as it is not clear which of the two was the striker; though you will make it clear if you express it thus: ' It is monstrous for this man to be struck by this man.' That is an example <sup>10</sup> of confused construction of words. 1435 b

The following examples illustrate attention to the insertion of the articles in the necessary places. ' The man there wrongs the man there ': in this case the presence of the articles makes the meaning clear; to remove them will obscure it. <sup>b</sup> But in <sup>15</sup> some cases the result is the contrary. This is how things stand in respect of the articles.

Do not juxtapose vowels, except in cases where it is impossible to express the meaning otherwise, or when a pause for breath or some other interval occurs.

The following is the method of avoiding ambiguities. In some cases the same word denotes several things, <sup>20</sup> e.g. doorway and pathway. <sup>c</sup> In such cases you must always add something denoting the proper sense.

If we keep these rules, our style will be clear in its use of words. Sentences that fall into two divisions we shall construct by employing the method described before.

XXVI. Let us now speak about antitheses, <sup>25</sup> *pari-soses* <sup>d</sup> and similarities, <sup>e</sup> as we shall also require these.

A sentence is antithetical when either terminology *Ant thesis.* English. Cf. Ennius, *Annals* vi. 5, quoted by Cicero, *De Divinatione* ii. 116, Aio te, Aeacida, Romanos uincere posse (Rhys Roberts, *Cl. Rev.* xxvi. 177).

<sup>b</sup> The point of this is not clear.

<sup>c</sup> The confusion caused in Greek by ignoring the presence or absence of the aspirate might be paralleled in English by ' way ' and ' whey, ' ' witch ' and ' which. '

<sup>d</sup> i.e. parallelism of structure.

<sup>e</sup> i.e. parallelism of sound: the more technical term is *παρομοίωσις* c. xxviii. *init.*



1435 b

μασίαν ἅμα καὶ τὴν δύναμιν τοῖς ἀντικειμένοις ἔχον, ἢ τὸ ἕτερον τούτων. τοῖς μὲν οὖν ὀνόμασιν εἴη ἂν ἐναντίον ἅμα καὶ τῇ δυνάμει τόδε· “οὐ  
 30 γὰρ δίκαιον τοῦτον μὲν τὰ ἐμὰ ἔχοντα πλουτεῖν, ἐμὲ δὲ τὰ ὄντα προέμενον<sup>1</sup> οὕτω πτωχεύειν.” τοῖς δ’ ὀνόμασι μόνοις· “διδότω γὰρ ὁ πλούσιος καὶ εὐδαίμων τῷ πένητι καὶ ἐνδεῖ.” τῇ δὲ δυνάμει· “ἐγὼ μὲν τοῦτον νοσοῦντα ἐθεράπευσα, οὗτος δ’ ἐμοὶ μεγίστων κακῶν αἴτιος γέγονεν”· ἐνταῦθα  
 35 μὲν γὰρ τὰ ὀνόματα οὐκ ἐναντία, αἱ δὲ πράξεις ἐναντίαι. κάλλιστον μὲν οὖν εἴη ἂν τὸ κατ’ ἀμφοτέρα ἀντίθετον, καὶ κατὰ τὴν δύναμιν καὶ κατὰ τὴν ὀνομασίαν· ἔστι δὲ καὶ τὰ λοιπὰ δύο ἀντίθετα.

XXVII. Παρίσωσις δ’ ἐστὶ μὲν ὅταν δύο ἴσα  
 40 λέγηται κῶλα, εἴη δ’ ἂν ἴσα καὶ πολλὰ μικρὰ ὀλίγοις  
 1436 a μεγάλοις καὶ ἴσα τὸ μέγεθος καὶ ἴσα<sup>2</sup> τὸν ἀριθμόν. ἔχει δὲ τοιόνδε τὸ σχῆμα ἢ παρίσωσις· “ἢ διὰ χρημάτων ἀπορίαν ἢ διὰ πολέμου μέγεθος”· ταῦτα γὰρ οὔτε ὅμοια οὔτε ἐναντία, ἀλλ’ ἴσα μόνον ἀλλήλοις.

5 XXVIII. Παρομοίωσις δ’ ἐστὶν<sup>3</sup> μείζων τῆς παρισώσεως· οὐ γὰρ μόνον ἴσα τὰ κῶλα ποιεῖ, ἀλλὰ καὶ ὅμοια ἐξ ὁμοίων ὀνομάτων, οἷον<sup>4</sup> “εἰ<sup>5</sup> δεῖ σοι<sup>6</sup> λόγου μίμημα, φέρε πόθου<sup>7</sup> τέχνημα.” μάλιστα δὲ ποιεῖν<sup>8</sup> ὅμοια τὰ τελευταῖα τῶν ὀνομάτων· ταῦτα γὰρ μάλιστα ποιεῖ τὴν παρομοίωσιν.<sup>9</sup>  
 10 ὅμοια δ’ ἐστὶν ὀνόματα τὰ ἐξ ὁμοίων συλλαβῶν,

<sup>1</sup> v.l. προέμενον.<sup>2</sup> καὶ ἴσα (uel καὶ) Rac.: ἴσα aut ἴσοις.<sup>3</sup> ἐστὶν Sp.: ἐστὶν ἢ.<sup>4</sup> οἷον Sp.: ὅσον.<sup>5</sup> εἰ add. Rac.<sup>6</sup> Rac.: σε (del. Usener).

1435 b

or meaning, or both at once, are opposite in the opposed clauses. The following would be an instance of opposition in terms and meaning at once : ' It is not fair for my opponent to have my money and be a 30 rich man while I from parting with<sup>a</sup> my substance am a mere beggar.' Opposition in terms only : ' Let the rich and prosperous give to the poor and needy.' In meaning : ' I nursed him when he was ill, but he has caused me a very great deal of harm '—here the terms are not opposed but the actions are. Antithesis 35 in both respects, in meaning and in terminology, would be most effective, but the two remaining forms are also antithetical.

XXVII. Parisosis occurs when a sentence has two equal members. Equality may exist between many small things and a few large things, and between an equal number of things of equal size. Parisosis has the following form : ' Either owing to lack of funds or owing to the magnitude of the war '—these clauses are neither like one another nor opposite, but only equal. 1436 a

XXVIII. Paromoeosis<sup>b</sup> goes further than parisosis, as it not only makes the members equal in length but assimilates them by constructing them of similar words, for example : ' If you want an imitation of wording, produce a simulation of wishing.' Assimilate specially the terminations of words—this is the best way of producing paromoeosis. Similar words 10 are those formed of similar syllables, having most of

<sup>a</sup> *πρoίεσθαι* is colloquial for 'lending.' N.E. 1164 a 23, 35, b 26. Demosthenes xxxvii. 36.

<sup>b</sup> See note on 'Similarities,' c. xxvi. *init.*

<sup>7</sup> *πόνου* Usener.

<sup>8</sup> *ποιεί* Buhl, *δεῖ ποιεῖν* ? Sp.

<sup>9</sup> Rac.: *ὁμοίωσιν*.

ἐν αἷς πλείστα γράμματα τὰ αὐτά ἐστιν, οἷον  
 “πλήθει μὲν ἐνδεῶς, δυνάμει δὲ ἐντελῶς.” ὅσα  
 δὲ ἔξω τέχνης κεῖται, τὸ αὐτόματον αὐτὸ δείξει.

Περὶ μὲν οὖν τούτων ἀπόχρη. καὶ γὰρ τὸ  
 15 δίκαιον καὶ τὸ νόμιμον<sup>1</sup> καὶ τὸ καλὸν καὶ τὸ συμ-  
 φέρον καὶ τὰ λοιπὰ αὐτά τε ἴσμεν οἷα<sup>2</sup> ἐστι καὶ  
 ὅθεν αὐτὰ πολλὰ ποιήσομεν. ὡσαύτως δὲ καὶ  
 τὰς αὐξήσεις καὶ τὰς ταπεινώσεις γινώσκομεν,  
 αἱ τινές τ’ εἰσὶ καὶ ὅθεν αὐτῶν εἰς τοὺς λόγους  
 εὐπορήσομεν. ὁμοιοτρόπως δὲ τούτοις τὰς τε  
 20 προκαταλήψεις καὶ τὰ παρὰ τῶν ἀκουόντων  
 αἰτήματα καὶ τὰς παλιλλογίας καὶ τὰς ἀστειο-  
 λογίας καὶ τὰ μήκη τῶν λόγων καὶ τῆς ἐρμηνείας  
 τὴν σύνθεσιν ἅπασαν ἴσμεν, ὥστε τὰς κοινὰς  
 δυνάμεις ἀπάντων τῶν εἰδῶν καὶ<sup>3</sup> τὰς χρήσεις  
 αὐτῶν ἐκ τῶν προειρημένων εἰδότες, ἂν ἐθίσωμεν  
 25 ἡμᾶς αὐτοὺς καὶ γυμνάσωμεν ἀναλαμβάνειν αὐτὰς  
 κατὰ τὰ προγυμνάσματα,<sup>4</sup> πολλὴν εὐπορίαν καὶ  
 γράφοντες καὶ λέγοντες ἐξ αὐτῶν ἔξομεν.

Κατὰ μέρη μὲν οὖν οὕτως ἀκριβέστατα ἂν διέλαις  
 τὰς τῶν λόγων μεθόδους· ὥς δ’ ἐπὶ τοῖς εἵδεσι  
 χρή τάττειν τοὺς λόγους σωματοειδῶς, τίσι τε  
 30 πρῶτοις τῶν μερῶν χρῆσθαι, καὶ πῶς τούτοις  
 αὐτοῖς, ταῦτα πάλιν δηλώσω.

Προοίμια<sup>5</sup> μὲν οὖν προτάττω· κοινὸν γὰρ<sup>6</sup> ἐστὶ  
 τῶν ἐπὶ εἰδῶν, καὶ ἐπὶ πᾶσι τοῖς πράγμασι  
 ἀρμόσει λεγόμενον.

XXIX. Ἔστι δὲ προοίμιον καθόλου μὲν εἰπεῖν

<sup>1</sup> καὶ τὸ νόμιμον add. Sp.

<sup>2</sup> οἷα Sp.: ᾧ (ᾧτινά τ’? Rac.).

<sup>3</sup> v.l. εἰδῶν καὶ τὰς διαφορὰς καὶ.

<sup>4</sup> προστάγματα Usener.

<sup>5</sup> προοίμιον Sp.

<sup>6</sup> Sp.: δὲ.

their letters the same : for example, ' In number defectively but in capacity effectively.'—Automatic suggestion will supply details that lie outside the scope of science.

This is enough about these subjects. For we know the nature of justice, legality, honour, expediency<sup>15</sup> and the rest of these topics, and the sources from which we shall produce them in abundance. And similarly we understand the meaning of amplifications and minimizations, and how to procure a good supply of them for our speeches. In like manner we know anticipations, postulates demanded of the audience,<sup>20</sup> recapitulations and pleasantries, and the question of the length of speeches and the whole subject of composing a statement ; and consequently, the qualities common to all the species and the modes of employing them being known to us from what has been said previously, if we habituate and train ourselves to<sup>25</sup> repeat them on the lines of our preparatory exercises, they will supply us with plenty of matter both in writing and in speaking.

You will, then, distinguish most accurately the methods of speaking by thus taking the parts separately. I will next explain the proper mode of arranging speeches organically in the various species of oratory—which of the parts should be dealt with<sup>30</sup> first and how these parts are themselves to be dealt with.

I deal, therefore, first with introductions, as this is a matter common to the seven species, and the discussion of it will apply to all subjects.

XXIX. In general terms, the introduction is a pre-

1436 a

ἀκροατῶν παρασκευὴ καὶ τοῦ πράγματος ἐν  
 35 κεφαλαίῳ μὴ εἰδόσι δήλωσις, ἵνα γινώσκωσι περὶ  
 ὧν ὁ λόγος παρακολουθῶσί τε τῇ ὑποθέσει, καὶ  
 ἐπὶ τὸ προσέχειν παρακαλέσαι, καὶ καθ' ὅσον  
 τῷ λόγῳ δυνατόν, εὖνους ἡμῖν αὐτοὺς ποιῆσαι.  
 τούτων μὲν οὖν εἶναι δεῖ τὸ προοίμιον παρα-  
 σκευαστικόν.

Ὡς δὲ αὐτῷ χρησόμεθα, πρῶτον μὲν ἐπὶ τῶν  
 40 δημηγοριῶν<sup>1</sup> καὶ προτρεπτικῶν καὶ ἀποτρεπτικῶν,<sup>2</sup>  
 τοῦτο δείξω.

1436 b

Τὸ μὲν οὖν προεκτιθέναι τὸ πρᾶγμα τοῖς ἀκού-  
 ονσι καὶ φανερόν ποιεῖν τοιόνδε ἐστίν· “ἀνέστην  
 συμβουλευσῶν ὡς χρὴ πολεμεῖν ἡμᾶς ὑπὲρ Συρα-  
 κουσίῳν”· “ἀνέστην ἀποφανόμενος ὡς οὐ χρὴ  
 βοηθεῖν ἡμᾶς Συρακουσίοις.” τὸ μὲν οὖν φράζειν  
 ἐν κεφαλαίῳ τὸ πρᾶγμα τοιοῦτον<sup>3</sup> ἐστίν.

5 Προσέχειν δὲ παρακαλεῖν ἐκ τούτων ἂν εἰδείημεν,  
 εἰ κατανοήσαιμεν αὐτοὶ ποίοις μάλιστα καὶ λόγοις  
 καὶ πράγμασι βουλευόμενοι προσέχομεν. ἄρ' οὖν  
 οὐ τούτοις, ὅταν ἢ ὑπὲρ μεγάλων ἢ φοβερῶν ἢ  
 τῶν ἡμῖν οἰκείων βουλευώμεθα, ἢ φάσκωσιν<sup>4</sup> οἱ  
 10 λέγοντες ὡς δίκαια καὶ καλὰ καὶ συμφέροντα καὶ  
 ῥάδια καὶ ἀληθινὰ ἐπιδείξουσιν ἡμῖν ἐφ' ᾧ πράττειν  
 παρακαλοῦσιν, ἢ<sup>5</sup> δεηθῶσιν ἡμῶν ἀκούσαι αὐτῶν  
 προσέχοντας τὸν νοῦν; ὥσπερ οὖν αὐτοὶ τοῖς  
 ἄλλοις, οὕτω καὶ ἡμεῖς τὰ οἰκειότατα τῶν προ-  
 ειρημένων τοῖς ὑφ' ἡμῶν πράγμασι λεγομένοις  
 15 λαμβάνοντες καὶ τοῖς ἀκούουσιν ἐνδεικνύμενοι

<sup>1</sup> Sp.: δημηγορικῶν.<sup>2</sup> καὶ ἀποτρεπτικῶν add. Sp.<sup>3</sup> Hammer: τοιόνδε.<sup>4</sup> Bekker: φάσκωσιν ἐπιδείξειν.<sup>5</sup> ἢ: καὶ Kayser.

paration of the hearers and a summary explanation of the business to persons who are not acquainted with it, in order to inform them what the speech is about and to enable them to follow the line of argument, and to exhort them to attend, and to make them well-disposed towards us—so far as this can be done by means of a speech. These are the preparatory measures that the introduction must be designed to effect.

1436 a  
Structure of  
Parliament-  
ary oration :  
35  
(1) Intro-  
duction.

I will first explain our mode of employing the introduction in the case of parliamentary oratory and speeches of exhortation and dissuasion.

The following are examples of a preliminary exposition and explanation of one's case to the audience : ' I rise to recommend that we ought to go to war on behalf of Syracuse ' ; ' I rise to prove that we ought not to assist Syracuse.' These are examples of a summary statement of one's case.

We may learn how to appeal for attention by noticing what are the kinds of arguments and facts to which we ourselves pay most attention when in council. Is it not when we are deliberating about matters that are important or alarming or that closely concern ourselves, or when the speakers declare that they will prove that the course of action that they are exhorting us to adopt is just and honourable and expedient and easy and honest, or when they entreat us to give them an attentive hearing ? Therefore we shall make them attend to us in the same way as we ourselves are made attentive to others—by taking those of the points enumerated which are most applicable to the case that we are putting forward and



προσέχειν αὐτοὺς<sup>1</sup> ποιήσομεν. ἐπὶ μὲν οὖν τὸ προσέχειν διὰ τούτων παρακαλοῦμεν.

Τὴν εὐνοϊαν δὲ παρασκευασόμεθα διασκεψάμενοι πρῶτον πῶς πρὸς ἡμᾶς αὐτοὶ τυγχάνουσιν ἔχοντες, εὐνοϊκῶς ἢ δυσμενῶς ἢ μήτε εὖ μήτε κακῶς. ἐὰν  
 20 μὲν οὖν εὖνοι τυγχάνωσιν ὄντες, περίεργον λέγειν περὶ εὐνοίας· ἐὰν δὲ πάντως βουλώμεθα, χρὴ συντόμως μετ' εἰρωνείας εἰπεῖν τοῦτον τὸν τρόπον·  
 “ὅτι μὲν οὖν εὖνους εἰμὶ τῇ πόλει, καὶ πολλάκις μοι πεισθέντες συμφερόντως ἐπράξατε, καὶ διότι πρὸς τὰ κοινὰ δίκαιον ἑμαυτὸν παρέχω καὶ μᾶλλον  
 25 τι τῶν ἰδίων προέμενον ἢ ἀπὸ τῶν δημοσίων ὠφελούμενον, περίεργον εἶναι νομίζω πρὸς ὑμᾶς τοῦτό γε σαφῶς εἰδότας λέγειν· ὥς δὲ ἦν<sup>2</sup> καὶ νῦν μοι πεισθῆτε καλῶς βουλευσέσθε, τοῦτο πειράσομαι διδάσκειν.” τοῦτον μὲν οὖν τὸν τρόπον τοῖς εὖ διακειμένοις ἐν ταῖς δημηγορίαις τῆς εὐμενείας ὑπομνηστέον.

30 Τοῖς δὲ μήτε διαβεβλημένοις μήτε εὖ διακειμένοις ῥητέον ὥς δίκαιόν ἐστι καὶ συμφέρον τοῖς μὴ πείραν δεδωκόσι τῶν πολιτῶν εὖνους ἀκροατὰς γενέσθαι· ἔπειτα τοὺς ἀκούοντας ἐπαίνῳ θεραπευτέον, δικαίως καὶ νουνεχῶς τοὺς λόγους ὥς εἰώθασι δοκιμάζειν· ἔτι δὲ τὰς ἐλαττώσεις οἰστέον,  
 35 λέγοντας<sup>3</sup> ὥς<sup>4</sup> “οὐ δεινότητι πιστεύων ἀνέστην, ἀλλὰ νομίζων τῷ κοινῷ τὸ συμφέρον εἰσηγήσεσθαι.” καὶ τοῖς μὲν μήτε εὖ μήτε κακῶς διακειμένοις ἐκ τῶν τοιούτων τὴν εὐνοϊαν ποριστέον.

Τοὺς δὲ διαβεβλημένους ἀναγκαῖον τὰς διαβολὰς

<sup>1</sup> Finckh: αὐτοῖς.

<sup>2</sup> Rac.: εἰ.

<sup>3</sup> λέγοντα Halm.

<sup>4</sup> ὥς v.l. om.: οὕτως? Rac.

laying them before our hearers. These are the means<sup>15</sup> that we shall employ in appealing for attention.

We shall secure their goodwill by first considering how they happen to be disposed towards us of themselves—whether they are friendly or hostile or merely neutral. If they are friendly, to talk about goodwill is superfluous, but if all the same we wish to do so,<sup>20</sup> we must speak briefly, in a tone of irony, thus: ‘I think it is superfluous for me to tell you that I am a loyal citizen, that you have often been led by my advice to take an advantageous line of action, and that I show myself true to my public duties and more ready to sacrifice part of my private interests than to profit at the public expense—you know this perfectly<sup>25</sup> well; but I shall try to prove to you that you will be well advised if you take my advice on the present occasion also.’ This is the way in which in parliamentary speeches a friendly audience should be reminded of its goodwill.

To an audience neither hostile nor friendly we must<sup>30</sup> say that it is proper and expedient to give a favourable hearing to fellow-citizens who have not yet given proof of themselves; then we must flatter our audience by complimenting them on their habit of estimating the speeches in a fair and sensible manner; furthermore we must employ self-depreciation, saying ‘I have risen not owing to confidence in my own<sup>35</sup> ability, but in the belief that the proposal which I am about to introduce is advantageous for the community.’ Such are the methods by which we must secure the goodwill of our audience when it is neither well nor ill disposed towards us.

If there is prejudice against the speaker, it must attach either to himself personally, or to

1436 b

ἢ αὐτοὺς ἔχειν ἢ τὰ πράγματα ὑπὲρ ὧν λέγουσιν  
ἢ τὸν λόγον.

40 Αὐτῶν<sup>1</sup> δ' αἱ διαβολαὶ γίνονται ἢ ἐκ τοῦ παρόντος

1437 a ἢ ἐκ τοῦ παροιχομένου χρόνου.

Ἐκ μὲν οὖν τοῦ παροιχομένου χρόνου εἰάν τις ὑπο-  
πτεύηται εἰς πονηρίαν τινά, πρῶτον μὲν δεῖ<sup>3</sup> πρὸς  
τοὺς ἀκροατὰς προκαταλήψει χρησθαι, καὶ λέγειν  
ὥς<sup>4</sup> “οὐδ’ αὐτὸς ἀγνοῶ διαβεβλημένος, ἀλλ’ ἐπιδείξω  
5 ψευδεῖς οὔσας τὰς διαβολάς.” ἔπειτα κεφαλαιω-  
δῶς ἐν τοῖς προοιμίοις ἀπολογητέον, ἃν ἔχῃς τι  
λέγειν ὑπὲρ σαυτοῦ, καὶ<sup>4</sup> τὰς κρίσεις ψεκτέον·  
ἀναγκαῖον γάρ, ἃν τε πρὸς τὸ δημόσιον ἢ τις  
διαβεβλημένος ἃν τε πρὸς τοὺς ἰδιώτας, ἢ γεγενῆ-  
σθαι κρίσιν ἢ μέλλειν γενήσεσθαι ἢ μὴ βούλεσθαι  
10 τοὺς τὴν αἰτίαν ἐπενεγκόντας λαβεῖν κρίσιν· καὶ<sup>5</sup>  
ῥητέον ὥς ἀδίκως ἢ κρίσις ἐγένετο καὶ ὥς ὑπὸ τῶν  
ἐχθρῶν κατεστασιάσθημεν· ἢ εἰάν τοῦτο μὴ ἐν-  
δέχεται, λέγε ὥς ἱκανὸν ἡμῖν ἀτυχῆσαι τότε, καὶ ὥς  
δίκαιόν ἐστι τῶν πραγμάτων ἤδη κεκριμένων μὴ  
περὶ τῶν αὐτῶν ἔτι διαβολὴν ἔχειν. ἃν δ’ ἐπίδοξος  
5 ἢ κρίσις ἢ γενέσθαι, λεκτέον ὥς ἔτοιμος εἶ περὶ  
τῶν διαβολῶν ἐν τοῖς καθημένοις ἤδη κρίνεσθαι, καὶ  
ἐλεγχθῆς τι τὴν πόλιν ἀδικῶν, ἀποθνήσκειν ὑπο-  
τιμᾶ.<sup>6</sup> εἰάν δὲ οἱ ἐγκαλέσαντες μὴ ἐπεξίωσιν, αὐτὸ  
τοῦτο χρὴ σημεῖον ποιεῖσθαι διότι τὴν διαβολὴν  
20 ψευδῶς ἡμῶν κατήνεγκαν· οὐ γὰρ εἰκὸς εἶναι δόξει  
τοὺς ἀληθῶς ἐγκαλοῦντας μὴ βούλεσθαι κρίσιν

<sup>1</sup> Sp.: αὐται.

<sup>2</sup> Halm: τῇ.

<sup>3</sup> οὕτως? Sp.

<sup>4</sup> καὶ: v.l. ἢ.

<sup>5</sup> καὶ (εἰ ἐγένετο) Kayser.

<sup>6</sup> Finckh: ὑποτιμᾶ αὐτ ὑποτιμᾶ.

the subject on which he is speaking, or the actual speech.

1436 b

Prejudice against speakers themselves arises either out of the present situation or out of something in the past.

1437 a

If someone is under suspicion of some misconduct in the past, he must first employ anticipation to the audience, and say 'Even I myself am not unaware that there is a prejudice against me, but I will prove that the charges against me are false.' Then in your introduction you must summarily state any argument you have to offer in your defence, and you must raise objections against the forms of trial, since, whether one has been depreciated publicly or in private company, it is bound to be the case either that a trial has been held, or is going to be held, or that those who have brought the charge do not want to have a trial held; and we must say that the trial was conducted unjustly, and that our enemies got the better of us by methods of faction; or if this is not possible, say that our misfortune on that occasion has been a sufficient punishment, and that when the matter has been already tried it is only fair that one should not lie under discredit any longer about the same affair. If the trial is expected to be held, you must say that you are ready to be tried at once before the court in session on the charges made against you, and that, if you are proved guilty of any offence against the state, you assess your penalty at death. If the authors of the charge do not want to prosecute, we must use this fact itself as a proof that the accusation they have brought against us is false, as it will be thought unlikely that persons making a true charge should not wish to obtain a trial. You

1437 a

λαβεῖν. αἰεὶ δὲ κατηγορεῖν χρή διαβολῆς, καὶ λέγειν  
 ὡς δεινὸν καὶ κοινόν<sup>1</sup> καὶ πολλῶν κακῶν αἷτιον·  
 ἐμφανιστέον δ' ὅτι καὶ πολλοὶ ἤδη διεφθάρησαν  
 ἀδίκως διαβληθέντες· χρή δὲ καὶ διδάσκειν ὡς  
 25 εὐηθές ἐστὶν ὑπὲρ τῶν κοινῶν βουλευομένους μὴ  
 παρὰ πάντων τοὺς λόγους ἀκούοντας τὸ συμφέρον  
 σκοπεῖν, ἀλλὰ ταῖς ἐνίῳν διαβολαῖς δυσχεραίνειν.  
 δεῖ δὲ καὶ ἐπαγγέλλεσθαι<sup>2</sup> δίκαια καὶ συμφέροντα<sup>3</sup>  
 ἐπιδείξειν ἃ ὑπέσχου<sup>4</sup> συμβουλεύειν. τοὺς μὲν οὖν  
 30 ἐκ τοῦ παροιχομένου χρόνου διαβεβλημένους τοῦτον  
 τὸν τρόπον ἐν ταῖς δημηγορίαις τὰς διαβολὰς  
 λυτέον.

Ἐκ δὲ τοῦ παρόντος χρόνου διαβάλλει τοὺς  
 λέγοντας πρῶτον μὲν ἡλικία· ἐάν τε γὰρ νέος  
 παντελῶς ἐάν τε πρεσβύτης δημηγορῇ, δυσχεραί-  
 νεται, τῷ μὲν γὰρ οὐπω ἤρχθαι τῷ δὲ ἤδη πεπαυ-  
 35 σθαι προσήκειν οἶονται. ἔπειτα ἐὰν συνεχῶς εἰώθῃ  
 λέγειν· πολυπράγμων γὰρ εἶναι δοκεῖ οὗτος. καὶ  
 ἐὰν μηδέποτε πρότερον εἰρήκῃ· καὶ γὰρ οὗτος ἕνεκά  
 τινος ἰδίου δοκεῖ παρὰ τὸ ἔθος δημηγορεῖν. ἐκ μὲν  
 οὖν τοῦ παρόντος χρόνου οὕτω τοι διαβολαὶ περὶ  
 τὸν δημηγοροῦντα γενήσονται· προφασίζεσθαι δὲ  
 40 ὑπὲρ αὐτῶν δεῖ τὸν μὲν νεώτερον ἐκ τῆς ἐρημίας  
 1437 b τῶν συμβουλευόντων, καὶ ἐκ τοῦ προσήκοντος  
 τούτῳ, λέγω δ' οἷον ὑπὲρ λαμπαδαρχίας ἢ ὑπὲρ  
 γυμνασίου ἢ ὑπὲρ ὅπλων ἢ ἵππων ἢ πολέμου<sup>5</sup>.  
 τούτων γὰρ οὐκ ἐλάχιστον μέρος τῷ νέῳ μέτεστιν.

<sup>1</sup> κενόν Kayser.<sup>2</sup> v.l. ἐπαγγέλλεσθαι καὶ ὑπισχνεῖσθαι.<sup>3</sup> v.ll. συμφέροντα καλὰ, συμφέροντα καὶ καλὰ, καλὰ καὶ  
 συμφέροντα.<sup>4</sup> v.l. ὑπέσχοντο.<sup>5</sup> v.l. περὶ πολέμου.



must always accuse them of misrepresentation, and say that it is a monstrous thing, and a matter of general concern, and a cause of many evils : you must declare that many men before now have been ruined by unjust misrepresentation, and you must also point out that it is foolish when deliberating 25 about a matter of public concern not to consider the proper course in the light of what all the parties have to say but to allow ill-feeling to be aroused by the misrepresentations of some of them. Also you must declare that you will prove that the advice you have undertaken to give is just and expedient. This is the method of refuting misrepresentations that should be employed in parliamentary speeches by persons 30 lying under prejudice arising out of the past.

Arising out of the present, the first thing that discredits speakers is their age : if a man who is quite young or quite old addresses the house, he causes resentment, because people think that the former ought not yet to have begun speaking and the latter ought to have left off. Next, a man encounters 35 prejudice who makes a constant practice of speaking, as he is thought to be a busybody. Also if he has never spoken before, as in that case he is supposed to have some special private reason for speaking contrary to his custom. These, then, may be said to be the ways in which prejudices in regard to a speaker will arise out of the present. The defence against them in the case of a comparatively young man must be 40 based on the plea of lack of advisers, and on his special interest in the matter—I mean for instance in a case about the superintendence of a torch-race or about a gymnasium, or about armour or horses, or in regard to war, as those are for the most part a young



1437 b

ρήτέον δὲ καὶ ὥς εἰ μήπω καθ' ἡλικίαν τὸ φρονεῖν,  
 5 ἀλλὰ κατὰ φύσιν καὶ ἐπιμέλειαν. ἐμφανιστέον δὲ  
 καὶ ὥς ἀμαρτύνοντι μὲν ἴδιον τὸ ἀτύχημα, κατορθώ-  
 σαντι δὲ κοινὴ ἢ ὠφέλεια. τῷ μὲν οὖν νέῳ ἐκ τῶν  
 τοιούτων προφασιστέον, τῷ γέροντι δὲ προφασι-  
 στέον<sup>1</sup> ἕκ τε τῆς ἐρημίας τῶν συμβουλευόντων καὶ  
 ἐκ τῆς ἐμπειρίας αὐτοῦ, πρὸς δὲ τούτοις καὶ ἐκ τοῦ  
 10 μεγέθους καὶ ἐκ τῆς καινότητος τῶν κινδύνων καὶ  
 ἐκ τῶν ἄλλων τῶν τοιούτων. τῷ δὲ λίαν εἰθισμένῳ  
 ἐκ τῆς ἐμπειρίας<sup>2</sup> καὶ ἐκ τοῦ αἰσχροὺν εἶναι πρότερον  
 αἰεὶ<sup>3</sup> λέγοντα νῦν μὴ ἀποφαίνεσθαι γνώμας. τῷ δὲ  
 μὴ εἰθισμένῳ ἕκ τε τοῦ μεγέθους τῶν κινδύνων καὶ  
 15 ἐκ τοῦ ἀναγκαῖον εἶναι πάντα τινὰ ὧς τῆς πόλεως  
 μέτεστιν ὑπὲρ τῶν νῦν προκειμένων ἀποφαίνεσθαι  
 γνώμην.

Τὰς μὲν οὖν περὶ αὐτὸν τὸν ἄνθρωπον διαβολὰς  
 ἐν ταῖς δημηγορίαις ἐκ τῶν τοιούτων ἐπιχειρή-  
 σομεν λύειν.

Αἱ δὲ περὶ τὸ πρᾶγμα γίνονται μὲν, ὅταν τις  
 ἡσυχίαν πρὸς τοὺς μηδὲν ἀδικοῦντας ἢ πρὸς τοὺς  
 20 κρείττους συμβουλεύῃ λύειν,<sup>4</sup> ἢ εἰρήνην ποιεῖ-  
 σθαι αἰσχροῖν, ἢ παραινῇ περὶ τὰς θυσίας μικρὰ  
 συντελεῖν, ἢ τι τοιοῦτον εἰσηγῇται. δεῖ δὲ περὶ  
 τῶν τοιούτων πρότερον μὲν πρὸς τοὺς ἀκροατὰς  
 προκαταλήψει χρῆσθαι, ἔπειτα τὴν αἰτίαν εἰς τὴν  
 ἀνάγκην καὶ τὴν τύχην καὶ τοὺς καιροὺς καὶ τὸ  
 25 συμφέρον ἀναφέρειν, καὶ λέγειν ὥς οὐχ οἱ συμ-  
 βουλευόντες τῶν τοιούτων ἀλλὰ τὰ πράγματά ἐστιν

<sup>1</sup> προφασιστέον v.l. om.: alii λέγοντι pro γέροντι δὲ  
 προφασιστέον.

<sup>2</sup> Kayser: εὐπορίας.

<sup>3</sup> Sp.: δεῖ aut δὴ.

<sup>4</sup> Roberts: συμβουλεύειν aut συμβουλεύῃ.

man's concern. Also he must say that, if he has not yet the wisdom given by years, still he is wise by nature and by training. He must also point out that when a man fails the misfortune is his own, but when he succeeds the benefit is shared by others. Such are the considerations on which a young man must base his defence. An old man must excuse himself on the ground of lack of advisers, and also because of his experience, and in addition to these points on the ground of the magnitude and the unprecedented nature of the dangers, and by means of other similar pleas. One who is in the habit of speaking too frequently must plead his experience, and say that it would be discreditable not to declare his opinion now when he has previously been a constant speaker. One not in the habit of speaking must plead the magnitude of the dangers and the absolute necessity for every member of the community to pronounce an opinion on the matter now before the house.

Such are the arguments by which in parliamentary speeches we shall attempt to dispel prejudices relating to oneself personally.

Prejudices in relation to the subject arise when one advises taking action against unoffending persons or against those who are in a stronger position, or making a discreditable peace, or when in connexion with festivals one recommends making a small contribution, or introduces some proposal of that nature. In addressing an audience on such subjects one should begin by using anticipation, and then put the blame on necessity, fortune, circumstances, considerations of expediency, and say that the responsibility in such matters rests not with the advisers

1437 b

αἷτια. καὶ τὰς μὲν περὶ τὸ πρᾶγμα διαβολὰς ἐκ τῶν τοιούτων ἀπὸ τῶν συμβουλευόντων ἀπάξομεν.

Ὁ δὲ λόγος ἐν ταῖς δημηγορίαις διαβάλλεται ὅταν ἢ μακρὸς ἢ ἀρχαῖος ἢ ἄπιστος λέγηται. ἐὰν  
 30 μὲν οὖν μακρὸς ἢ, τὸ πλῆθος αἰτιατέον τῶν πραγμάτων· ἐὰν δὲ ἀρχαῖος, διδακτέον ὅτι νῦν καιρὸς ἂν<sup>1</sup> αὐτοῦ<sup>2</sup> εἴη· εἰ δὲ ἀπίθανος, ὑπισχνεῖσθαι δεῖ ὡς ἀληθῇ ἐπιδείξεις ἐπὶ τοῦ λόγου.

Τὰς μὲν οὖν δημηγορίας ἐκ τούτων καταστησόμεθα, τάξομεν δὲ πῶς<sup>3</sup>; ἐὰν μὲν μηδεμίαν δια-  
 35 βολὴν ἔχωμεν μήτε αὐτοὶ μήτε ὁ λόγος μήτε τὸ πρᾶγμα, τὴν πρόθεσιν ἐν ἀρχῇ εὐθέως ἐκθήσομεν, ἐπὶ δὲ τὸ προσέχειν καὶ τοῦ λόγου εὐμενῶς ἀκούειν ὕστερον παρακαλέσομεν· ἐὰν δὲ διαβολή τις ἢ τῶν προειρημένων περὶ ἡμᾶς, προκαταλαβόντες τοὺς ἀκροατάς, καὶ περὶ τῶν διαβολῶν τὰς ἀπολογίας  
 40 καὶ τὰς προφάσεις συντόμως ἐνεγκόντες, οὕτω  
 1438 a προθήσομεν καὶ τοὺς ἀκροατὰς ἐπὶ τὸ προσέχειν παρακαλέσομεν.

Τοῦτον μὲν οὖν τὸν τρόπον τὰς καταστάσεις τῶν δημηγοριῶν ποιητέον.

XXX. Μετὰ δὲ τοῦτο ἀνάγκη ἡμᾶς εἶσθαι ἢ τὰς προγεγενημένας πράξεις ἀπαγγέλλειν ἢ ἀναμιμνή-  
 5 σκειν, ἢ τὰς νῦν οὔσας μερίζοντας<sup>4</sup> δηλοῦν, ἢ τὰς μελλούσας γενήσεσθαι προλέγειν. ὅταν μὲν οὖν πρεσβείαν ἀπαγγέλλωμεν, πάντα δεῖ τὰ ῥηθέντα καθαρῶς διεξελεῖν, ἵνα πρῶτον μὲν μέγεθος ὁ λόγος ἔχῃ (ἀπαγγελία γὰρ μόνον ἔσται ἢ τοιαύτη, καὶ οὐδὲν ἄλλο λόγου σχῆμα παρεμπεσεῖται), ἔπειθ'

<sup>1</sup> ἂν add. Rac. (post αὐτοῦ Funckhaenel).

<sup>2</sup> v.l. αὐτῶ: αὐτῷ? Rac.

<sup>3</sup> οὕτως Sp.

<sup>4</sup> v.l. μερίζοντα: del. Sp.

but with the facts of the case. This is the class of arguments by which we shall divert from the advisers of a policy prejudices relating to the subject.

The actual speech delivered in addressing parliament arouses prejudice when it is lengthy or old-fashioned or unconvincing. If it is lengthy, you must lay the blame on the multiplicity of the facts ; if old-fashioned, you must explain that it may be appropriate in the circumstances ; if unconvincing, you must promise that you will prove the truth of your statements in the course of your speech.

These being the materials out of which we shall construct our parliamentary speeches, how shall we arrange them ? If no prejudice attaches either to ourselves or to our speech or to our subject, we shall set out our proposal straight away at the beginning, making our appeal for attention and a favourable hearing afterwards. If there be any prejudice arising from something already said about us, we must anticipate the reaction of the audience, and briefly produce our defences and excuses about the prejudices thus caused before we put forward our proposal and appeal to the audience for attention.

This is the manner in which public speeches should be constructed.

XXX. After this we must either report or remind our hearers of events that have occurred before, or arrange in groups and exhibit the facts of the present, or forecast what is going to occur. So when we are reporting an embassy, we should give a clear account of everything that was said, in order that in the first place our speech may have due bulk (for a speech of this sort will be merely narrative, and no other form of oratory will be introduced), and secondly in order

1437 b

(2) *Exposition of the case :*

1438 a

- 10 ὅπως, ἂν μὲν ἀποτετυχηκότες ὦμεν, μὴ διὰ τὴν  
 ἡμετέραν ῥαθυμίαν οἱ ἀκούοντες οἴωνται δια-  
 μαρτεῖν<sup>1</sup> τῆς πράξεως ἀλλὰ δι' ἄλλην τινὰ αἰτίαν,  
 ἂν δὲ ἐπιτύχωμεν, μὴ διὰ τύχην ὑπολάβωσι τοῦτο  
 γεγενῆσθαι ἀλλὰ διὰ τὴν ἡμετέραν προθυμίαν.  
 ταῦτα δὲ πιστεύουσιν,<sup>2</sup> ἐπειδὴ τοῖς πράγμασιν οὐ  
 15 παρεγένοντο πραττομένοις, ἐὰν ἐπὶ τοῦ λόγου τὴν  
 προθυμίαν ἡμῶν θεωρῶσι μηδὲν παραλειπόντων  
 ἀλλ' ἀκριβῶς ἕκαστα ἀπαγγελλόντων. ὅταν μὲν  
 οὖν πρεσβείαν ἀπαγγέλλωμεν, διὰ τὰς αἰτίας ταύτας  
 ἕκαστα ὃν τρόπον ἐγένετο ἀπαγγελλτέον. ὅταν δὲ  
 20 αὐτοὶ δημηγοροῦντες τῶν παρεληλυθότων τι δι-  
 εξίωμεν ἢ<sup>3</sup> τὰ παρόντα δηλῶμεν ἢ τὰ μέλλοντα  
 προλέγωμεν, δεῖ τούτων ἕκαστον ποιεῖν σαφῶς καὶ  
 βραχέως<sup>4</sup> καὶ μὴ ἀπίστως, σαφῶς μὲν ὅπως κατα-  
 μάθωσι τὰ λεγόμενα πράγματα, συντόμως δὲ ἵνα  
 μνημονεύσωσι τὰ ῥηθέντα, πιστῶς δὲ ὅπως μὴ πρὸ  
 25 τοῦ ταῖς πίστεσι καὶ ταῖς δικαιολογίαις βεβαιῶσαι  
 τὸν λόγον ἡμᾶς τὰς ἐξηγήσεις ἡμῶν οἱ ἀκούοντες  
 ἀποδοκιμάσωσιν. σαφῶς μὲν οὖν δηλώσομεν ἀπὸ  
 τῶν ὀνομάτων ἢ ἀπὸ τῶν πραγμάτων. ἀπὸ μὲν  
 οὖν τῶν πραγμάτων, ἐὰν μὴ ὑπερβατῶς αὐτὰ  
 δηλῶμεν, ἀλλὰ τὰ πρῶτα πραχθέντα ἢ πραττόμενα  
 30 ἢ πραχθησόμενα πρῶτα λέγωμεν, τὰ δὲ λοιπὰ  
 ἐφεξῆς τάττωμεν, καὶ ἐὰν μὴ προαπολιπόντες τὴν  
 πράξιν<sup>5</sup> περὶ ἧς ἂν ἐγχειρήσωμεν λέγειν δι' ἐτέρων<sup>6</sup>  
 ἐξαγγείλωμεν. ἀπὸ μὲν οὖν τῶν πραγμάτων  
 σαφῶς οὕτως ἐροῦμεν, ἀπὸ δὲ τῶν ὀνομάτων, ἐὰν  
 ὅτι μάλιστα τοῖς οἰκείοις τῶν πραγμάτων ὀνόμασι  
 85 τὰς πράξεις προσαγορεύωμεν, καὶ ἐὰν τοῖς κοινοῖς,

<sup>1</sup> Rac.: διαμαρτάνειν.<sup>2</sup> Sp.: πιστεύουσιν.<sup>3</sup> Sp.: ἢ καὶ αὐτ καὶ.<sup>4</sup> Sp.: βραχέως καὶ σαφῶς.



that, if our mission was a failure, the audience may not think the affair miscarried owing to negligence on our part but from some other cause, and if we succeeded, they may suppose this to have happened not by accident but owing to our zeal. As they were not present when the affair was actually in progress, they will believe this if they see our keenness at the time of our speech, in leaving nothing out but narrating everything in detail. For these reasons, therefore, when we are reporting an embassy we should give a detailed account of everything that happened. In making a speech of our own, when we are narrating something that happened in the past, or describing the present situation, or forecasting the future, we must do each of these things clearly, briefly and convincingly : we must be clear in order that the audience may grasp the facts we are stating, concise in order that they may remember what we say, convincing in order that our hearers may not reject our narrative before we have supported our statement with proofs and justifications. Clearness of exposition will be obtained from the language or from the facts. From the facts if we do not set them out in a transposed order, but state first the things that were done or are being done or are going to be done first, and arrange the remaining ones in sequence, and if we do not leave the matter about which we have undertaken to speak and make a story out of something else. This is how our speech will gain clearness from the facts. We shall obtain it from the language if we designate the facts as far as possible by the words appropriate to the things, and by those in common use, and if we do not arrange them in a

<sup>5</sup> v.l. τάξιν.

<sup>6</sup> v.ll. πάλιν ἐτέρων, πρᾶξιν ἐτέρων.



1438 a

καὶ μὴ ὑπερβατῶς αὐτὰ τιθῶμεν ἀλλ' αἰεὶ τὰ ἐχόμενα ἐξῆς τάττωμεν. σαφῶς μὲν οὖν δηλώσομεν ταῦτα διαφυλάττοντες, συντόμως δέ, ἔαν ἀπὸ τῶν πραγμάτων καὶ τῶν ὀνομάτων περαιοῦμεν τὰ μὴ  
 40 ἀναγκαῖα ῥηθῆναι, ταῦτα μόνα καταλείποντες ὧν  
 1438 b ἀφαιρεθέντων ἀσαφῆς ἔσται ὁ λόγος. καὶ συντόμως μὲν τοῦτον τὸν τρόπον δηλώσομεν, οὐκ ἀπίστως δέ, ἂν περὶ τὰς ἀπιθάνους πράξεις αἰτίας φέρωμεν παρ' ἃς εἰκότως τὰ λεγόμενα δόξει πραχθῆναι. ὅσα δ' ἂν λίαν ἄπιστα συμβαίνοι, δεῖ παραλείπειν· ἔαν  
 5 δὲ ἀναγκαῖον ἦ λέγειν, εἰδότα δεῖ φαίνεσθαι, καὶ ἐπιπλέξαντα αὐτὰ τῷ τῆς παραλείψεως σχήματι ὑπερβάλλεσθαι, καὶ προϊόντος τοῦ λόγου ἐπιδείξειν ἀληθῆ<sup>1</sup> ὑπισχνεῖσθαι, προφασισάμενον ὅτι τὰ προειρημένα πρῶτον βούλει ἀποδείξαι ἀληθῆ ὄντα ἢ δίκαια ἢ τι τῶν τοιούτων. καὶ τοῦτον μὲν τὸν  
 10 τρόπον τὰς ἀπιστίας ἱασόμεθα· συλλήβδην δὲ τὰς ἀπαγγελίας καὶ τὰς δηλώσεις καὶ τὰς προρρήσεις ἐξ πάντων τῶν εἰρημένων σαφεῖς καὶ βραχείας καὶ οὐκ ἀπίστους ποιήσομεν.

XXXI. Τάξομεν δὲ αὐτὰς διὰ τριῶν τρόπων. ὅταν  
 15 μὲν γὰρ ὧσιν ὀλίγα τὰ πράγματα περὶ ὧν λέγομεν καὶ γνώριμα τοῖς ἀκούουσι, τῷ προοιμίῳ συναίψομεν, ἵνα μὴ βραχὺ τοῦτο τὸ μέρος καθ' ἑαυτὸ τεθὲν γένηται. ὅταν δὲ λίαν ὧσιν αἱ πράξεις πολλαὶ καὶ μὴ γνώριμοι, παρ' ἑκάστον<sup>2</sup> συναπτὰς ποιήσομεν καὶ δικαίας καὶ συμφερούσας καὶ καλὰς  
 20 ἀποφανοῦμεν, ἵνα μὴ μόνον πραγματολογοῦντες ἀπλοῦν τὸν λόγον καὶ μὴ ποικίλον ποιῶμεν ἀλλὰ καὶ τῶν ἀκουόντων τὰς διανοίας ἀναλαμβάνωμεν.

<sup>1</sup> Sp.: ἀληθές.<sup>2</sup> ἐκάστην ? Rac.

transposed order but always place the words that are connected next to one another. By taking these precautions we shall make our exposition clear. It will be concise if we discard from our facts and our words those that are not necessary to be said, leaving only those the omission of which would make our meaning obscure. This being how our exposition will be concise, it will be convincing if in regard to facts that are improbable we bring forward reasons that will make the events that we allege seem likely to have taken place. Any occurrences that would be too improbable had better be omitted; but if you are compelled to introduce them, you must show that you know them as facts, and must pass them over lightly, working them in by means of the figure of omission,<sup>a</sup> and promise that you will demonstrate their truth in the course of your speech, pleading that you wish first to prove the statements you have made already to be true or just or the like. This is how we shall provide an antidote to incredulity. To sum up, the collection of devices stated will enable us to make our reports and expositions and forecasts clear, brief and convincing.

XXXI. There are three methods by which we shall arrange them. When the actions about which we are speaking are few in number and familiar to the audience, we shall include them in the introduction, so that this part standing by itself may not be too short. When the actions are too numerous and not familiar, we shall in each case put them in connexion and prove them to be just, expedient and honourable, so as not to make our speech only a plain unvarnished statement of fact but to win the attention of our hearers. If the

\* See 1434 a 17 ff.

1438 b

ἂν δ' ὥσιν αἱ πράξεις μέτραι καὶ ἀγνοούμεναι, τὴν ἀπαγγελίαν ἢ τὴν δήλωσιν ἢ τὴν πρόρρησιν ἐπὶ τῷ  
 25 φροιμίῳ δεῖ σωματοειδῇ τάττειν· τοῦτο δὲ ποιή-  
 σομεν, ἐὰν ἀπὸ τῆς ἀρχῆς τῶν πραγμάτων ἐπὶ τὸ  
 τέλος διέλθωμεν, μηδὲν ἄλλο συμπαραλαμβάνοντες  
 ἀλλ' ἢ τὰς πράξεις αὐτὰς ψιλὰς φράζοντες. καὶ  
 τὰς μὲν διηγήσεις ἐπὶ τοῖς προοιμίοις ὥς δεῖ τάτ-  
 τειν, οὕτως εἰσόμεθα.

XXXII. Μετὰ δὲ ταῦτα ἐστὶ βεβαιώσεις, δι' ἧς<sup>1</sup> τὰς  
 30 προειρημένας πράξεις ἐκ τῶν πίστεων καὶ τῶν  
 δικαίων καὶ τῶν συμφερόντων οἷας ὑπεθέμεθα δεί-  
 ξειν βεβαιώσομεν. ὅταν μὲν οὖν συναπτὰς ποιῆς,  
 οἰκειόταται ταῖς δημηγορίαις εἰσὶ πίστεις τὰ τε  
 τῶν πραγμάτων ἔθῃ καὶ τὰ παραδείγματα καὶ τὰ  
 35 ἐνθυμήματα<sup>2</sup> καὶ ἡ δόξα τοῦ λέγοντος· χρηστέον δὲ  
 καὶ ἂν τις τῶν ἄλλων πίστεων παρεμπέσῃ. τάττειν  
 δὲ αὐτὰς ὧδε δεῖ, πρῶτον μὲν τὴν τοῦ λέγοντος  
 δόξαν, εἰ δὲ μή, τὰ τῶν πραγμάτων ἔθῃ, δεικνύν-  
 τας<sup>3</sup> ὅτι ταῦθ' ἃ λέγομεν ἢ τὰ τούτοις ὅμοια οὕτως  
 εἶθισται γίνεσθαι. ἐπὶ δὲ τούτοις παραδείγματα  
 40 οἰστέον, καὶ εἰ ὁμοιότης τις ἐστί, πρὸς τὰ ὑφ' ἡμῶν  
 1439 a λεγόμενα προσακτέον. λαμβάνειν δὲ δεῖ τὰ παρα-  
 δείγματα τὰ<sup>4</sup> οἰκεῖα τῷ πράγματι καὶ τὰ ἐγγύτατα  
 τοῖς ἀκούουσι χρόνῳ ἢ τόπῳ, ἐὰν δὲ μὴ ὑπάρχη  
 τοιαῦτα, τῶν ἄλλων τὰ μέγιστα καὶ γνωριμώτατα.  
 μετὰ ταῦτα γνωμολογητέον. δεῖ δὲ καὶ περὶ τὰ  
 5 μέρη τῶν εἰκότων καὶ τῶν παραδειγμάτων ἐπὶ  
 τελευτῆς<sup>5</sup> ἐνθυμηματώδεις καὶ γνωμολογικὰς τὰς  
 τελευτὰς ποιεῖσθαι. καὶ τὰς μὲν πίστεις οὕτως ἐπὶ  
 ταῖς πράξεσι προσακτέον.

<sup>1</sup> v.l. ταῦτα ἐπιβεβαιώσεις δι' ὧν.

<sup>2</sup> Sp.: ἐπενθυμήματα.

<sup>3</sup> δεικνύντας v.l. om.

facts are moderate in number and not familiar, we ought to place the report or exposition or prediction of them bodily as an addition to the introduction; and we shall do this if we go right through from the beginning of the facts to the end, not introducing any side issue but merely stating the bare facts themselves. This will inform us how to arrange narratives of facts in our introductions.

XXXII. After this comes confirmation, the method by which we shall confirm the facts already stated as being of such a nature as we undertook to show them to be, by means of proofs and considerations of justice and expediency. When, therefore, you are including proofs, those most appropriate to public speeches are the customary course of events, examples, considerations, and the opinion of the speaker; and any other proof available must also be employed. They must be arranged as follows: first, the speaker's opinion, or else the usual nature of the facts, to prove that the things we assert or things like them usually take place in this way. Next we must adduce examples, and employ any available similarity to support the statements we are making. We must take examples that are akin to the case and those that are nearest in time or place to our hearers, and if such are not available, such others as are most important and best known. After these we must cite maxims. Also at the end of the sections devoted to probabilities and examples we must frame the conclusions in the form of considerations and maxims. This, then, is how we must introduce proofs as to matters of fact.

(3) Confirmation by proof or by general considerations.

1439 a

<sup>4</sup> τὰ add. Halm.

<sup>5</sup> [ἐπὶ τελευτῆς] Kayser.

Ἐὰν δὲ πιστεύηται τὰ πράγματα εὐθέως ῥηθέντα, τὰς μὲν πίστεις παραλείπτεον, τῷ δὲ δικαίῳ καὶ  
 10 τῷ νομίμῳ καὶ τῷ συμφέροντι καὶ τῷ καλῷ καὶ τῷ ἡδεῖ καὶ τῷ ῥαδίῳ καὶ τῷ δυνατῷ καὶ τῷ ἀναγκαίῳ τὰς προειρημένας πράξεις βεβαιωτέον. καὶ εἰ μὲν ὑπάρχει, πρῶτον τὸ δίκαιον τακτέον, διεξιόντας διὰ αὐτοῦ<sup>1</sup> τε τοῦ δικαίου καὶ τοῦ ὁμοίου τῷ δικαίῳ καὶ τοῦ ἐναντίου καὶ τοῦ κεκριμένου δικαίου. δεῖ δὲ καὶ τὰ παραδείγματα τὰ<sup>2</sup>  
 15 τοῖς ὑπὸ σοῦ λεγομένοις δικαίοις ὅμοια φέρειν. πολλὰ δὲ ἔξεις λέγειν<sup>3</sup> ἐκ τῶν<sup>4</sup> ἰδία παρ' ἐκάστοις δικαίων ὑπολαμβανομένων, καὶ ἐκ τῶν ἐν αὐτῇ τῇ πόλει ἐν ἣ ἴσθης καὶ ἐκ τῶν ἐν ταῖς ἄλλαις πόλεσιν. ὅταν δὲ ἅπαντα τοῦτον τὸν τρόπον μετιόντες δι-  
 20 ἔλθωμεν, ἐπὶ τελευτῆς αὐτοῦ γνώμας καὶ ἐνθυμήματα μέτρια καὶ ἀλλήλοις ἀνόμοια ἐνεγκόντες, εἴαν μὲν μακρὸν ἢ τὸ μέρος καὶ βουλώμεθα μνημονεύεσθαι, συντόμως παλιλλογήσομεν, εἴαν δὲ μέτριον ἢ καὶ μνημονεύηται, αὐτὸ τὸ μέρος ὀρισάμενοι πάλιν ἕτερον προθησόμεθα. ἔστι δὲ ὁ λέγω τοιόνδε·  
 25 “ὥς μὲν δίκαιόν ἐστιν ἡμᾶς βοηθεῖν Συρακοσίοις, ἐκ τῶν εἰρημένων ἱκανῶς ἀποδεδεῖχθαι νομίζω· ὥς δὲ καὶ συμφέρει ταῦτα πράττειν, ἐπιχειρήσω διδάσκειν.” πάλιν δὲ περὶ τοῦ συμφέροντος ὁμοιοτρόπως τοῖς προειρημένοις ἐπὶ τοῦ δικαίου μετιών, καὶ ἐπὶ τῇ τελευτῇ τούτου<sup>5</sup> τοῦ μέρους ἢ παλιλλογίαν ἢ ὀρισμὸν ἐπιθείς, πάλιν ἕτερον ὃ τι ἂν  
 30 ὑπάρχῃ σοι προτίθει. τοῦτον δὲ δεῖ τὸν τρόπον ἄλλο ἄλλῳ συνάπτειν μέρος καὶ συννυφαίνειν τὸν λόγον. ὅταν δὲ πάντα διεξέλθῃς ἐξ ὧν ἐνδέχεται

<sup>1</sup> Finckh: τούτου.<sup>3</sup> λέγειν om. v.l.<sup>2</sup> τὰ add. Finckh.<sup>4</sup> Rac.: ἐκ τε τῶν.



If the mere statement of the facts carries immediate conviction, proofs should be omitted, and the policies already stated should be confirmed on grounds of justice, legality, expediency, honour, pleasantness, 10 facility, practicability and necessity. We should place the plea of justice first, if it is available, going through the topics of absolute justice, approximate justice, the opposite of justice, and justice as decided by a previous judgement. You must also produce examples conforming with the principles of justice 15 that you assert. You will be able to produce many examples of the special conceptions of justice held in particular communities, both those obtaining in the city where you are speaking and those in other states. When by following this method we have gone through the whole of what we have to say, producing at the 20 end of it a variety of maxims and considerations of moderate length, if the division is a long one and we wish to aid the memory, we shall briefly recapitulate, but if it is of moderate length and easy to remember, we shall round off the division itself and put forward another in turn. This is the sort of thing I mean : ' I think that what has been said has given a 25 sufficient proof of the justice of sending help to Syracuse. I shall now attempt to show that policy to be also expedient.' Then you must treat the subject of expediency in a manner similar to what you have said already in the case of justice, and at the end of this division add either a recapitulation or a definition, 30 and then put forward any other subject that you have available. This is the way in which you must join one division to another, and link your speech together. When you have gone through all the subjects available

---

<sup>5</sup> τοῦτον add. Sp.



1439 a

σοι βεβαιῶσαι τὴν προτροπὴν, ἐπὶ τούτοις ἅπασιν κεφαλαιωδῶς μετὰ ἐνθυμημάτων καὶ γνωμῶν ἢ  
 35 σχημάτων δείκνυε ὥς ἄδικον καὶ ἀσύμφορον καὶ αἰσχρὸν καὶ ἀηδὲς μὴ ποιεῖν ταῦτα, καὶ ἀντιτίθει κεφαλαιωδῶς ὥς δίκαιον καὶ συμφέρον καὶ καλὸν καὶ ἡδὺ πράττειν ἐφ' ᾧ παρακαλεῖς. ὅταν δὲ ἱκανῶς ἤδη ἥς ἐγνωμολογηκώς, τὴν προτροπὴν πέρατι ὄρισαι.

Καὶ τοῦτον μὲν τὸν τρόπον βεβαιώσομεν τὰ  
 1439 b προτεθέντα, μετὰ δὲ τοῦτο τὸ μέρος λέξομεν τὴν προκατάληψιν.

XXXIII. Αὕτη δ' ἐστὶ δι' ἥς τὰς ἐνδεχομένας ἀντιλογίας ῥηθῆναι τοῖς ὑπὸ σοῦ εἰρημένοις προ-  
 5 καταλαμβάνων διασύρεις. δεῖ δὲ τὰ μὲν ἐκείνων μικρὰ ποιεῖν, τὰ δὲ σαυτοῦ αὔξειν, ὥς ἐν ταῖς αὐξήσεσι προακήκοας. χρὴ δὲ παρατιθέναι καὶ ἐν πρὸς ἓν, ὅταν τὸ σὸν μείζον ᾖ, καὶ πρὸς πλείω πλείω, καὶ ἐν πρὸς πολλά, καὶ πολλά πρὸς ἓν, διαλλάττοντα κατὰ πάντας τοὺς τρόπους, τὰ μὲν  
 10 σαυτοῦ αὔξοντα, τὰ δὲ τῶν ἐναντίων ἀσθενῇ καὶ μικρὰ ποιοῦντα. καὶ τοῦτον μὲν τὸν τρόπον ταῖς προκαταλήψεσι χρησόμεθα.

Ταῦτα δὲ διελθόντες ἐπὶ τελευτῇ παλιλλογήσομεν τὰ προειρημένα σχῆμα<sup>1</sup> διαλογισμοῦ λαβόντες ἢ ἀπολογισμοῦ ἢ ἐκ<sup>2</sup> προαιρέσεως ἢ ἐξ ἐπερωτήσεως ἢ εἰρωνείας.

15 XXXIV. Ἐὰν δὲ ἐπὶ τὸ βοηθεῖν τισὶ πρό- τρέπωμεν, ἢ ἰδιώταις ἢ πόλεσιν, ἀρμόσει συντόμως

<sup>1</sup> Sp.: σχήματα.

<sup>2</sup> ἐκ add. Sp.

<sup>a</sup> i.e. the four rhetorical figures προκατάληψις 1432 b 10. αἰτήματα 1433 b 17, παλιλλογία ib. b 29, εἰρωνεία 1434 a 17.

for you to employ in confirmation of your exhortation, in addition to all these prove summarily, with the aid of considerations and maxims or figures,<sup>a</sup> that it is 35 unjust and inexpedient and disgraceful and unpleasant not to do this, and oppose a summary proof that the course you advocate is just and expedient and honourable and pleasant. When you have now made sufficient use of maxims, round off the exhortation with a conclusion.

This is the way in which we shall confirm the pro- 1439 b posals we put forward. In the following section we shall deal with anticipation.

XXXIII. Anticipation is the method by which you anticipate the objections that can be advanced against your arguments and sweep them aside. You 5 must minimize the other party's arguments and amplify your own in the manner which you have heard already in the passage dealing with amplifications. You must set one argument against one other when yours is the stronger, and several against several, and one against many, and many against one, contrasting them in all possible ways, amplify- 10 ing your own and making those of your opponents weak and trifling. This is the way in which we shall employ anticipations.

When we have gone through these passages, in conclusion we shall recapitulate what has been said already, adopting the form of argument or of refutation or employing a proposal of policy or interrogation or irony.

XXXIV. If we are urging our audience to render 15 assistance to certain parties, whether individuals or states, it will also be suitable briefly to mention <sup>(4) Appeal to feelings.</sup>

εἰπεῖν καὶ εἴ τις προϋπάρχει τούτοις πρὸς τοὺς ἐκκλησιάζοντας φιλία ἢ χάρις ἢ ἔλεος. μάλιστα γὰρ τοῖς οὕτω διακειμένοις ἐθέλουσιν ἐπαμύνειν· φιλοῦσι μὲν οὖν πάντες ὑφ' ὧν<sup>1</sup> οἴονται κατὰ τὸ  
 20 προσῆκον εὖ πεπονθέναι ἢ πάσχειν ἢ πείσεσθαι, ἢ ὑπ' αὐτῶν ἢ τῶν φίλων, ἢ αὐτοὶ ἢ ὧν κηδόμενοι τυγχάνουσιν· χάριν δ' ἔχουσι τούτοις ὑφ' ὧν οἴονται παρὰ τὸ προσῆκον ἀγαθόν τι πεπονθέναι ἢ πάσχειν ἢ πείσεσθαι, ἢ ὑπ' αὐτῶν ἢ τῶν φίλων, ἢ αὐτοὶ ἢ ὧν κηδόμενοι τυγχάνουσιν. τούτων μὲν  
 25 οὖν ἂν τι ἐνῇ, χρὴ συντόμως διδάσκειν, καὶ ἐπὶ τὸν ἔλεον ἄγειν. εὐπορήσομεν δὲ ἐλεεινὰ ποιεῖν ἅπερ ἂν ἐθέλωμεν ἔαν συνειδῶμεν ὅτι πάντες ἐλεοῦσι τούτους οὓς οἰκείως ἔχειν αὐτοῖς ὑπειλήφασιν ἢ οἴονται ἀναξίους εἶναι δυστυχεῖν. δεῖ δὴ<sup>2</sup> ταῦτα ἀποφαίνειν ἔχοντας οὓς ἐθέλεις ἐλεεινοὺς  
 30 ποιεῖν, καὶ ἐπιδεικνύειν αὐτοὺς ἢ κακῶς πεπονθότας ἢ πάσχοντας, ἢ πεισομένους ἔαν μὴ οἱ ἀκούοντες αὐτοῖς βοηθῶσιν. ἔαν δὲ ταῦτα μὴ ἐνῇ, δεικτέον, ὑπὲρ ὧν λέγεις, ἀγαθῶν ἐστερημένους ὧν τοῖς ἄλλοις ἅπασιν ἢ τοῖς πλείστοις μέτεστιν, ἢ ἀγαθοῦ μηδέποτε τετυχηκότας ἢ μὴ τυγχάνοντας, ἢ μὴ  
 35 τευξομένους ἔαν μὴ νῦν οἱ ἀκούοντες οἰκτεῖρῶσιν. ἐκ τούτων μὲν οὖν ἐπὶ τὸν ἔλεον ἄξομεν.

Τὰς δὲ ἀποτροπὰς ἐκ τῶν ἐναντίων τούτοις ποιήσομεν, τὸν αὐτὸν τρόπον φροιμαζόμενοι καὶ τὰ πράγματα διεξιόντες, ταῖς τε πίστεσι χρώμενοι, καὶ τοῖς ἀκούουσι δεικνύντες ὥς ἐστὶν ἃ πράττειν

<sup>1</sup> <τούτους> ὑφ' ὧν Sp.

<sup>2</sup> v.l. δέ.

any friendly feeling or cause for gratitude or compassion that already exists between them and the members of the assembly. For these are specially willing to assist people standing in those relations to them ; everybody, therefore, feels kindly towards people from whom personally or from whose friends they think that they themselves or those they happen to care for have received or are receiving or are going to receive some merited service ; and are grateful to those from whom personally or from whose friends they think that they themselves or those they happen to care for have received or are receiving or are going to receive some unmerited benefit. If any one of these circumstances is present, we must concisely explain it, and lead our hearers to compassion. We shall find it easy to excite compassion for anything we wish if we remember that all men pity those whom they conceive to be closely related to them, or think not to deserve misfortune. You must, therefore, prove that this is the condition of those for whom you wish to excite compassion and must show that they either have been or are in distress, or will be if your hearers do not assist them. If these circumstances are not present, you must show that those for whom you are speaking have been deprived of advantages which all or most men share, or have never had any luck, or have none now, or will have none if your hearers do not pity them now. These are the means by which we shall lead our audience to feel compassion.

For dissuasion we shall use the opposite methods, opening the case and going through the facts in the same manner, by employing proofs and demonstrating to our hearers that the actions they are taking in

1440 <sup>a</sup> ἐπιχειροῦσιν ἄνομα καὶ ἄδिका καὶ ἀσύμφορα καὶ αἰσχροὶ καὶ ἀηδῆ καὶ ἀδύνατα καὶ ἐργῶδη καὶ οὐκ ἀναγκαῖα. ἡ δὲ τάξις ὁμοιότροπος<sup>1</sup> ἔσται οἷα καὶ τῷ προτρέποντι. τοῖς μὲν οὖν καθ' αὐτοὺς ἀποτρέπουσιν οὕτω τὰς τάξεις ποιητέον.

- <sup>5</sup> Τοὺς δὲ πρὸς τὰς ὑφ' ἐτέρων εἰρημένους προτροπὰς ἀντιλέγοντας πρῶτον μὲν ἐν τῷ προοιμίῳ δεῖ οἷς μέλλουσιν ἀντιλέγειν προθέσθαι, τὰ δ' ἄλλα καθ' αὐτὰ προοιμιάζεσθαι, μετὰ δὲ τὰ προοίμια μάλιστα μὲν ἕκαστα τῶν προειρημένων καθ' ἐν ἕκαστον προτιθέμενος<sup>2</sup> ἐπιδεικνύειν ὥς οὐκ ἔστι
- <sup>10</sup> δίκαια οὐδὲ νόμιμα οὐδὲ συμφέροντα οὐδὲ τούτοις ἀκόλουθα ἐφ' ἃ παρακαλεῖ ὁ ἐναντίος. τοῦτο δὲ ποιήσεις ἀποφαίνων ἢ ἄδिका ὄντα ἃ λέγει ἢ ἀσύμφορα, ἢ τούτοις ὅμοια, ἢ ἐναντία τοῖς δικαίοις καὶ τοῖς συμφέρουσι καὶ τοῖς κεκριμένοις τοιούτοις. ὁμοιοτρόπως δὲ καὶ τῶν ἄλλων τὰ ὑπάρχοντα
- <sup>15</sup> μέτιθι. κράτιστος μὲν οὖν ὁ τρόπος τῆς ἀποτροπῆς οὗτος ἐστίν, ἐὰν δὲ μὴ ἐνδέχεται τοῦτο ποιεῖν, ἐκ τοῦ παραλελειμμένου τόπου<sup>3</sup> ἀπώτρεπε λέγων· οἷον ἐὰν ὁ ἐναντίος δίκαιον ἀποφήνη, σὺ ἐπιχειρεῖς δεικνύναι ὥς ἐστὶν αἰσχρὸν ἢ ἀσύμφορον ἢ ἐργῶδες ἢ ἀδύνατον ἢ ὅ τι ἂν ἔχῃς τοιούτον·
- <sup>20</sup> ἐὰν δὲ ἐκεῖνος ἔχῃ τὸ συμφέρον, σὺ ἐπιδείκνυε ὥς ἄδικον, κἂν τι ἄλλο ἔχῃς πρὸς τούτῳ. δεῖ δὲ καὶ τὰ μὲν σαυτοῦ<sup>4</sup> αὖξιν τὰ δὲ τούναντίου ταπεινοῦν, ποιοῦντα ὥς ἐν τῷ προτρεπτικῷ εἴρηται. χρὴ δὲ καὶ γνώμας φέρειν καὶ ἐνθυμήματα

<sup>1</sup> Sp.: ὁμοιοτρόπως.

<sup>2</sup> Rac. cf. 1434 b 12 n.: προτιθέμενον (προτιθεμένους Sp.).

<sup>3</sup> Finckh: τρόπου.

<sup>4</sup> Sp.: αὐτοῦ αὐτοῦ.

hand are illegal, unjust, inexpedient, disgraceful, 1440 a unpleasant, impossible, laborious and unnecessary. The arrangement will be similar to that used in persuasion. This, then, is how those who use dissuasion on their own account should arrange their speeches.

Those replying to exhortations spoken by others 5 must first set out in their introduction the position they are going to oppose, and make a preliminary statement of their other points seriatim. After the introduction the best plan is to put forward one at a time each of the statements made in the previous speech, and prove that they are not just nor lawful nor 10 expedient nor consistent with the policy advocated by the opponent. You will do this by showing that what he says is either unjust or inexpedient, or approximately so, or the opposite of what is just and expedient and what has been judged to be so. And treat the other points that are available in a similar way. This is the best method of dissuasion ; but if this 15 is not feasible, base your dissuasion on any topic that has been omitted ; for instance, if your opponent makes out a policy to be just, attempt on your side to prove that it is dishonourable or inexpedient or laborious or impossible or whatever else of the sort you can ; and if he has expediency on his side, you 20 must show that his policy is unjust and whatever else you can in addition. And you must amplify your own points and run down those of your opponent, following the method already set out in the section on the oratory of persuasion. You must also, as in that section, produce maxims and considerations, and



1440 a

καθάπερ ἐκεῖ,<sup>1</sup> καὶ τὰς προκαταλήψεις λύειν, καὶ  
 25 ἐπὶ τελευτῇ παλιλλογεῖν.

Πρὸς δὲ τούτοις ἐν μὲν ταῖς προτροπαῖς ἀπο-  
 φαίνειν φιλίαν ὑπάρχουσιν<sup>2</sup> οἷς βοηθεῖν προ-  
 τρέπομεν πρὸς τοὺς προτρεπομένους,<sup>3</sup> ἢ χάριν τοὺς  
 προτρεπομένους ὀφείλοντας τοῖς<sup>4</sup> δεομένοις· οἷς  
 δ' οὐκ ἐῷμεν βοηθεῖν, ἢ ὀργῆς ἢ φθόνου ἢ ἔχθρας  
 ἀξίους ὑπάρχοντας. ἔχθραν μὲν οὖν ἐμποιήσομεν  
 30 ὑπ' ἐκείνων οὐ προσηκόντως τοὺς ἀποτρεπομένους  
 ἀποφαίνοντες κακῶς πεπονθότας<sup>5</sup> ἢ τῶν φίλων ἢ  
 αὐτοὺς ἢ ὧν κηδόμενοι τυγχάνουσιν· ὀργὴν δέ,  
 εἰ ἐπιδεικνύμεν παρὰ τὸ προσηκόν ὀλιγωρη-  
 μένους ἢ ἡδικομένους ὑπ' ἐκείνων<sup>6</sup> ἢ τῶν φίλων<sup>7</sup>  
 ἢ αὐτοὺς ἢ ὧν κηδόμενοι τυγχάνουσιν.<sup>8</sup> φθόνον δέ  
 35 παρασκευάσομεν συλλήβδην πρὸς τούτους οὓς ἀπο-  
 φαίνομεν ἀναξίως εὖ πεπραχότας ἢ πράττοντας  
 ἢ πράξοντας, ἢ ἀγαθοῦ μηδέποτε ἐστερημένους  
 ἢ μὴ στερουμένους ἢ μὴ στερησομένους, ἢ κακοῦ  
 μηδέποτε τετυχηκότας ἢ μὴ τυγχάνοντας ἢ μὴ<sup>9</sup>  
 τευξομένους. φθόνον μὲν οὖν καὶ ἔχθραν καὶ  
 40 ὀργὴν τοῦτον τὸν τρόπον ἐμποιήσομεν, φιλίαν δέ  
 1440 b καὶ χάριν καὶ ἔλεον ἐκ τῶν ἐν ταῖς προτροπαῖς.  
 συνθήσομεν δὲ καὶ τάξομεν ἐξ ἀπάντων τῶν  
 προειρημένων αὐτὰς τόνδε τὸν τρόπον.<sup>10</sup>

Τὸ μὲν οὖν προτρεπτικὸν<sup>11</sup> εἶδος αὐτό τε ἴσμεν  
 οἷόν ἐστι καὶ ἐξ ὧν συνέστηκε καὶ ὥς αὐτῷ  
 χρηστέον.

5 XXXV. Τὸ δὲ ἐγκωμιαστικὸν καὶ τὸ κακολο-

<sup>1</sup> Sp.: ἐκεῖσε.

<sup>2</sup> Sp.: ὑπάρχειν.

<sup>3</sup> πρὸς τοὺς προτρεπομένους v.l. om.

<sup>4</sup> ἢ . . . τοῖς: v.l. καὶ ὀφείλοντας χάριν ἔχειν τοῖς.

<sup>5</sup> πεπονθότας (ἢ ὑπ' αὐτῶν) Sp.

<sup>6</sup> ὑπ' ἐκείνων add. Hammer.

refute anticipations, and at the conclusion recapitulate. 1440 a  
25

In addition to this, in persuasions we must show that those whose support we are recommending are friendly to those to whom our recommendation is addressed, or that the latter owe a favour to the appellants; and that those whose support we are opposing are deserving of anger or envy or enmity. We shall engender enmity by showing that those 30 whom we are dissuading themselves or those whom they care for have been wrongfully ill-treated by the other party or by their friends; anger, if we prove that they or those they care for have been wrongfully despised or injured by the other party. We shall cause envy against those (to put it briefly) whom we 35 show to have been or to be or to be going to be undeservedly prosperous, or never to have suffered or not to be suffering or going to suffer the loss of some good, or never to have encountered or not to be encountering or going to encounter some evil. This is the manner in which we shall engender envy, 40 hatred and anger, whereas friendship, favour and compassion we shall arouse by the means stated in 1440 b the case of exhortations; and this is the way in which we shall construct and arrange them out of all the materials already stated.

We now know the nature and component parts of the persuasive kind of oratory and the manner in which it is to be employed.

XXXV. Next let us set before us for examination 5

<sup>7</sup> Post φίλων add. ἐκείνων aut ἐκείνοις codd.

<sup>8</sup> Sp.: τυγχάνουσιν αὐτοί. <sup>9</sup> v.l. ἢ μηδὲ.

<sup>10</sup> [αὐτὰς . . . τρόπον] Sp.

<sup>11</sup> προτρεπτικὸν (καὶ ἀποτρεπτικὸν) Sp.

γικὸν πάλιν προθέμενοι σκοπῶμεν. φροιμιστέον οὖν καὶ περὶ τούτων πρῶτον προθεμένους τὰς προθέσεις καὶ τὰς διαβολὰς ἀπολυομένους<sup>1</sup> ὁμοίως ὥσπερ ἐν τοῖς προτρεπτικοῖς. ἐπὶ δὲ τὸ προσέχειν παρακαλοῦμεν ἕκ τε τῶν ἄλλων τῶν ἐν ταῖς  
 10 δημηγορίαις εἰρημένων, καὶ ἐκ τοῦ θαυμαστὰ καὶ περιφανῆ<sup>2</sup> φάσκειν εἶναι<sup>3</sup> καὶ αὐτοὺς<sup>4</sup> ἴσα καὶ τοὺς ἐγκωμιαζομένους καὶ τοὺς ψεγομένους ἀποφανεῖν<sup>5</sup> πεπραγότας. ὥς γὰρ ἐπὶ τὸ πολὺ ἐπὶ τούτων τῶν<sup>6</sup> εἰδῶν οὐκ ἀγῶνος ἀλλ' ἐπιδείξεως ἕνεκα λέγομεν.

Τάξομεν δὲ πρῶτον τὰ προοίμια τὸν αὐτὸν  
 15 τρόπον ὅνπερ ἐπὶ τῶν προτροπῶν καὶ ἀποτροπῶν. μετὰ δὲ τὸ προοίμιον δεῖ διελόμενον τὰ ἔξω τῆς ἀρετῆς ἀγαθὰ καὶ τὰ ἐν αὐτῇ τῇ ἀρετῇ ὄντα ποιεῖν οὕτω· τὰ μὲν οὖν ἔξω τῆς ἀρετῆς εἰς εὐγένειαν καὶ ῥώμην καὶ κάλλος καὶ πλοῦτον, τὴν δ' ἀρετὴν εἰς σοφίαν καὶ δικαιοσύνην καὶ ἀνδρείαν καὶ ἐπι-  
 20 τηδεύματα ἔνδοξα. τούτων δὲ τὰ μὲν τῆς ἀρετῆς δικαίως ἐγκωμιάζεται, τὰ δ' ἔξω κλέπτεται, τοὺς γὰρ ἰσχυροὺς καὶ τοὺς καλοὺς καὶ τοὺς εὐγενεῖς καὶ τοὺς πλουσίους οὐκ ἐπαινεῖν ἀλλὰ μακαρίζειν προσήκει. ταῦτα δὴ διαλογισάμενοι<sup>7</sup> μετὰ τὰ προοίμια πρώτην τὴν γενεαλογίαν τάξομεν. πρῶ-  
 25 τον γὰρ τοῖς ἀνθρώποις καὶ τοῖς ἄλλοις ζώοις τοῦθ' ὑπάρχει ἔνδοξον ἢ ἄδοξον· τοιγαροῦν τὸν μὲν ἀνθρωπον ἢ τι ἄλλο τοιοῦτο ζῶον εὐλογοῦντες<sup>8</sup>

<sup>1</sup> Sp.: ἀπολύομεν.<sup>2</sup> v.l. διαφανῆ.<sup>3</sup> (εἶναι) add. Wurm.<sup>4</sup> Sp.: αὐτόν.<sup>5</sup> Kayser: ἀποφαίνειν.<sup>6</sup> ἐπὶ τούτων τῶν Sp. (τῷ τοιούτῳ εἶδεε Finckh): τῶν τοιούτων.

the oratory of eulogy and vituperation. With these also we must first in the introduction state our propositions and refute misrepresentations in the same way as in speeches of exhortation. We call for attention by the means that have been specified in the case of 10 parliamentary speeches, especially by asserting that the facts are surprising and remarkable and that we shall prove the parties to have done deeds equal to those that win men eulogy or vituperation. For as a rule in speeches of this class we are not speaking to contest a case but for display.

We shall first arrange the introduction in the same way as in speeches of exhortation and dissuasion. After the introduction one should make a distinction 15 between the goods external to virtue and those actually inherent in virtue, putting it thus: goods external to virtue fall under high birth, strength, beauty and wealth; virtue is divided into wisdom, justice, courage and creditable habits.<sup>a</sup> Those belonging to virtue are 20 justly eulogized, but those external to it are kept in the background, since it is appropriate for the strong and handsome and well-born and rich to receive not praise but congratulation on their good fortune. Having, then, made this distinction, we shall place first after the introduction the genealogy of the person we are speaking of, as that is the fundamental ground of reputation or discredit for human beings, and also 25 for animals; so in eulogizing a human being or

\* Synonym for σωφροσύνη, temperance or soundness of mind.

<sup>7</sup> μετὰ δὲ (l. 15) . . . διαλογισάμενοι secl. Ipselkofer ut secundum *Rhet.* ii. 9 interpolatum. διελόμενοι pro διαλογισάμενοι Sp.

<sup>8</sup> Rac.: εὐλόγως.

1440 b

γενεαλογήσομεν· ὅταν δὲ πάθος ἢ πράγμα ἢ λόγον ἢ κτῆμα, ἀπ' αὐτῶν εὐθύς τῶν προσόντων ἐνδόξων ἐπαινέσομεν.

Γενεαλογεῖν δὲ δεῖ ὧδε. εἰ μὲν ὥσιν οἱ  
 30 πρόγονοι σπουδαῖοι, πάντας ἐξ ἀρχῆς ἀναλαβόντα<sup>1</sup>  
 μέχρι πρὸς τὸν ἐγκωμιαζόμενον, ἐφ' ἐκάστῳ τῶν  
 προγόνων κεφαλαιωδῶς ἐνδοξόν τι παρατιθέναι.<sup>2</sup>  
 εἰ δὲ οἱ πρῶτοι μὲν ὥσι σπουδαῖοι, τοὺς δὲ  
 λοιποὺς συμβεβήκη<sup>3</sup> μηδὲν ἀξιόλογον πράξαι, τοὺς  
 μὲν πρώτους τὸν αὐτὸν τρόπον διεξελεῖν, τοὺς  
 35 δὲ φαῦλους παραλιπεῖν, προφασισάμενος<sup>4</sup> ὅτι διὰ  
 πληθὸς τῶν προγόνων οὐ θέλεις λέγων αὐτοὺς  
 μακρολογεῖν, ἔτι δὲ οὐκ ἄδηλον εἶναι πᾶσιν ὅτι  
 τοὺς ἐξ ἀγαθῶν γενομένους εἰκὸς ἐστὶ τοῖς προ-  
 γόνοις ὁμοιοῦσθαι. εἰ δὲ οἱ παλαιοὶ πρόγονοι  
 φαῦλοι τυγχάνωσιν ὄντες οἱ δὲ πρὸς αὐτὸν ἐνδοξοί,  
 40 τούτους δεῖ γενεαλογεῖν καὶ λέγειν ὅτι περὶ μὲν  
 1441 a ἐκείνων περίεργον ἂν εἴη μακρολογεῖν, τοὺς δὲ  
 πλησίον γεγονότας τῶν ἐπαινουμένων, τούτους  
 ὄντας ἀγαθοὺς ἐπιδείξεις, καὶ δῆλον ὡς οἱ γε  
 τούτων πρόγονοι σπουδαῖοί τινες ἦσαν, οὐ γὰρ  
 εἰκὸς φανῆναι τοιούτους<sup>5</sup> εἶναι τοὺς<sup>6</sup> ἐκ μοχθηρῶν  
 5 προγόνων γεγονότας.<sup>7</sup> εἰ δὲ μηδὲν ἀπὸ τῶν  
 προγόνων ἐνδοξον ὑπάρχει, λέγε ὡς αὐτός ἐστι  
 γενναῖος, συμβιβάζων ὡς εὖ γεγόνασι πάντες οἱ  
 πρὸς<sup>8</sup> ἀρετὴν εὖ πεφυκότες. ἐπιτίμα<sup>9</sup> δὲ καὶ τοῖς  
 ἄλλοις ὅσοι τοὺς προγόνους ἐπαινοῦσι, λέγων ὅτι

<sup>1</sup> Sp.: ἀναλαβόντες.

<sup>2</sup> Finckh: περιτιθέναι.

<sup>3</sup> Sp.: συμβέβηκε.

<sup>4</sup> Usener: προφασιζόμενον.

<sup>5</sup> Rac.: τοὺς τοιούτους καλοὺς ἢ ἀγαθοὺς (καλοὺς ἢ ἀγαθοὺς εἶναι secl. Kayser).

<sup>6</sup> τοὺς add. Rac.

<sup>7</sup> προγόνων γεγονότας Sp.: προγεγονότας.

a domestic animal we shall state their pedigree, although when praising an emotion or action or speech or possession we shall base our approval directly on the creditable qualities that actually belong to it.

The proper way to employ genealogy is this. If the ancestors are men of merit, you must enumerate <sup>30</sup> them all from the beginning down to the person you are eulogizing, and at each of the ancestors summarily mention something to his credit. If the first ones are men of merit but the rest do not happen to have done anything remarkable, you must go through the first ones in the same way but omit the inferior ones, <sup>35</sup> explaining that because of the number of the ancestors you do not wish to make a long story by mentioning them all, and moreover that it is patent to everybody that the scions of a worthy stock naturally resemble their ancestors. If his early ancestors happen to be undistinguished but those near to his own time are famous, you must mention his descent from the latter <sup>40</sup> and say it would be tedious to dwell on the former, <sup>1441 a</sup> but that you will show that the immediate predecessors of those you are praising were good men, and that it is quite clear that *their* forefathers must have been men of merit, because it is manifestly unlikely that those born from base ancestors could be of that quality. If he has no ancestral distinction in <sup>5</sup> his favour, say that he himself is a fine fellow, suggesting that all men by nature well-endowed with virtue are 'well-born.' Also rebuke all the other people who praise their ancestors by saying that many

\* v.l. πρὸς τῇν.

\* Sp.: ἐπιτιμᾶν.



1441 a

πολλοὶ προγόνων ἐνδόξων τυχόντες ἀνάξιοι γε-  
 10 γόνασιν. λέγε δὲ καὶ ὅτι τοῦτον, οὐ τοὺς προ-  
 γόνους, πρόκειται νῦν ἐγκωμιάζειν. ὁμοιοτρόπως  
 δὲ καὶ κακολογοῦντα ἐπὶ τῶν μοχθηρῶν προγόνων  
 ποιητέον τὴν γενεαλογίαν.

Καὶ τοῦτον μὲν τὸν τρόπον ἐν τοῖς ἐπαίνοις καὶ  
 ταῖς κακολογίαις τὰς γενεαλογίας τακτέον.

15 Εἴ τι δὲ ἔνδοξον αὐτῷ διὰ τὴν τύχην ὑπῆρξε \* \* \*  
 \* \* \*<sup>1</sup> τοῦτο μόνον διαφυλάττοντα ὅπως πρέποντα  
 ταῖς ἡλικίαις ἐρεῖς, καὶ μικρά· τοὺς γὰρ παῖδας οὐχ  
 οὕτω δι' αὐτοὺς ὥς διὰ τοὺς ἐφεστῶτας οἴονται  
 κοσμίους εἶναι καὶ σώφρονας, διὸ βραχυλογητέον  
 περὶ αὐτῶν. ὅταν δὲ τοῦτον τὸν τρόπον διέλθῃς,  
 20 ἐπὶ τελευτῇ τοῦ μέρους ἐνθύμημα καὶ γνώμην  
 εἰπὼν ὀρίσας<sup>2</sup> τοῦτο τὸ μέρος, ἐπὶ τῇ τοῦ νεανίσκου  
 ἡλικίᾳ καὶ τὴν πρόθεσιν ποιήσας καὶ προθέμενος ἢ  
 τὰ ἔργα τοῦ ἐπαινουμένου ἢ τὸν τρόπον ἢ τὰ ἐπι-  
 τηδεύματα, αὔξειν καθάπερ εἶπομεν πρότερον ἐν  
 ἀρχαῖς ἐπὶ τοῦ ἐγκωμιαστικοῦ εἵδους, διεξιὼν ὅτι  
 25 ὑπὸ τοῦ<sup>3</sup> ἐπαινουμένου ἐν ταύτῃ τῇ ἡλικίᾳ ὄντος τὸ  
 καὶ τὸ γέγονεν ἔνδοξον, ἢ ὅτι διὰ τούτου, ἢ ὅτι διὰ  
 τοῦ ἐπιτηδεύματος,<sup>4</sup> ἢ ἐκ τούτου, ἢ ἔνεκα τούτου.  
 δεῖ δὲ καὶ ἐτέρων νέων ἐνδόξους πράξεις παρ-  
 ιστάναι καὶ ὑπερβάλλειν δεικνύναι τὰς τοῦδε τὰς  
 ἐκείνων, τοῦ μὲν ἐτέρου τἀλάχιστα τῶν ὑπαρχόντων  
 30 λέγοντα, τοῦ δ' ὑπὸ σοῦ ἐπαινουμένου τὰ μέγιστα.  
 χρή δὲ καὶ παρ' ἄλλα σμικρά<sup>5</sup> ἔνδοξα πράγματα

<sup>1</sup> lacunam Sauppe.<sup>2</sup> v.l. ὀρίσαι.<sup>3</sup> v.l. τούτου τοῦ.<sup>4</sup> [ἢ ὅτι διὰ τούτου . . . ἐπιτηδεύματος] Sp.<sup>5</sup> Finckh: ἄλλοις μικρά.

men who have had distinguished ancestors have been unworthy of them. Also say that the business in hand at the moment is to eulogize the man himself, and not his ancestors. Similarly in vituperation use must be made of genealogy in a case of bad ancestry.

This is the way in which to introduce genealogy in eulogy and vituperation.

If the person possessed some distinction that was due to luck . . .

. . . <sup>a</sup> only taking care to say things suited to their ages, and say little, for people do not think that orderly conduct and self-restraint in young people is due so much to themselves as to those who are in charge of them, so in speaking about them one must be brief. When you have gone through the topic in this way, after terminating this section by enunciating a consideration and a maxim at the end of the section, when you come to the young person's early manhood you must state your line, namely either the achievements of the subject of your eulogy, or his character, or his habits, and amplify them as we said before at the beginning when dealing with the eulogistic species of oratory, recounting that this or that distinguished thing was done at this age by the subject of your eulogy or through his agency or owing to his habit or from his initiation or at his prompting. You must also compare the distinguished achievements of other young men and show that they are surpassed by his, specifying the smallest achievements of the other youth and the biggest exploits of the one you are praising. And you must make the exploits you

success rather to his own efforts than to fortune.—You must next describe his habits and way of life beginning from his earliest years.>

1441 a

παριστάμενα τὰ<sup>1</sup> μέγιστα ὑπὸ σοῦ λεγόμενα οὕτω  
 μέγαλα φαίνεσθαι. δεῖ<sup>2</sup> δὲ καὶ εἰκάζοντα τὰς  
 πράξεις αὖξιν ὧδε· καίτοι ὅστις<sup>3</sup> νέος οὕτω φιλό-  
 σοφος ἐγένετο, οὗτος<sup>4</sup> πρεσβύτερος γενόμενος με-  
 35 γάλην ἂν ἐπίδοσιν σχοίῃ· ἢ ὅστις<sup>5</sup> ἐρρωμένως τοὺς  
 ἐν τοῖς γυμνασίοις ὑπομένει πόνους, σφόδρα τὴν ἐν  
 τῇ φιλοσοφίᾳ φιλοπονίαν ἀγαπήσει. τοῦτον μὲν  
 οὖν τὸν τρόπον εἰκάζοντες αὖξήσομεν.

1441 b

Ὅταν δὲ καὶ τὰ περὶ τὴν ἡλικίαν τοῦ νεανίσκου  
 διέλθωμεν καὶ ἐπὶ τελευτῇ τούτου τοῦ μέρους  
 γνώμας καὶ ἐνθυμήματα τάξωμεν,<sup>6</sup> ἢ παλιλ-  
 λογήσαντες συντόμως τὰ προειρημένα ἢ περὶ<sup>7</sup> τὸ  
 πρακτικὸν μέρος τελευταῖον ὀρισάμενοι, πάλιν<sup>8</sup>  
 ἃ διεπράξατο ὁ ὑφ' ἡμῶν ἐγκωμιαζόμενος ἀνὴρ<sup>9</sup>  
 προθέμενοι, τὴν δικαιοσύνην τάξομεν<sup>10</sup> πρῶτον, καὶ  
 5 ὁμοιοτρόπως τοῖς προειρημένοις αὖξήσαντες ἤξομεν  
 ἐπὶ τὴν σοφίαν, ἐὰν ὑπάρχη· καὶ ταύτην τὸν αὐτὸν  
 τρόπον διελθόντες, προθέμενοι τὴν ἀνδρείαν, ἐὰν ᾖ,  
 καὶ τὴν αὖξιν ταύτης πάλιν διαδραμόντες, ὅταν  
 ἐπὶ τελευτῇ τούτου τοῦ μέρους γενώμεθα καὶ πάντα  
 τὰ εἶδη διεξεληλυθότες ὦμεν, παλιλλογήσαντες ἐν  
 10 κεφαλαίῳ τὰ προειρημένα, τελευτὴν ἤτοι<sup>11</sup> γνώμην  
 ἢ ἐνθύμημα παντὶ τῷ λόγῳ ἐπιθήσομεν. ἀρμόσει  
 δ' ἐν τοῖς ἐπαίνοις καὶ πολλοῖς ὀνόμασι περὶ ἕκα-  
 στον χρησάμενον μεγαλοπρεπῇ τὴν λέξιν ποιῆσαι.<sup>12</sup>

Τὸν δ' αὐτὸν τρόπον ἐπὶ τῶν μοχθηρῶν πραγ-

<sup>1</sup> τὰ add. Sp.

<sup>2</sup> Sp.: ἀεί.

<sup>3</sup> Finckh: καὶ ποῖός τις αὐτ καὶ ποῖ τις.

<sup>4</sup> Hammer: ὅς.

<sup>5</sup> σχοίῃ . . . ὅστις Sauppe: ἔσχεν καὶ τοιοῦτο (αὐτ οὕτω) τις.

<sup>6</sup> v.l. τάξομεν.

<sup>7</sup> v.l. παρὰ (locus vix sanus?).

<sup>8</sup> πάλιν <διέξιμεν> Sauppe.

are narrating seem great by comparing them with other noteworthy achievements on a small scale. You must also magnify his deeds by conjecture, thus : ' Yet one who has become such a philosopher when young is likely to make a great advance when he gets older,' or ' One who has endured the toils of the gymnasium so sturdily will be an ardent devotee of the toilsome labour of philosophy.' This is how we shall magnify his record by using conjecture.

When we have gone through the events of the youth's early manhood and have ended this section with maxims and considerations, after either a concise recapitulation of what we have said already or a final conclusion in respect of the section dealing with conduct, we shall next set out the achievements of the person we are praising when an adult. We shall put first his justice, and after having magnified this in a manner similar to what has been said already, we shall come to his wisdom, if he possesses that virtue ; and after going through this in the same way, we shall set out his courage, if he has it, and having in turn run through the amplification of this, when we have reached the conclusion of this section and have gone through all the species of virtue, we shall recapitulate what we have said before in a summary, and then affix either a maxim or else a consideration as a conclusion to the whole speech. In eulogies it will be appropriate to add dignity to the style by speaking about each topic with considerable fullness.

We shall compose accusations in the same way,

<sup>9</sup> ἀνὴρ <γενόμενος> ? Rac.

<sup>10</sup> τάξομεν om. v.l.

<sup>11</sup> τελευταῖον ἤδη Wurmer.

<sup>12</sup> [ἀρμόσει . . . ποιῆσαι] Ipfelkofer.

1441 b

- 15 *μάτων κακολογοῦντες*<sup>1</sup> τὰς κατηγορίας συστήσομεν. δεῖ δὲ μὴ σκώπτειν ὃν ἂν κακολογῶμεν, ἀλλὰ διεξιέναι τὸν βίον αὐτοῦ· μᾶλλον γὰρ οἱ λόγοι τῶν σκωμμάτων καὶ τοὺς ἀκούοντας πείθουσι καὶ τοὺς κακολογουμένους λυποῦσιν· τὰ μὲν γὰρ σκώμματα στοχάζεται τῆς ιδέας ἢ τῆς οὐσίας, οἱ δὲ λόγοι τῶν
- 20 ἡθῶν καὶ τῶν τρόπων εἰσὶν οἷον εἰκόνες. φυλάττου δὲ καὶ τὰς αἰσχροὺς πράξεις μὴ αἰσχροῖς ὀνόμασι λέγειν, ἵνα μὴ<sup>2</sup> διαβάλης τὸ ἡθος, ἀλλὰ τὰ τοιαῦτα αἰνιγματωδῶς ἐρμηνεύειν, καὶ ἐτέρων πραγμάτων ὀνόμασι χρώμενος<sup>3</sup> δηλοῦν τὸ πρᾶγμα. χρή δὲ καὶ ἐν ταῖς κακολογίαις εἰρωνεύεσθαι καὶ καταγελᾶν
- 25 τοῦ ἐναντίου ἐφ' οἷς σεμνύνεται, καὶ ἰδίᾳ μὲν καὶ ὀλίγων παρόντων ἀτιμάζειν αὐτόν, ἐν δὲ τοῖς ὄχλοις κοινὰς μάλιστα κατηγορίας λοιδορεῖν· αὔξειν δὲ καὶ ταπεινοῦν τὸν αὐτὸν τρόπον τὰς κακολογίας ὅνπερ καὶ τὰ ἐγκώμια.

Περὶ μὲν οὖν τούτων τῶν εἰδῶν ἐντεῦθεν εἰδήσομεν τὴν χρῆσιν.

- 30 XXXVI. Λοιπὸν δ' ἐστὶν ἡμῖν εἶδος τό τε κατηγορικὸν καὶ<sup>4</sup> τὸ ἐξεταστικόν. ταῦτα πάλιν ὥς ἐν τῷ δικανικῷ γένει συνθήσομεν καὶ τάξομεν<sup>5</sup> διέλθωμεν.

- Πρῶτον μὲν οὖν ἐν τοῖς προοιμίοις προθήσομεν τὸ πρᾶγμα περὶ οὗ κατηγορήσομεν ἢ ἀπολογησόμεθα, ὥσπερ ἐπὶ τῶν ἄλλων εἰδῶν. προσέχειν
- 85 δὲ παρακαλέσομεν ἐκ τῶν αὐτῶν ὧν ἐν τῷ προ-

<sup>1</sup> v.l. *πραματολογοῦντες*.

<sup>2</sup> [μὴ] ? Rac.

<sup>3</sup> Rac. : *χρωμένους*.

<sup>4</sup> καὶ (τὸ ἀπολογητικὸν καὶ) Sp.

<sup>5</sup> Sp. : *τάξομεν καὶ*.

by employing vituperation with reference to wicked actions. We must not scoff at the person we are vituperating, but recount his career ; for narratives carry more conviction with the hearers than scoffs, and also annoy the victim more, since scoffs are aimed at men's appearance or their possessions, but narratives mirror their characters and manners. Be careful not to designate even his base actions by base names, in order that you may not traduce his character,<sup>a</sup> but to indicate such matters allusively, and to reveal the fact by using words that denote something else. In vituperations also you should employ irony, and ridicule your opponent for the things on which he prides himself ; and in private when few people are present you should try to discredit him, but in crowded assemblies your abuse should consist chiefly of ordinary charges ; and you must amplify and minimize vituperations in the same way as eulogies.

1441 b

15

(2) *Topics of vituperation.*

20

25

As to these species of oratory this will teach us the mode of employing them.

XXXVI. We still have left the oratory of accusation and that of investigation. Let us in turn discuss how we shall construct and arrange these species under the forensic genus.

30

*Structure of forensic oration.*

First then, as in the case of the other species, we shall set out in the introduction the action with which our accusation or defence<sup>b</sup> is concerned. And we shall use the same means to appeal for attention in

(a) *For the prosecution :*

(1) *Introduction.*

35

<sup>a</sup> ' In order not to violate conventional feeling ' (Forster). Perhaps the negative should be omitted, giving ' To discredit his character, do not openly specify his base actions but merely hint at them.'

<sup>b</sup> Included as the opposite of accusation and falling into the same class of oratory ; in the next sentence only defence is specified.



1441 b

τρεπτικῶ καὶ ἐν τῷ ἀπολογητικῷ.<sup>1</sup> ἔτι δὲ καὶ περὶ  
 τῆς εὐμενείας, τῷ μὲν εὖ διακειμένῳ<sup>2</sup> μηδὲ<sup>3</sup> δια-  
 βεβλημένῳ τῷ πρὸς αὐτὸν ἢ πρὸς τὸ πρᾶγμα ἢ  
 1442 a πρὸς τὸν λόγον τοὺς ἀκούοντας δυσχεραίνειν, τὸν  
 αὐτὸν τρόπον ὡς περὶ ἐκείνων εἴρηται τὴν εὐ-  
 μένειαν παρασκευαστέον<sup>4</sup>. τῷ δὲ μήτε εὖ μήτε  
 κακῶς διακειμένῳ<sup>5</sup> καὶ τῷ<sup>6</sup> ἢ ἐκ τοῦ παροιχομένου  
 χρόνου ἢ ἐκ τοῦ παρόντος ἢ δι' ἑαυτὸν ἢ τὸ  
 5 πρᾶγμα ἢ τὸν λόγον διαβεβλημένῳ ἔνια μὲν μεμιγ-  
 μένως ἔνια δ' ἰδίως πρὸς εὐμένειαν ποριστέον.<sup>7</sup>

Οὗτος μὲν οὖν ὁ τρόπος ἔσται δι' οὗ τὴν εὐ-  
 μένειαν παρασκευαστέον. τοὺς μὲν γὰρ μήτε εὖ  
 μήτε κακῶς διακειμένους αὐτοὺς μὲν συντόμως  
 ἐπαινετέον καὶ τοὺς ἐναντίους κακολογητέον, δέι  
 10 δὲ αὐτοὺς ἐκ τούτων ἐπαινεῖν ὧν μάλιστα μέτεστι  
 τοῖς ἀκούουσιν, λέγω δὲ φιλόπολιν φιλέταιρον  
 εὐχάριστον ἐλεήμονα καὶ τὰ τοιαῦτα, τὸν δ' ἐναντίον  
 κακολογεῖν ἐκ τούτων ἐφ' οἷς οἱ ἀκούοντες  
 ὀργιοῦνται, ταῦτα δ' ἐστὶ μισόπολιν μισόφιλον ἀ-  
 χάριστον ἀνελεήμονα καὶ τὰ τοιαῦτα. χρή δὲ καὶ  
 15 τοὺς δικαστὰς ἐπαίνῳ θεραπεῦσαι ὡς δικασταὶ  
 δίκαιοι καὶ δεινοὶ εἰσιν. συμπαραληπτέον δὲ καὶ  
 τὰς ἐλαττώσεις, εἴ που τῶν ἀντιδίκων κατα-  
 δεεστέως ἔχει πρὸς τὸ λέγειν ἢ πράττειν ἢ ἄλλο  
 τι τῶν περὶ τὸν ἀγῶνα. πρὸς δὲ τούτοις ἐμβλητέον  
 τό τε δίκαιον καὶ τὸ νόμιμον καὶ τὸ συμφέρον καὶ  
 20 τὰ τούτοις ἀκόλουθα. τῷ μὲν οὖν μήτε εὖ μήτε

<sup>1</sup> ἀποτρεπτικῶ Sp.<sup>2</sup> post διακειμένῳ add. ἐκ τοῦ παροιχομένου χρόνου ἢ τοῦ παρόντος καὶ codd.: del. Sp.<sup>3</sup> Sp.: μήτε.<sup>4</sup> Rac.: ποριστέον.<sup>5</sup> post διακειμένῳ v.l. add. τὴν εὐμένειαν παρασκευαστέον.

defensive oratory as in the oratory of exhortation. Again, as to goodwill, for a client towards whom the audience is favourably disposed, and not prejudiced through being irritated by his personality or his conduct or his speech, goodwill must be secured in the same way as has been described in the former cases. For one towards whom they are neither favourable nor unfavourable, and also one against whom they have been previously or are now prejudiced either on account of his personality or of his conduct or his speech, we must produce reasons for goodwill, some in combination and others in detail.

That will be the way in which we must secure goodwill. For when the disposition of the audience is neither favourable nor unfavourable, we must briefly praise our clients themselves, while running down their adversaries. We must praise them for the qualities that most concern the audience—I mean loyalty to country and friends, gratitude, compassion and the like ; and we must abuse an adversary for qualities that will provoke the anger of the audience—these are disloyalty to country and friends, ingratitude, hardness of heart and so on. We ought also to court the favour of the jury by praising them for their justice and competence in their office. We must also bring in any matters in which our client is at a disadvantage as compared with the other side with regard to word or deed or anything else concerning the suit. In addition we must bring in considerations of justice, law and expediency and connected matters. These are the means by which we must secure the

<sup>6</sup> καὶ τῷ add. Hammer.  
<sup>7</sup> v.l. om. πρὸς . . . ποριστέον.

1442 a

κακῶς διακειμένῳ ἐκ τούτων ἐν τοῖς δικασταῖς τὴν εὐνοίαν ποριστέον.

Τῷ δὲ διαβεβλημένῳ, εἰ μὲν ἐκ τοῦ παροιχομένου χρόνου αἱ διαβολαὶ ὥσι περὶ τὸν λόγον,<sup>1</sup> ἴσμεν ὥς δεῖ τὰ τοιαῦτα λύειν ἐκ τῶν προτέρων· εἰ δὲ ἐκ τοῦ παρόντος χρόνου περὶ αὐτὸν τὸν  
 25 ἄνθρωπον, ἀναγκαῖον διαβεβλῆσθαι εἰ ἀπρεπὴς ἢ τῷ παρόντι ἀγῶνι ἢ ὑπεναντίος τοῖς ἐγκλήμασιν ἢ ὁμολογούμενος τῇ κατηγορίᾳ. ἀπρεπὴς μὲν οὖν γένοιτ' ἂν εἰ ἀγωνίζεται νεώτερος ἢ πρεσβύτερος ὑπὲρ ἄλλου, ὑπεναντίος δὲ εἰάν τις ἰσχυρὸς ὢν ἀσθενεῖ δικάζεται αἰκίας, ἢ εἰάν τις ὑβριστὴς ὢν  
 30 ὑβριν ἐγκαλῇ σῶφρονι, ἢ εἰάν τις πάνυ πλουσίῳ δικάζεται πάνυ πένης χρημάτων ἐγκαλῶν. οἱ μὲν οὖν τοιοῦτοι ὑπεναντίοι εἰσὶ τοῖς ἐγκλήμασιν· ὁμολογούμενος δ' ἔσται, εἰάν τις ἰσχυρὸς ὢν ὑπὸ ἀσθενοῦς αἰκίας διώκεται, ἢ εἰάν τις κλέπτῃς δοκῶν  
 35 εἶναι κλοπῆς δίκην φεύγῃ· ὅλως δὲ οἱ τὰς περὶ αὐτῶν δόξας ὁμοιοτρόπους αὐτοῖς ἔχοντες ὁμολογούμενοι τοῖς ἐγκλήμασι δόξουσιν εἶναι. περὶ μὲν οὖν αὐτὸν τὸν ἄνθρωπον ἐκ τοῦ παρόντος χρόνου τοιαῦται γενήσονται διαβολαί, αἱ δὲ περὶ τὸ πρᾶγμα συμβαίνουσαι,<sup>2</sup> εἰάν τις πραγματεύηται πρὸς οἰ-  
 1442 b κείους φίλους ἢ ξένους ἢ ἰδίους,<sup>3</sup> ἢ περὶ μικρῶν ἢ αἰσχυρῶν· ταῦτα γὰρ ἀδοξίαν τοῖς δικαζομένοις ποιεῖ.

Πῶς οὖν τὰς διαβολὰς τὰς προειρημένας ἀπολύσομεν, τοῦτο δηλώσω. δύο μὲν δὴ στοιχεῖα

<sup>1</sup> [περὶ τὸν λόγον] Sp.<sup>2</sup> συμβαίνουσι Sp.<sup>3</sup> [ἢ ἰδίους] Kayser.

goodwill of the jury for persons towards whom they are neither well nor ill disposed.

For a man against whom they are prejudiced, if the prejudices turn on something he has said in the past, we know from what has gone before how to dissipate difficulties of this sort. If the prejudices arise from <sup>25</sup> the present and concern him personally, there is bound to be prejudice against him if his personality is unsuited for the case in progress or incompatible with the accusations he is making or consistent with the charge brought against him. There would be unsuitability if one who was too young or too old appeared on behalf of another ; incompatibility if a strong man sued a weak one for assault, or a violent man brought a charge of violence against a well- <sup>30</sup> behaved one, or a very poor man sued a very rich one on a charge of defrauding him of money : such are cases where the personality of the litigants is incompatible with the charges. There will be compatibility if a strong man is prosecuted for assault by a weak man, or if a charge of theft is brought against a person with a reputation for stealing ; and in general, the charges will be thought to be consistent with the <sup>35</sup> litigants if their reputations tally with their actual personalities. Such are the prejudices that will arise at the time in connexion with the litigant's personality. Prejudices occurring in regard to his action will be raised if a man takes proceedings against relations or guests or private friends, or about petty or dis- <sup>1442 b</sup> creditable matters : these things bring litigants into disrepute.

I shall now show how we shall get rid of the aforesaid prejudices. I maintain that there are two elementary

1442 b

λέγω κοινὰ κατὰ πάντων, τὸ μὲν, οἷς ἂν νομίζης  
 5 τοὺς κριτὰς ἐπιπλήξειν, προκαταλάμβανε αὐτοὺς  
 καὶ ἐπίπληττε· τὸ δὲ ἕτερον εἰ τὰς πράξεις  
 μάλιστα μὲν εἰς τοὺς ἀντιδίκους ἀποτρέψεις, εἰ δὲ  
 μή, εἰς ἄλλους τινάς, προφάσει χρώμενος ὅτι οὐχ  
 ἐκὼν ἀλλ' ὑπὸ τῶν ἀνταγωνιστῶν ἀναγκαζόμενος  
 εἰς τὸν ἀγῶνα κατέστης. καθ' ἐκάστην δὲ τὴν  
 10 διαβολὴν τάδε χρή προφασίζεσθαι, τὸν μὲν νεώ-  
 τερον πρεσβυτέρων φίλων ἀπορίαν τῶν ἀγωνιου-  
 μένων ὑπὲρ αὐτοῦ, ἢ μέγεθος ἀδικημάτων, ἢ  
 πλῆθος,<sup>2</sup> ἢ προθεσμίαν χρόνου, ἢ ἄλλο τι τοιοῦτον.  
 εἰ δὲ ὑπὲρ ἄλλου λέγῃς, ῥητέον ὥς διὰ φιλίαν  
 συνηγορεῖς, ἢ δι' ἔχθραν τοῦ ἀντιδίκου, ἢ διὰ τὸ  
 15 τοῖς πράγμασι παραγενέσθαι, ἢ διὰ τὸ κοινῇ συμ-  
 φέρον, ἢ διὰ τὸ ἔρημον εἶναι καὶ ἀδικεῖσθαι ὧ  
 συνηγορεῖς. εἰ δὲ ὁμολογούμενος τῷ ἐγκλήματι  
 ἢ ὑπεναντίος τῇ κατηγορίᾳ γένηται,<sup>3</sup> τῇ τε προ-  
 καταλήψει χρήσθαι καὶ λέγειν ὥς οὐ δίκαιον καὶ  
 νόμιμον οὐδὲ συμφέρον ἐκ τῆς ὑπολήψεως ἢ τῆς  
 20 ὑποψίας κατακρίνειν πρὶν τοῦ πράγματος ἀκοῦσαι.  
 τὰς μὲν οὖν περὶ τὸν ἄνθρωπον αὐτὸν διαβολὰς  
 οὕτω λύσομεν, τὰς δὲ περὶ τὸ πρᾶγμα οὕτως  
 ἀπωσόμεθα, τὴν αἰτίαν εἰς τοὺς ἐναντίους<sup>4</sup> τρέ-  
 ποντες, ἢ λοιδορίαν ἐγκαλοῦντες αὐτοῖς ἢ ἀδικίαν  
 ἢ πλεονεξίαν ἢ φιλονεικίαν ἢ ὀργήν, προφασιζόμενοι  
 25 ὅτι τοῦ δικαίου δι' ἄλλου τρόπου τυχεῖν ἀδύνατον.  
 τὰς μὲν οὖν ἰδίας διαβολὰς ἐπὶ τῶν δικαστῶν<sup>5</sup> οὕτω

<sup>1</sup> v.l. εἰς.<sup>2</sup> ἢ πλῆθος hic Sp.: infra post χρόνου.<sup>3</sup> γένῃ, δέι Sp.<sup>4</sup> Sp.: τὸ ἐναντίον αὐτὸν τὸν ἐναντίον.<sup>5</sup> v.l. δικαστηρίων.



rules that apply to all cases in common. The first rule is this—whatever arguments you think your adversaries will use to make an impression on the judges, anticipate them and make the impression yourself. The second way is if you shift the responsibility for the acts, if possible, on to your opponents, or failing that, on some other persons, pleading that you have become involved in the suit not of your own will but under compulsion from your adversaries. The following excuses must be put forward to correspond with each particular prejudice. A comparatively young man must plead lack of friends to contest the case on his behalf, or the magnitude and number of the offences with which he is charged, or the time-limit fixed, or something else of the sort. If you are speaking on behalf of another person, say that your motive for advocating his cause is friendship, or enmity for his opponent, or your having been present at the events, or the public interest, or your client's isolated position and the wrong that has been done to him. If his personality is consistent with the charge brought against him or not compatible with the charge that he is bringing, employ anticipation, and say that it is unjust and illegal and inexpedient to convict on the strength of an opinion or a suspicion before hearing the facts. This is how we shall dissipate prejudices felt against a man personally. Those that turn on his conduct we shall repulse thus—by turning the blame against his opponents, accusing them either of slander or injustice or cheating or contentiousness or bad temper, pleading that it is impossible to get justice by any other means. This is how we shall dissipate private prejudices in the case of the



1442 b

λύσομεν, τὰς δὲ κοινὰς πᾶσι τοῖς εἶδεσιν, ὥς ἐπὶ τῶν προτέρων εἰδῶν εἴρηται.

Τάξομεν δὲ τὰ δικανικὰ προοίμια τὸν αὐτὸν τρόπον ὅνπερ καὶ τὰ δημηγορικά· κατὰ τὸν αὐτὸν  
 80 δὲ τρόπον<sup>1</sup> καὶ τὰς ἀπαγγελίας ἧ<sup>2</sup> συνάψομεν τῷ προοιμίῳ ἧ<sup>3</sup> περὶ τὰ μέρη πιστὰς καὶ δικαίας ἀποφανοῦμεν ἢ αὐτὰς ἐφ'<sup>4</sup> ἑαυτῶν σωματοειδεῖς ποιησόμεθα.

Τὰ δὲ μετὰ ταῦτα ἔσται βεβαίωσις, ἃν μὲν ἀντιλέγῃται τὰ πράγματα ὑπὸ τῶν ἀντιδίκων, ἐκ  
 35 τῶν πίστεων, ἃν δὲ ὁμολογῇται, ἐκ τῶν δικαίων καὶ τῶν συμφερόντων καὶ ἐκ τῶν τούτοις ἀκολουθῶν. τάττειν δὲ δεῖ τῶν μὲν πίστεων πρώτας τὰς μαρτυρίας καὶ τὰ ἐκ τῶν βασάνων ἡμῖν ὁμολογηθέντα, ἃν ὑπάρχη. ἔπειτα βεβαιοῦν, ἃν μὲν πιθανὰ ᾖ, γνώμαις καὶ ἐνθυμήμασιν, ἂν δὲ μὴ παντελῶς  
 1443 a πιθανὰ ᾖ, τῷ εἰκότι, ἔπειτα τοῖς παραδείγμασι καὶ τοῖς τεκμηρίοις καὶ τοῖς σημείοις καὶ τοῖς ἐλέγχοις, τελευταῖον δὲ τοῖς ἐνθυμήμασι καὶ ταῖς γνωμολογίαις. ἂν δὲ ὁμολογῇται τὰ πράγματα, τὰς μὲν πίστεις ἑατέον, τῇ δὲ δικαιολογίᾳ ὥσπερ ἐν τοῖς  
 5 ἔμπροσθεν χρηστέον. καὶ τοῦτον μὲν τὸν τρόπον βεβαιώσομεν.

Μετὰ δὲ τὴν βεβαίωσιν τὰ πρὸς<sup>5</sup> τοὺς ἀντιδίκους τάττοντες προκαταληψόμεθα αὐτῶν τὰ ἐπίδοξα λέγεσθαι. ἂν μὲν οὖν ἐξαρνῶνται τὰ πράγματα,<sup>6</sup> τὰς μὲν ὑφ' ἡμῶν πίστεις εἰρημένους αὐξήτέον  
 10 τὰς δ' ὑπ' ἐκείνων μελλούσας λέγεσθαι διασυρτέον καὶ ταπεινωτέον. ἂν δὲ ὁμολογοῦντες μέλλωσιν<sup>7</sup>

<sup>1</sup> v.l. λόγον.<sup>2</sup> ἧ add. Finckh.<sup>3</sup> ἧ Finckh: καὶ ἧ.<sup>4</sup> Pacius: ὑφ'.<sup>5</sup> v.l. ἐπὶ.<sup>6</sup> Forster: τὸ πᾶγμα.<sup>7</sup> Sp.: ὥσι.

judges; public ones<sup>a</sup> we shall remove by all the methods that have been described, as has been said<sup>b</sup> in the case of the previous species of oratory.

1442 b

In forensic speeches we shall arrange the introduction in the same way as in parliamentary ones, and we shall also deal in the same way with the narratives of facts,<sup>c</sup> either attaching them to the introduction or proving their reliability and justice under the various divisions of the speech, or setting them out as a separate section by themselves.

The next section will be confirmation. This will be based on proofs if the facts are denied by the opposite party, but on considerations of justice and expediency and the like if they are admitted. First among the proofs must be placed the evidence of witnesses and confessions that we have obtained by torture, if any be available. Next this evidence must be confirmed by means of maxims and general considerations, if it be convincing, or if not entirely convincing, by probability, and then by examples, tokens, signs and refutations, and by considerations and the enunciation of maxims to finish with. If the facts are admitted, proofs may be passed over, and legal arguments employed, as in the earlier passages. This is the way in which we shall effect confirmation.

(2) *Proof of charges.*

35

1443 a

After confirmation we shall put our case against our opponents, anticipating their probable arguments. If their line is to deny the acts, we must amplify the proofs that we have put forward and pull to pieces and minimize those that are going to be put forward by them. If they are going to admit the acts and try

(3) *Anticipation of opponent's case.*

10

<sup>a</sup> 'Those that concern a man's public life' (Forster).

<sup>b</sup> 1436 b 37 ff.

<sup>c</sup> Cf. 1438 b 24.

ἔννομα καὶ δίκαια ἀποφαίνειν κατὰ τοὺς γεγραμ-  
 μένους νόμους, οὓς μὲν ἡμεῖς παρεσχόμεθα καὶ τοὺς  
 ὁμοίους τούτοις δικαίους καὶ καλοὺς καὶ συμ-  
 φέροντας τῷ κοινῷ τῆς πόλεως καὶ<sup>1</sup> κεκριμένους ὑπὸ  
 τῶν πολλῶν τοιούτους εἶναι πειρατέον ἐπιδεικνύνειν,  
 15 τοὺς δὲ τῶν ἀντιδίκων τὰ ἐναντία. εἰ δὲ μὴ  
 ἐνδέχεται ταῦτα λέγειν, ὑπομύνησκε τοὺς δικαστὰς  
 ὅτι οὐχ ὑπὲρ τοῦ νόμου ἀλλὰ τοῦ πράγματος δικά-  
 ζουσιν, ὁμόσαντες κατὰ τοὺς νόμους τοὺς κειμένους  
 τὴν ψῆφον οἴσιν, καὶ δίδασκε ὅτι οὐ νομοθετεῖν  
 νῦν προσήκει ἀλλ' ἐν ταῖς περὶ τούτων κυρίαις  
 20 ἡμέραις. ἂν δ' ἡμῖν συμβαίνειη παρὰ μοχθηροῦς  
 δοκοῦντας<sup>2</sup> εἶναι νόμους τὸ πρᾶγμα πεπραχθαι,  
 ῥητέον ὥς οὐ νόμος ἀλλ' ἀνομία τὸ τοιοῦτόν ἐστιν.  
 ὁ μὲν γὰρ νόμος ἐπὶ τὸ<sup>3</sup> ὠφελεῖν τίθεται, οὗτος δὲ  
 βλάπτει τὴν πόλιν. ῥητέον δὲ καὶ ὥς οὐ παρα-  
 25 νομήσουσιν ἂν τούτῳ τῷ νόμῳ ἐναντίαν ψῆφον  
 θῶνται, ἀλλὰ νομοθετήσουσιν ὥστε μὴ χρῆσθαι  
 δόγμασι ποιηροῖς καὶ παρανόμοις. δεῖ δὲ καὶ  
 τοῦτο συμβιβάζειν, ὥς οὐδεὶς νόμος κωλύει τὸ  
 κοινὸν εὖ ποιεῖν, τοὺς δὲ φαύλους νόμους ἀκύρους  
 ποιεῖν εὐεργετεῖν τὴν πόλιν ἐστίν. περὶ μὲν οὖν  
 τῶν σαφῶς εἰρημένων νόμων, ὁποίους<sup>4</sup> ἂν αὐτῶν<sup>5</sup>  
 30 ἔχωμεν, ἐκ τῶν τοιούτων προκαταλαμβάνοντες  
 ἀντιλέγειν εὐπορήσομεν. περὶ δὲ τῶν ἀμφιβόλων  
 εἰδὲς οὕτως ὑπολαμβάνωσιν ὥς σοὶ συμφέρει, δεῖ  
 ταῦτα ὑποδεικνύνειν. ἂν δ' ὥς ὁ ἐναντίος λέγει, χρή  
 διδάσκειν ὥς ὁ νομοθέτης οὐ<sup>6</sup> τοῦτο διανοεῖτο ἀλλ'<sup>7</sup>  
 ὁ σὺ λέγεις, καὶ ὅτι συμφέρει αὐτοῖς οὕτω λέγειν

<sup>1</sup> καὶ add. Bekker.    <sup>2</sup> v.l. τὸ παρὰ μοχθηροῖς δοκοῦσιν.

<sup>3</sup> v.l. τῷ.    <sup>4</sup> ὁποτέρους? Rac.    <sup>5</sup> αὐτοῖς Kayser.

<sup>6</sup> οὐ: αὐτὸ Halm.    <sup>7</sup> ἀλλ' add. Sp.

to prove that they were legal and just according to the laws enacted, we must attempt to show that the laws adduced by us and those like them are just and honourable and advantageous to the common weal, and have been judged to be so by the general body of the citizens, and that those quoted by the other side 15 are the opposite. If it is not feasible to take this line, remind the jury that they are giving judgement not about the law but about the fact, as they have sworn that they will give their vote according to the laws established ; and instruct them that it is not proper to make laws on the present occasion but on the regular days appointed for that purpose. If the 20 position is that the action committed was contrary to laws that seem to be bad ones, we must say that a regulation of that sort is not law but the negation of law, inasmuch as the law is laid down for the public benefit, but this law is injurious to the state. And we must also say that if the jury give a verdict con- 25 travening this law, they will not be acting illegally but legislating to prevent the execution of resolutions that are bad and illegal. Also we must bring forward the point that no law forbids acting for the good of the community, and that it is a public service to annul bad laws. Such considerations as these will give us 30 plenty to say against our opponent's case in anticipation with regard to laws that are clearly expressed, whatever class of them we have before us. About laws that are ambiguous, if the jury understand them in the sense favourable to you, you must indicate that interpretation ; if they accept your opponent's view, you must explain that the legislator had not that meaning in mind but the one you put forward, and that for the law to have your meaning is to their

1443 a

35 τὸν νόμον. εἰ δὲ μὴ δυνατὸς ἦς ἐπὶ τὸ ἐναντίον μεθιστάναι, δείκνυε ὡς οὐδὲν ἄλλο λέγειν δύναται ὁ νόμος<sup>1</sup> ἢ ὁ σύ. καὶ περὶ μὲν νόμων, ὡς δεῖ χρησθαι, τοῦτον τὸν τρόπον μετιὼν εὐπορήσεις.

Καθόλου δέ, ἂν ὁμολογήσαντες ἐκ τῶν δικαίων  
40 καὶ τῶν νομίμων τὴν ἀπολογία ποιεῖσθαι μέλ-  
λωσιν, ἐκ τούτων τὰ ἐπίδοξα ῥηθήσεσθαι προκατα-  
ληπτέον. εἰ δὲ ὁμολογήσαντες συγγνώμης ἀξιῶσι

1443 b τυχεῖν, ὧδε χρὴ περαιοῦσθαι τὰ τοιαῦτα τῶν  
ἀντιδίκων. πρῶτον μὲν λεκτέον ὡς κακοηθέστερον  
ἦν, καὶ ὡς τὰ τοιαῦτα ἐξαμαρτάνειν φασὶν ὅταν  
γνωσθῶσιν, ὥστε “εἰ τούτῳ συγγνώμην ἔχετε, καὶ  
τοὺς ἄλλους πάντας τῶν τιμωριῶν ἀφήσετε.” ἔτι

5 δὲ λέγε ὡς “εἰ τῶν ὁμολογούντων ἐξαμαρτάνειν  
ἀποψηφιέσθε, πῶς τῶν μὴ ὁμολογούντων κατα-  
ψηφιέσθε;” λεκτέον δὲ ὅτι “εἰ καὶ ἐξήμαρτεν,  
οὐκ ἐμὲ δεῖ διὰ τὴν τούτου ἁμαρτίαν ζημιοῦσθαι.”  
πρὸς δὲ τούτοις ῥητέον ὡς οὐδὲ ὁ νομοθέτης τοῖς  
ἁμαρτάνουσι συγγνώμην ἔχει· οὐκοῦν δίκαιον οὐδὲ  
10 τοὺς δικαστὰς κατὰ τοὺς νόμους κρίνοντας. ἐκ μὲν  
οὖν τῶν τοιούτων τὰς συγγνώμας περαιορησόμεθα,  
καθάπερ καὶ ἐν ἀρχαῖς δεδηλώκαμεν· συλλήβδην δὲ  
τὰ ὑπὸ τῶν ἀντιδίκων μέλλοντα λέγεσθαι καὶ πρὸς  
πίστιν καὶ δικαιολογίαν καὶ συγγνώμην ἐκ τῶν  
προειρημένων προκαταληψόμεθα.

15 Μετὰ δὲ ταῦτα<sup>2</sup> τὴν αἰτίαν ἀναλογιστέον<sup>3</sup> ἐν  
κεφαλαίῳ τοῦ λόγου ὅλου,<sup>4</sup> καὶ συντόμως, εἰ  
ἐνδέχεται, πρὸς μὲν τοὺς ἐναντίους ἔχθραν ἢ ὀργὴν

<sup>1</sup> Kayser: λέγειν ὁ ἐναντίος δύναται νόμος.

<sup>2</sup> v.l. ταύτην.

<sup>3</sup> v.l. ἀναλογητέον.

<sup>4</sup> Kayser: τὸν λόγον ὅλον (μετὰ δὲ ταῦτα τὴν αἰτιολογίαν παλλιλλογητέον ἐν κεφαλαίῳ τοῦ λόγου ὅλου ? Hammer).



advantage. If you cannot turn the law the other way round, show that it cannot possibly mean anything else than what you say. If you follow this method you will have no difficulty as to how to deal with the point of law.

In general, if your opponents are going to admit the facts and base their defence on principles of justice and legality, you must anticipate what is likely to be said under those heads. If while admitting the facts they claim to be granted pardon, this is the way in which you must deprive your adversaries of pleas of that nature. First you must say that their conduct was really more unprincipled, and that those are the sort of offences that they admit when they are found out, and consequently ' If you pardon this man you will absolve everybody else too from punishment.' Further say : ' If you give a verdict of Not guilty on those who confess their offence, how will you be able to vote Guilty on those who do not confess ? ' And you must say : ' Even if he is guilty, I ought not to be punished for his offence.' Furthermore argue that even the lawgiver does not pardon offenders ; neither, therefore, is it right for the jury to do so when giving judgement according to the laws. We shall use arguments like these to deprive our adversaries of pleas for pardon, as we have also shown at the beginning ; and generally, we shall anticipate what our adversaries are going to say to prove their case on points of principle and in pleading for pardon by employing the considerations previously stated.

After this, in a summary of the whole speech we must repeat the charge, and if feasible briefly inspire the jury with hatred or anger or jealousy against our

(4) *Recapitulation.*



1443 b

ἢ φθόνον τοῖς δικασταῖς ἐμποιητέον πρὸς δ' ἡμᾶς  
 φιλίαν ἢ χάριν ἢ ἔλεον. ὅθεν δὲ ταῦτα γίνεται, ἐν  
 τῷ δημηγορικῷ εἶδει<sup>1</sup> ἐπὶ τῶν προτροπῶν καὶ  
 20 ἀποτροπῶν εἰρήκαμεν, καὶ ἐν τῷ ἀπολογητικῷ  
 εἶδει πάλιν ἐπὶ τελευτῆς διέξιμεν.

Τὸν μὲν οὖν πρῶτον λόγον, ἐὰν κατηγορῶμεν ἐν  
 τοῖς δικανικοῖς, οὕτω συνθήσομεν καὶ τάξομεν.

Ἐὰν δὲ ἀπολογώμεθα, τὸ μὲν προοίμιον ὁμοιο-  
 τρόπως τῷ κατηγοροῦντι<sup>2</sup> συστήσομεν, τῶν δὲ  
 25 κατηγορουμένων ἃ μὲν εἰδέναι τοὺς ἀκούοντας  
 ἐποίησε, παραλείβομεν, ἃ δὲ δοξάζειν, ταῦτα προ-  
 θέμενοι μετὰ τὸ προοίμιον διαλύσομεν, τοὺς τε μάρ-  
 τυρας καὶ τὰς βασάνους καὶ τοὺς ὅρκους ἀπίστους  
 ποιήσομεν, ὡς προακήκοας, εἰ μὲν τὰ πράγματα  
 30 πιστὰ εἴη,<sup>3</sup> τὴν ὑπὲρ αὐτῶν ἀπολογία ἐπὶ τὸν  
 ἐκ τοῦ παραλειπομένου τόπον μεταβιβάζοντες, εἰ  
 δ' εἴην οἱ μάρτυρες οἱ βασανισθέντες πιστοί, ἐπὶ  
 τὸν λόγον ἢ τὴν πράξιν ἢ ὅ τι ἂν ἄλλο ἔχῃς ἐπὶ<sup>4</sup>  
 τῶν ἐναντίων πιστότατον. ἂν δὲ τὸ λυσιτελές ἢ τὸ  
 ἔθος ἐπιφέρων σοῦ κατηγορήσῃ, ἀπολογουῦ μάλιστα  
 35 μὲν ὡς ἀλυσιτελές<sup>5</sup> σοί<sup>6</sup> ἐστι τὸ κατηγορούμενον,  
 εἰ δὲ μή, ὅτι οὐκ εἴθισαι τὰ τοιαῦτα πράττειν οὔτε  
 σὺ οὔτε οἱ σοὶ ὅμοιοι, ἢ ὅτι οὐ τοῦτον τὸν τρόπον.  
 τὸ μὲν οὖν εἰκὸς οὕτω λύσεις.

Τὸ δὲ παράδειγμα πρῶτον μὲν, ἂν δύνῃ, δείκνυε  
 ὡς οὐχ ὁμοίον ἐστι τῷ ἐγκαλουμένῳ, εἰ δὲ μή,  
 ἕτερον φέρε αὐτὸς παράδειγμα ἐκ τῶν ἐναντίων  
 40 παρὰ τὸ εἰκὸς γενόμενον. τὸ δὲ τεκμήριον λύε

<sup>1</sup> εἶδει Rac.: καὶ (om. nonnulli).

<sup>2</sup> κατηγορικῷ Kayser.

<sup>3</sup> Sp.: ἢ. <sup>4</sup> [ἐπὶ] Sp.

<sup>5</sup> Bekker: λυσιτελές.

<sup>6</sup> σοί add. Kayser.

<sup>a</sup> Cf. 'Cui bono?'

<sup>b</sup> Cf. 1429 a 21.

opponents and friendship or favour or pity for ourselves. We have said how these feelings are to be produced when we were dealing with persuasion and dissuasion in the section on parliamentary oratory,<sup>20</sup> and we shall go over it again in the section at the end on defence.

This, then, is how we shall construct and arrange the opening speech in forensic cases if we are for the prosecution.

If we are for the defence, we shall construct the<sup>25</sup> introduction in the same way as the prosecutor: we shall pass over charges of which he gave his hearers convincing proofs, and put forward after our introduction and refute those which he only got them to accept as probable; and we shall discredit the witnesses, and statements made under torture and on oath, in the way which you have heard already,—if the facts be convincing, by transposing our defence about them<sup>30</sup> into the form based on omission; if the witnesses that have been examined under torture are trustworthy, by passing over to the argument or action or anything else that is your most convincing point against your opponents. If his accusation is based on the ground that you stood to gain by the act,<sup>a</sup> or that it is your habit, plead in defence, if possible, that the action you are charged with would not have been profitable to you, or else that it is not your habit nor<sup>35</sup> the habit of people like you to do such acts, or not to do them in that way. This is how you will refute the argument from probability.

In dealing with an example,<sup>b</sup> first show if you can that it does not resemble the act of which you are accused, or else yourself produce another example to the contrary that has occurred against probability.<sup>40</sup>

(b) Forensic  
oration for  
the defence:  
(1) Alleged  
actions  
disproved,

1443 b

φράζων παρ' ἧς αἰτίας ἐναντιωθῆναι συνέβη. τὰς

1444 a δὲ γνώμας καὶ τὰ ἐνθυμήματα ἢ παράδοξα ἀπό-  
φαινε ἢ ἀμφίβολα. τὰ δὲ σημεία πλειόνων ὄντα<sup>1</sup>  
ἀπόφαινε σημεία, καὶ μὴ μόνου τοῦ σοὶ ἐγκαλου-  
μένου. καὶ τὰ μὲν τῶν ἐναντίων ἐπὶ τὸ ἐναντίον  
ἄγοντες ἢ ἐπὶ τὸ ἀμφίβολον ἀπίθانا τοῦτον τὸν  
■ τρόπον καταστήσομεν.

Ἄν δὲ ὁμολογῶμεν τὰ ἐγκαλούμενα πεποιηκέναι,  
ἐκ τῶν δικαίων καὶ νομίμων μετιόντες ἐννομώτερα  
καὶ δικαιότερα τὰ ἡμέτερα ἀποδεικνύναι πειρασό-  
μεθα. εἰ δὲ μὴ τοῦτο ἐνδέχεται, εἰς ἀμάρτημα ἢ  
ἀτύχημα καταφεύγοντας καὶ μικρὰς τὰς βλάβας  
10 ἀποφαίνοντας, συγγνώμης τυγχάνειν πειρατέον τὸ  
μὲν ἀμαρτάνειν κοινὸν πάντων ἀνθρώπων ἐπι-  
δεικνύοντας τὸ δ' ἀδικεῖν ἴδιον τῶν πονηρῶν. λέγε  
δὲ ὅτι καὶ ἐπιεικὲς καὶ δίκαιον καὶ συμφέρον ἐστὶ  
συγγνώμην ἔχειν ταῖς ἀμαρτίαις· οὐδεὶς γὰρ οἶδεν  
ἀνθρώπων εἴ τι τοιοῦτον ἂν<sup>2</sup> αὐτῷ συνεμπέσοι.<sup>3</sup>  
15 ἀπόφαινε δὲ<sup>4</sup> καὶ τὸν ἐναντίον, εἴ τι ἐξήμαρτεν,  
συγγνώμης τυχεῖν ἀξιώσαντ' αὖν.

Μετὰ δὲ<sup>5</sup> ταῦτα αἱ προκαταλήψεις αἱ ὑπὸ τῶν  
ἐναντίων εἰρημέναι. τὰς μὲν οὖν ἄλλας ἐξ αὐτῶν  
τῶν πραγμάτων εὐπορήσομεν λύειν· εἰ δὲ δια-  
βάλλωσιν ἡμᾶς ὡς γεγραμμένους λόγους λέγομεν  
20 ἢ λέγειν μελετῶμεν ἢ ὡς ἐπὶ μισθῷ τινὶ συν-  
ηγορούμεν, χρή πρὸς τὰ τοιαῦτα ὁμόσε βαδίζοντας  
εἰρωνεύεσθαι, καὶ περὶ μὲν τῆς γραφῆς λέγειν μὴ  
κωλύειν τὸν νόμον ἢ αὐτὸν γεγραμμένα λέγειν ἢ  
ἐκεῖνον ἄγραφα· τὸν γὰρ νόμον οὐκ εἶναι τοιαῦτα<sup>6</sup>

<sup>1</sup> Sp.: ὄντων.<sup>2</sup> ἂν add. Rac.<sup>3</sup> v.l. συνεμπέσση.<sup>4</sup> δὲ add. Rac.<sup>5</sup> δὲ add. Aldus.<sup>6</sup> τὰ καὶ τὰ? Rac.

\* Cf. 1430 a 14.

Refute a token<sup>a</sup> by giving reasons showing that what really happened was just the opposite. Maxims and considerations you must show to be either paradoxical or ambiguous. Signs you must show to indicate a variety of things, and not only the act of which you are accused. In this way we shall make our opponents' arguments unconvincing, by showing that they point in the opposite direction or that they are ambiguous. 1443 b  
1444 a

If, on the other hand, we admit the actions we are charged with, we shall take the line of justice and legality, and we shall endeavour to prove that our conduct was more legal and more just. If this is not feasible, we shall have recourse to the plea of error or of misfortune, and shall show that the damage done was small, attempting to obtain forgiveness by pointing out that error is common to all mankind, whereas wrongdoing is peculiar to the wicked. Say that to forgive error is reasonable and just and expedient, because no human being knows whether something of the kind might not befall himself. And point out that if your opponent had committed an error he too would have asked for pardon. (2) or justified, or palliated;  
10  
15

After this come the anticipations of our case made in the speeches of our opponents. For the most part we shall find no difficulty in rebutting them merely on the strength of the facts; but if they try to discredit us by saying that we read our speeches, or practise them beforehand, or that we are acting as advocates for a reward, we must come to close quarters with suggestions of that sort, in a tone of irony, and about writing our speech say that the law does not forbid one to read a written speech oneself any more than it forbids one's adversary to speak without notes; what the law prohibits is certain (3) anticipations answered;  
20

1444 a

πράττειν, λέγειν δὲ ὅπως ἂν τις βούληται συγ-  
 25 χωρεῖν. ῥητέον δὲ καὶ ὅτι “ οὕτως ὁ ἐναντίος οἶεται  
 μεγάλα ἡδίκηκέναι ὥστ’ οὐ νομίζει με κατ’ ἀξίαν  
 ἂν<sup>1</sup> κατηγορῆσαι εἰ μὴ γράψαιμι<sup>2</sup> καὶ πολὺν χρόνον  
 σκεψαίμην.” πρὸς<sup>3</sup> μὲν οὖν τὰς τῶν γεγραμμένων  
 λόγων διαβολὰς οὕτως ἀπαντητέον· ἂν δὲ φάσκωσιν  
 ἡμᾶς λέγειν μανθάνειν καὶ μελετᾶν, ὁμολογήσαντες  
 30 ἐροῦμεν “ ἡμεῖς μὲν οἱ μανθάνοντες, ὡς φῆς, οὐ  
 φιλόδοκοί ἐσμεν, σὺ δὲ ὁ λέγειν μὴ ἐπιστάμενος καὶ  
 νῦν ἡμᾶς καὶ πρότερον ἐάλως συκοφαντῶν,” ὥστε  
 λυσιτελεῖς φανεῖται τοῖς πολίταις κακεῖνον μανθάνειν  
 ῥητορεύειν· οὐ γὰρ ἂν<sup>4</sup> οὕτω πονηρὸν οὐδὲ συκο-  
 35 φάντην αὐτὸν εἶναι. τὸν αὐτὸν δὲ τρόπον καὶ ἡμᾶς  
 ἐπὶ μισθῷ συνηγορεῖν λέγει τις, ὁμολογήσαντες  
 εἰρωνευσόμεθα, καὶ τὸν αἰτιώμενον ἡμᾶς ἐπι-  
 δείξομεν ταῦτ’<sup>5</sup> ποιοῦντα καὶ τοὺς ἄλλους ἀπαντας.  
 τῶν δὲ μισθῶν διαίρει<sup>6</sup> τὰ εἶδη, καὶ λέγε<sup>7</sup> ὡς οἱ  
 μὲν ἐπὶ χρήμασιν οἱ δ’ ἐπὶ χάρισιν οἱ δ’ ἐπὶ τι-  
 40 μωρίαις οἱ δ’ ἐπὶ τιμαῖς συνηγοροῦσιν· σαυτὸν<sup>8</sup> μὲν  
 οὖν ἀπόφαινε διὰ χάριν συνηγοροῦντα, τὸν δ’  
 1444 b ἐναντίον λέγε οὐδ’ ἐπὶ μικρῷ μισθῷ συνηγορεῖν·  
 ὅπως γὰρ λάβῃ ἀργύριον ἀδίκως, οὐχ ὅπως μὴ  
 ἐκτίσῃ, δικάζεται. τῷ αὐτῷ δὲ τρόπῳ<sup>9</sup> καὶ ἐάν τις  
 ἡμᾶς δικάζεσθαι τινὰς λέγει διδάσκειν, ἢ λόγους  
 5 δικανικοὺς συγγράφειν· ἀπόφαινε γὰρ<sup>10</sup> καὶ τοὺς  
 ἄλλους ἀπαντας, καθ’ ὅσον δύνανται, τοὺς φίλους  
 ὠφελεῖν καὶ διδάσκοντας καὶ συμβουλευόντας. καὶ  
 οὕτως ἐντέχνως περὶ τῶν τοιούτων ἀπαντήσεις.

<sup>1</sup> ἂν add. Halm.<sup>2</sup> Rac.: γράφοιμι.<sup>3</sup> Sp.: περὶ.<sup>4</sup> ἂν add. Halm.<sup>5</sup> Finckh: τοῦτο.<sup>6</sup> Sp.: διαιρεῖν aut διαιροῦ.<sup>7</sup> v.l. λέγειν.<sup>8</sup> Sp.: αὐτὸν.<sup>9</sup> τρόπῳ (δεῖ χρῆσθαι) Sp.<sup>10</sup> ἀποφανοῦμεν Sauppe.



actions—it allows a man to speak as he likes. One should also say : ‘ My opponent thinks the offences <sup>25</sup> he has committed are of such magnitude that he feels I should not be able to conduct the prosecution adequately if I had not written my speech and given much time to considering it.’ This is how to meet misrepresentations about written speeches. If they say that we study and practise speaking, we shall admit the charge, and say : ‘ We who study <sup>30</sup> speaking, as you say, are not litigious, whereas you who do not know how to make a speech are proved to be bringing a malicious prosecution against us now and to have done so before ’—so making it appear that it would be to the advantage of the public if he too studied rhetoric, as he would not be such a rascally blackmailer if he did. In the same way also if someone says that we are acting as advocates for a <sup>35</sup> reward, we shall admit it in an ironical tone, and prove that the person accusing us does the same, and so does everybody else. Also distinguish between the different sorts of reward, and say that some people act as advocates for money, others as a favour, others for revenge, others for honours ; and then <sup>40</sup> show that you yourself are acting as advocate for a favour, but say that your opponent is acting for a <sup>1444 b</sup> reward and not a small one, as he is bringing the case in order to get money dishonestly, not in order to avoid having to pay money. Similarly if someone says we instruct people in legal procedure, or write speeches for lawsuits : show that everybody else also, <sup>5</sup> to the best of his ability, assists his friends with instruction and advice. These will be scientific methods of meeting charges of this sort.



<sup>1</sup>Χρὴ δὲ καὶ περὶ τὰς ἐρωτήσεις καὶ τὰς ἀποκρίσεις, ὅποσαι πίπτουσιν εἰς τὰ τοιαῦτα εἶδη, μὴ  
 10 ῥαθύμως ἔχειν, ἀλλὰ διακρίνειν τὰς ὁμολογίας καὶ  
 τὰς ἀρνήσεις ἐν ταῖς ἀποκρίσεσιν. ὁμολογίαι μὲν  
 οὖν εἰσὶν αἱ τοιαίδε· “ἀπέκτεινάς μου τὸν υἱόν;”  
 “ἀπέκτεινα πρότερον ἐπ’ ἐμὲ σίδηρον αἰρόμενον.”  
 “συνέκοψάς μου τὸν υἱόν;” “ἔγωγε ἀδίκων χειρῶν  
 ἄρχοντα.” “κατέαξάς μου τὴν κεφαλὴν;” “ἔγώ  
 15 βιαζομένου σου νύκτωρ εἰς τὴν ἐμὴν οἰκίαν εἰσ-  
 ιέναι.” αἱ μὲν οὖν τοιαῦται ὁμολογίαι τῷ νομίμῳ  
 πιστεύουσai ὁμολογοῦνται, αἱ δὲ τοιαίδ’ ἀρνήσεις  
 παρεγκλίνουσι τὸν νόμον· “ἀπέκτεινάς μου τὸν  
 υἱόν;” “οὐκ ἔγωγε ἀλλ’ ὁ νόμος.” τὰ δὲ  
 τοιαῦτα πάντα οὕτω δεῖ ὑποκρίνεσθαι,<sup>2</sup> ὅταν τῶν  
 νόμων ὁ μὲν κελεύῃ τοῦτο ποιεῖν ὁ δὲ κωλύῃ. τὰ  
 20 μὲν οὖν πρὸς τοὺς ἀντιδίκους ἐκ τούτων ἀπάντων  
 συνάξεις.

Μετὰ δὲ ταῦτα παλιλλογία τῶν εἰρημένων ἤδη  
 σύντομος ἀνάμνησις. χρήσιμος δ’ ἐστὶ παρὰ  
 πάντας τοὺς καιροὺς, ὥστε καὶ παρὰ μέρος καὶ  
 παρὰ εἶδος τῇ παλιλλογίᾳ χρηστέον. μάλιστα δ’  
 25 ἀρμόττει πρὸς τὰς κατηγορίας καὶ τὰς ἀπολογίας,  
 ἔτι δὲ παρὰ<sup>3</sup> τὰς προτροπὰς καὶ ἀποτροπὰς. οὐ  
 γὰρ μόνον ἀναμνῆσαι δεῖν φαμέν περὶ τῶν εἰρη-  
 μένων ἐνταῦθα, καθάπερ καὶ ἐπὶ τῶν ἐγκωμίων καὶ  
 τῶν κακολογιῶν, ἀλλὰ καὶ πρὸς ἡμᾶς τοὺς κριτὰς  
 εὖ διαθεῖναι καὶ πρὸς τοὺς ἐναντίους κακῶς· διὸ καὶ  
 30 τελευταῖον τοῦτο τῶν ἐν τῷ λόγῳ μερῶν τάττομεν.  
 ἔστι δὲ μνημονικὸν ποιεῖν ἐν κεφαλαίῳ ἢ<sup>4</sup> ἀπολογι-  
 ζόμενον περὶ τῶν εἰρημένων ἢ διαλογιζόμενον,<sup>5</sup> ἢ

<sup>1</sup> Χρὴ δὲ . . . 20 συνάξεις spuria Ipfelkofer.

<sup>2</sup> v.l. ἀποκρίνεσθαι.

<sup>3</sup> [παρὰ] Sp.

Also one must not be slack about any questions and answers that occur in this class of cases, but in one's answers one must clearly distinguish what one admits and what one denies. The following are examples of admissions : ' Did you kill my son ? '—' I did kill him, when he drew on me first.' ' Did you give my son a thrashing ? '—' Yes, I did, when he was the aggressor.' ' Did you break my head ? '—' Yes, when you were trying to break into my house at night.' Such admissions, then, are based in form on the actual terms of the law. Denials like the following give a slight twist to the law : ' Did you kill my son ? '—' No, I did not, but the law did.' All such replies should be made in this manner in cases where one law orders the commission of the act and another law prohibits it. Out of all these examples you will collect modes of replying to your opponents.

After this comes recapitulation—a brief reminder of what has been said already. This is useful on all occasions, so recapitulation should be employed at every part of a speech and with every kind of speech. It is most suitable for accusations and defences, but also in exhortations and dissuasions. For we say that in these we should not only recapitulate what has been said, as in eulogies and vituperations, but also we ought to make the judges favourably disposed towards ourselves and unfavourably disposed towards our opponents ; and on this account we place this last of the divisions in a speech. A summary reminder may be made either by enumerating the points that have been made or in the form of a calculation<sup>a</sup> or

<sup>a</sup> See 1433 b 4.

<sup>4</sup> ἦ add. Rac.

<sup>5</sup> ἦ διαλογιζόμενον v.l. om.

1444 b

προσερωτῶντα<sup>1</sup> τῶν μὲν σαυτοῦ τὰ βέλτιστα τῶν  
 δὲ τῶν<sup>2</sup> ἐναντίων τὰ φαυλότατα, εἰ δὲ βούλει,  
 ἐρωτήσεως σχῆμα ποιησάμενον. οἷον δὲ τούτων  
 35 ἕκαστόν ἐστιν, ἐκ τῶν προτέρων ἴσμεν.

Εὖ δὲ διαθήσομεν πρὸς<sup>3</sup> ἡμᾶς καὶ πρὸς<sup>3</sup> τοὺς  
 ἐναντίους κακῶς, ὥσπερ ἐπὶ τῶν προτροπῶν καὶ  
 ἀποτροπῶν, ἀποφαίνοντες<sup>4</sup> κεφαλαιωδῶς ἐφ' οἷς εὖ  
 πεποιήκαμεν τοὺς ἀδικούντας ἢ ποιούμεν ἢ ποιή-  
 σομεν, ἢ αὐτοὶ ἢ οἱ ἡμέτεροι φίλοι, ἢ αὐτοὺς ἢ ὧν  
 κηδόμενοι τυγχάνουσιν, ἢ πάλιν τοὺς κρίνοντας ἢ  
 40 αὐτοὺς ἢ ὧν κηδόμενοι τυγχάνουσιν, καὶ διεξιόντες  
 1445 a αὐτοῖς ὡς νῦν καιρὸς χάριτας ἡμῖν τῶν ὑπ-  
 ηργμένων ἀποδοῦναι, καὶ πρὸς τούτοις ἐλεεινούς  
 ἡμᾶς αὐτοὺς καθιστάντες, εἰς ἐνδέχεται. τοῦτο δὲ  
 ποιήσομεν ἐπιδεικνύντες ὡς πρὸς τοὺς ἀκούοντας  
 οἰκείως ἔχομεν καὶ ἀναξίως δυστυχοῦμεν, κακῶς  
 5 πρότερον πεπονθότες ἢ νῦν πάσχοντες, ἢ πεισόμενοι  
 εἰς μὴ βοηθῶσιν ἡμῖν οὗτοι, εἰς μὴ τοιαῦτα  
 ὑπάρχει, διεξιόντες τίνων ἀγαθῶν ἐστερήμεθα ἢ  
 στερισκόμεθα, ἢ στερησόμεθα ὀλιγωρηθέντες ὑπὸ  
 τῶν κρινόντων, ἢ ὡς ἀγαθοῦ μηδέποτε τετυκῆ-  
 χαμεν<sup>5</sup> ἢ μὴ τυγχάνομεν<sup>6</sup>, ἢ μὴ τευξόμεθα<sup>7</sup> μὴ  
 10 τούτων ἡμῖν συμβοηθησάντων· ἐκ γὰρ τούτων  
 ἐλεεινούς καταστήσομε νήμας αὐτούς, καὶ πρὸς<sup>8</sup>  
 τοὺς ἀκούοντας εὖ διαθήσομεν.

Διαβαλοῦμεν δὲ τοὺς ἀντιδίκους καὶ φθονεῖσθαι  
 ποιήσομεν ἐκ τῶν ἐναντίων τούτοις, ἀποφαίνοντες  
 ὑπὸ τούτων ἢ τῶν τούτοις φίλων τοὺς ἀκούοντας

<sup>1</sup> προαιρούμενον Ipfelkofer.

<sup>2</sup> τῶν add. Rac.

<sup>3</sup> πρὸς bis add. Rac.

<sup>4</sup> v.l. ὑποφαίνοντες.

<sup>5</sup> Rac. (ἐπιτετυκῆκαμεν cf. 24 Hammer.): ἐτύχομεν.

<sup>6</sup> Sp.: ἐπιτυγχάνομεν.

by putting questions as to your own strongest points and your opponent's weakest, and if you like by employing the figure of a direct question.<sup>a</sup> The nature of each of these figures we know from what has been said before. 35

We shall make them well-disposed towards ourselves and ill-disposed towards our opponents in the same way as in exhortations and dissuasions, by summarily showing on what occasions we or our friends have done or are doing or are going to do good to those who are wronging us or to persons whom they care for, or again to the judges themselves or persons whom the judges care for, and by explaining to them that now there is an opportunity for them to repay us a return for the services we have rendered; and in addition by making ourselves if possible objects of compassion. We shall effect this by demonstrating that we stand in friendly relations with our hearers and that we are undeservedly unfortunate in having been in trouble already or being so now, or going to be if they do not help us, or if such pleas are not available, by recounting what benefits we have been or are being deprived of, or shall be if we are slighted by those judging the case, or how we have never had or have not any good luck, or never shall have if they do not come to our help. By these means we shall make ourselves objects of pity, and put ourselves on good terms with our audience. 40 1445 a

We shall discredit our adversaries and make them objects of jealousy by the opposite means—by showing that our hearers themselves or those they care for

<sup>a</sup> On the difference between ἐρωτᾶν and προσερωτᾶν see *Rhet.* 1418 b 39 ff.

<sup>1</sup> Sp.: ἐπιτευξόμεθα.

<sup>2</sup> [πρὸς] ? Rac.

1445 a

- 15 ἢ αὐτοὺς<sup>1</sup> ἢ ὧν<sup>2</sup> κήδονται κακῶς πεπονθότας ἢ  
 πάσχοντας ἢ πεισομένους παρὰ τὸ προσῆκον· ἐκ  
 γὰρ τῶν τοιούτων καὶ μῖσος καὶ ὀργὴν πρὸς αὐτοὺς  
 ἔξουσιν. ἂν δὲ μὴ ταῦτα ἐνδέχῃται, συνάξομεν ἐξ  
 ὧν φθόνον τοῖς ἀκούουσι κατὰ τῶν ἐναντίων ἐργασό-  
 μεθα· τὸ γὰρ φθονεῖν πλησίον τοῦ μισεῖν ἐστίν.  
 20 φθονήσονται δὲ συλλήβδην ἐὰν ἀναξίως αὐτοὺς εὖ  
 πράττοντας ἀποφαίνωμεν καὶ πρὸς τοὺς ἀκούοντας  
 ἀλλοτρίως ἔχοντας, διεξιόντες ὡς ἀγαθὰ πολλὰ  
 πεπόνθασιν ἀδίκως ἢ πάσχουσιν ἢ μέλλουσι  
 πείσεσθαι, ἢ ἀγαθοῦ οὐδέποτε πρότερον ἐστερή-  
 θησαν ἢ νῦν οὐ στερίσκονται ἢ οὐ στερήσονται, ἢ  
 25 κακοῦ οὐδέποτε τετυχηκότες εἰσὶν<sup>3</sup> ἢ νῦν οὐ  
 τυγχάνοντες, ἢ οὐ τευξόμενοι, ἐὰν μὴ νῦν αὐτοὺς  
 οἱ κριταὶ κολάσωσιν.

Ἐκ τούτων μὲν οὖν ἐν τοῖς ἐπιλόγοις εὐμενῶς  
 μὲν πρὸς ἡμᾶς<sup>4</sup> αὐτοὺς κακῶς δὲ πρὸς<sup>5</sup> τοὺς  
 ἐναντίους διαθήσομεν, ἐκ δὲ τῶν προειρημένων  
 ἀπάντων ἐντέχνως καὶ τὰς κατηγορίας καὶ τὰς  
 ἀπολογίας τάξομεν.

- 80 XXXVII. Τὸ δ' ἐξεταστικὸν εἶδος αὐτὸ μὲν  
 καθ' ἑαυτὸ οὐ πολλάκις συνίσταται, τοῖς δὲ ἄλλοις  
 εἵδεσι μίγνυται· καὶ μάλιστα πρὸς τὰς ἀντιλογίας  
 χρήσιμόν ἐστιν. οὐ μὴν ἄλλ' ὅπως μηδὲ τούτου  
 τὴν τάξιν ἀγνοῶμεν, ἂν ποθ' ἡμῖν λόγον ἢ βίον  
 ἢ πρᾶξιν ἀνθρώπων ἢ διοίκησιν πόλεως ἐξετάζειν  
 85 συμβῇ, διεξιέμι<sup>6</sup> καὶ περὶ τούτου κεφαλαιωδῶς.

Φροιμισαστέον μὲν οὖν σχεδὸν ὁμοιοτρόπως τοῖς  
 διαβεβλημένοις καὶ τοῖς ἐξετάζουσιν ταῦτα, ὥστε

<sup>1</sup> ἢ αὐτοὺς add. Sp.

<sup>3</sup> εἰσὶν add. Halm.

<sup>5</sup> πρὸς add. Rac.

<sup>2</sup> ὧν Rac.: ὧν αὐτοί.

<sup>4</sup> ἡμᾶς add. Rac.

<sup>6</sup> διεξιέμι ? Hammer.

have been or are being or are going to be wrongfully ill-treated by them or their friends ; for such statements will inspire the audience with hatred and anger towards them. If this is not possible, we shall adduce considerations that will result in our inspiring our hearers with jealousy against our opponents ; because jealousy is near to hatred. Speaking generally, they will encounter jealousy if we show that they are prospering undeservedly, and that they are ill-disposed towards our hearers—we must recount that they have received or are receiving or are going to receive many benefits unjustly, or that they have never before been or are not now being or are not going to be deprived of some benefit, or that they have never before met with or are not now meeting with some evil, or will not do so unless the judges punish them now. 15  
20  
25

By these means in our perorations we shall make the audience well-disposed towards ourselves and ill-disposed towards our opponents ; and by all the methods already stated we shall construct both speeches in accusation and speeches in defence scientifically.

XXXVII. The examinational species is not generally employed as a separate composition but in combination with the other forms : it is specially useful in meeting contradictions. Nevertheless, in order that we may not be ignorant of the structure of this form either, in case it ever befalls us to have to examine the words or life or conduct of individuals or the administration of a state, I will give a summary account of this also. 30

*Structure  
of Investiga-  
tional  
oration.  
Introduc-  
tion : points  
to be treated.  
35*

In making an examination of these matters the introduction should be framed on almost the same lines as in refuting a misrepresentation. We shall therefore



1445 a

προφάσεις ἐν ἀρχαῖς εὐλόγους ἐνεγκόντες δι' αἷς  
δόξομεν εἰκότως τοῦτο ποιεῖν, οὕτως ἐπὶ τὴν  
ἐξέτασιν ἤξομεν. ἀρμόσουσι δὲ αἱ τοιαίδε, ἐν μὲν

40 τοῖς πολιτικοῖς συλλόγοις, ὥς οὐ φιλονεικία

1445 b τοιοῦτο<sup>1</sup> ποιούμεν ἀλλ' ὅπως μὴ λάθῃ τοὺς  
ἀκούοντας, εἶτα ὅτι ἡμᾶς οὗτοι πρότεροι<sup>2</sup> ἤν-  
ώχλησαν· ἐν δὲ τοῖς ἰδίοις ἢ ἔχθρα<sup>3</sup> ἢ τὰ ἥθη<sup>4</sup>  
τῶν ἐξεταζομένων φαῦλα ὄντα ἢ φιλία<sup>5</sup> πρὸς τοὺς  
ἐξεταζομένους, ὅπως<sup>6</sup> συνέντες<sup>7</sup> ἂ πράττουσι μηκέτι  
5 ταῦτα ποιήσωσιν· ἐν δὲ τοῖς δημοσίοις τὸ νόμιμον  
καὶ<sup>8</sup> τὸ δίκαιον καὶ<sup>9</sup> τὸ τῷ κοινῷ συμφέρον.

Φροιμασάμενοι δ' ἐκ τούτων καὶ τῶν τούτοις  
ὁμοιοτρόπων, ἐφεξῆς ἕκαστον προτιθέμενοι τῶν  
ῥηθέντων ἢ πραχθέντων ἢ διανοηθέντων ἐξετάσο-  
μεν, ἐνδεικνύντες αὐτὰ καὶ τοῖς δικαίοις καὶ τοῖς  
10 νομίμοις καὶ τοῖς ἰδίᾳ καὶ κοινῇ συμφέρουσιν  
ἐναντιούμενα, καὶ πάντα σκοποῦντες, εἴ που αὐτὰ  
αὐτοῖς ἐστὶν ἐναντία ἢ τοῖς ἔθεσι<sup>10</sup> τῶν χρηστῶν  
ἀνθρώπων ἢ τοῖς εἰκόσιν. ἵνα δὲ μὴ μηκύνωμεν  
τὸν λόγον καθ' ἐν ἕκαστον λέγοντες, ὅσω ἂν  
πλείοσι τῶν ἐνδόξων ἐπιτηδευμάτων ἢ πραγμάτων  
15 ἢ λόγων ἢ ἐθῶν ἐναντιούμενα τὰ τῶν ἐξεταζομένων  
ἀποφαίνωμεν τοῖς ἀκούουσι, τοσούτῳ μᾶλλον οἱ  
ἐξεταζόμενοι ἀδοξήσουσιν. δεῖ δὲ πικρῷ τῷ ἡθει  
μὴ ἐξετάζειν, ἀλλὰ πραεῖ· τοῦτον γὰρ τὸν τρόπον  
οἱ λόγοι γιγνόμενοι πιθανώτεροι φανήσονται τοῖς  
ἀκούουσιν, οἱ δὲ λέγοντες αὐτοὺς<sup>11</sup> ἥκιστα δια-  
20 βαλοῦσιν. ὅταν δὲ πάντα ἀκριβῶς ἐξητακῶς

<sup>1</sup> v.l. τοῦτο, τὸ τοιοῦτο (τὸ καὶ τὸ? cf. 1444 a 23 Rac.).

<sup>2</sup> v.l. πρότερον

<sup>4</sup> Sylburg: ἔθη.

<sup>6</sup> Sp.: ἢ ὅπως.

<sup>8</sup> καὶ add. Rac.

<sup>3</sup> Sp.: ἔχθραν.

<sup>5</sup> Sp.: φιλίαν.

<sup>7</sup> Finckh: ἀνέντες.

<sup>9</sup> καὶ om. v.l.

begin by producing plausible pretexts that will make  
our action appear reasonable, before we proceed  
to the examination. The following are examples of  
pretexts that will be suitable : in political conferences,  
that we are acting in this way not from contentious- 40  
ness but in order to acquaint our audience with the 1445 b  
facts, and also that our opponents were the ag-  
gressors ; in private cases, our motive will be given  
as hostile feeling or the bad moral character of the  
persons under examination, or friendliness for the  
persons under examination, with the intention that if  
they understand what they are doing they may not 5  
do it any longer ; in public trials, considerations of  
law and justice, and the public interest.

These and similar subjects having furnished *Tone and bearing.*  
material for our introduction, we shall next put for-  
ward for examination the various past utterances or  
actions or intentions of the persons seriatim, showing  
that they run counter to the principles of justice and  
law and to private and public interest, and scrutinizing 10  
any points in all of them where they are inconsistent  
with themselves or with the habits of virtuous people  
or with probability. Not to prolong the subject by  
going into detail—the greater the number of creditable  
pursuits or actions or words or habits to which we can  
convince our audience that the pursuits etc. of the 15  
persons under examination run counter, the more  
those persons will be discredited. The examination  
should be conducted in a mild and not a bitter spirit,  
because speeches delivered in that manner will appear  
more plausible to the audience, and those who deliver  
them will arouse least prejudice against themselves.  
When you have carefully examined everything and 20

<sup>10</sup> Rac. : ἡθεσι.

<sup>11</sup> v.l. αὐτοῦς.

1445 b

αὐξήσης αὐτά, παλλιλογίαν ἐπὶ τῇ τελευτῇ σύν-  
τομον ποιῆσαι<sup>1</sup> καὶ τοὺς ἀκροατὰς περὶ τῶν  
εἰρημένων ἀνάμνησον.

Τὰ μὲν οὖν εἶδη πάντα τοῦτον τὸν τρόπον τάτ-  
τοντες ἐντέχνως αὐτοῖς χρησόμεθα.

XXXVIII. Δεῖ δὲ καὶ λέγοντας καὶ γράφοντας  
25 ὅτι μάλιστα πειρᾶσθαι κατὰ τὰ προειρημένα<sup>2</sup>  
τοὺς λόγους ἀποδιδόναι, καὶ συνεθίζειν αὐτοὺς  
τούτοις ἅπασιν ἐξ ἐτοίμου χρήσθαι. καὶ περὶ μὲν  
τοῦ λέγειν ἐντέχνως καὶ ἐν τοῖς ἰδίοις καὶ ἐν τοῖς  
κοινοῖς ἀγῶσι καὶ ταῖς πρὸς τοὺς<sup>3</sup> ἄλλους ὁμιλίαις  
ἐντεῦθεν πλείστας καὶ τεχνικωτάτας ἀφορμὰς  
30 ἔχομεν· χρή δὲ καὶ τὴν ἐπιμέλειαν ποιεῖσθαι μὴ  
μόνον περὶ τοὺς λόγους ἀλλὰ καὶ περὶ τὸν βίον τὸν  
αὐτοῦ, διακοσμοῦντα ταῖς ἰδέαις ταῖς εἰρημέναις·  
συμβάλλεται γὰρ ἢ περὶ τὸν βίον παρασκευὴ καὶ  
πρὸς τὸ πείθειν καὶ πρὸς τὸ δόξης ἐπικικοῦς  
τυγχάνειν.

Πρῶτον μὲν οὖν διελέσθαι χρή τὰ πράγματα  
35 κατὰ τὴν ὅλην τοῦ παιδεύματος διαίρεσιν, ὃ τι  
πρῶτον ἢ δεύτερον ἢ τρίτον ἢ τέταρτον μετα-  
χειριστέον, εἴτα σαυτοῦ ποιεῖσθαι παρασκευήν,  
ὥσπερ ἐν τοῖς προοιμίοις διήλθομεν τὰ περὶ τῶν  
ἀκροατῶν. εὐμενῇ<sup>4</sup> μὲν οὖν τὰ περὶ σεαυτὸν  
ποιήσεις, ἐὰν οἷς ὁμολογεῖς ἐμμένης καὶ δια-  
40 φυλάττης φίλους τοὺς αὐτοὺς διὰ παντὸς τοῦ βίου,  
1446 a καὶ περὶ τῶν ἄλλων ἐπιτηδευμάτων φαίνη μὴ  
μεθιστάμενος ἀλλ' αἰεὶ τοῖς αὐτοῖς χρώμενος.  
προσέξουσι δέ σοι ἐὰν μεγάλας καὶ καλὰς μετα-  
χειρίζῃ πράξεις<sup>5</sup> καὶ τοῖς πολλοῖς συμφερούσας.

<sup>1</sup> Sp.: ποιήσον.<sup>2</sup> τοὺς om. v.l.<sup>3</sup> Sp.: πεπραγμένα.<sup>4</sup> εὐμενεῖς Finckh.

have amplified your points, conclude by giving a concise repetition, recalling what you have said to your hearers' memory.

This is the way in which we shall arrange all the species in order to employ them scientifically. *Miscellaneous appendix.*

XXXVIII. Both in speaking and in writing we must try to frame our remarks as far as possible in accordance with the rules already stated, and we must train ourselves to employ all of them readily. These rules will supply us with the largest number of resources of the most scientific character for speaking artistically in private and public contests and in social intercourse. And one must also be careful not only about one's speech but also about one's personal conduct, regulating it by the principles that have been stated, because one's manner of life contributes to one's powers of persuasion as well as to the attainment of a good reputation. 25

First, therefore, you must divide your matter according to the general system of division given by your training, and arrange what topics are to be treated first, second, third or fourth. Next you must prepare your hearers to receive you, as we said in discussing the handling of the audience in the introduction.<sup>a</sup> You will make their feelings towards you favourable if you stand by your agreements and keep the same friends all through your life and generally show yourself not changeable in your habits but always keeping to the same principles. And they will hear you with attention if you deal with important and honourable actions and such as are to the public advantage. 30

<sup>a</sup> Cf. 1437 a 31 f., 1440 b 4.

<sup>b</sup> v.l. τὰς πράξεις.

Εὐμενεῖς δὲ γενόμενοι, ὅταν ἐπὶ τῶν πράξεων  
 5 γένῃ ὅσαι τῶν κακῶν ἀποτροπὴν ἔχουσι τῶν δ'  
 ἀγαθῶν παρουσίαν, ταύτας μὲν ὡς συμφερούσας  
 αὐτοῖς ἀποδέξονται, ὅσαι δὲ τὰναντία παρασκευά-  
 ζουσιν αὐτῶν, ταύτας ἀποδοκιμάσουσιν.

Ἀντὶ δὲ τοῦ ταχεῖαν καὶ σαφῇ καὶ καθαρὰν καὶ<sup>1</sup>  
 μὴ ἄπιστον τὴν διήγησιν λέγεσθαι, τὰς πράξεις  
 10 δεῖ τοιαύτας<sup>2</sup> ποιεῖσθαι. ταχέως μὲν οὖν ἐπι-  
 τελέσεις ἂν μὴ \* \* \* \*, σαφῶς δὲ ἂν μὴ<sup>3</sup> πάντα ἅμα  
 πράττειν<sup>4</sup> βούλῃ, ἀλλὰ πρότερον τὸ πρῶτον,  
 ἔπειτα τὸ ἐξῆς· καθαρῶς δὲ ἂν μὴ ταχὺ τῆς  
 πράξεως πανόμενος ἄλλα πράγματα μεταχειρίζῃ  
 πρὶν ταύτην ἐπιτελέσαι· μὴ ἀπίστως δὲ ἂν μὴ  
 παρὰ τὸ ἦθος τὸ σαντοῦ πράττης, πρὸς δὲ τούτοις  
 15 ἂν μὴ προσποιῇ τοὺς αὐτοὺς ἐχθροὺς καὶ φίλους  
 εἶναί σοι.

Ἐκ δὲ τῶν πίστεων ληψόμεθα, περὶ ὧν μὲν  
 ἐπιστήμην ἔχομεν, κατὰ τὴν ταύτης ἐξήγησιν τὰς  
 πράξεις ἐπιτελεῖν, περὶ ὧν δὲ τυγχάνομεν ἀ-  
 γνοοῦντες, κατὰ τὸ ὡς ἐπὶ τὸ πολὺ συμβαῖνον·  
 ἀσφαλέστατον γὰρ πράττειν περὶ τῶν οὕτως  
 20 ἔχόντων πρὸς τὸ εἰωθὸς ἀποβλέποντας.

Εἰς δὲ τὸν πρὸς τοὺς ἀντιδίκους ἀγῶνα ἐν μὲν  
 τοῖς λόγοις ἐκ τῶν λελεγμένων ποιήσομεν βε-  
 βαιότητα περὶ ἡμῶν, ἐν δὲ τοῖς συμβολαίοις τοῦτο  
 ποιήσομεν εἰὰν κατὰ τοὺς νόμους αὐτὰ μετα-  
 χειρίζομεθα τοὺς ἀγράφους καὶ τοὺς γεγραμ-  
 25 μένους μετὰ μαρτύρων ὡς βελτίστων ὀριζομένοις  
 χρόνοις.

<sup>1</sup> καθαρὰν καὶ add. Rac.

<sup>2</sup> Sp.: ταύτας αὐτ ταῦτα.

<sup>3</sup> \* \* \* \* σαφῶς δὲ ἂν μὴ add. Finckh.

<sup>4</sup> Rac.: πάντα πράττειν ἅμα αὐτ πράττειν ἅμα πάντα.

The goodwill of your audience having been gained, when you come to practical proposals for securing the avoidance of evils and the provision of benefits, they will accept these as contributing to their own advantage, and they will reject measures that produce the opposite results. <sup>5</sup>

For the purpose of making your exposition rapid, clear, distinct and convincing in style, your practical suggestions must have those qualities. You will get through them rapidly, if you do not \* \* \* \*<sup>a</sup>; <sup>10</sup> clearly, if you do not try to treat every point at once, but the first thing first and then the next; distinctly, if you do not quickly drop the subject and take up other matters before you have finished this one; convincingly, if your line of action is not at variance with your own character, and in addition if you do not pretend that the same persons are your <sup>15</sup> enemies and your friends.

From among methods of proof, in matters of which we have knowledge we shall adopt the plan of completing our practical proposals by its guidance; but in matters of which we happen to be ignorant we shall follow the line of what generally occurs, as in such cases it is safest to act with an eye to what is usual. <sup>20</sup>

As regards the issue with our opponents, on a question of words, we shall obtain confirmation in regard to our case from the actual words used; on questions of contracts we shall do so if we deal with them in accordance with written and unwritten laws, with the support of the best available evidence, <sup>25</sup> within fixed limits of time.

\* Some words are clearly lost here in the ms. text, which runs, 'You will get through them rapidly if you do not try to treat every point at once.'



1446 a

Ἐκ δὲ τοῦ ἐπιλόγου περὶ μὲν τῶν λελεγμένων ἀναμνήσομεν τοὺς ἀκροατὰς<sup>1</sup> τὰ πραχθέντα ἐν κεφαλαίῳ αὖθις εἰπόντες, περὶ δὲ<sup>2</sup> τῶν πεπραγμένων ἐξ ὧν πράττομεν ἀναμνήσομεν οὕτως, ἐπειδὰν τὰς αὐτὰς πράξεις ἢ τὰς ὁμοίας μεταχειρίζομεθα ταῖς προτέραις.

80 Φιλικῶς δὲ διακείσονται πρὸς ἡμᾶς ἐὰν πράττωμεν ἐξ ὧν εὖ πεπονθέναι δόξουσιν ἢ πάσχειν ἢ πείσεσθαι. μεγάλα δὲ πράξομεν ἐὰν πολλῶν αἰτίας καὶ καλῶν πράξεις μεταχειρίζομεθα.

Καὶ τοῦτον μὲν τὸν τρόπον χρή τὰ κατὰ τὸν βίον αὐτοῦ παρασκευάζειν, ἐκ δὲ τῆς προτέρας συν-  
85 τάξεως περὶ τοὺς λόγους γυμνάζεσθαι.

[Τὰς δὲ θυσίας δεῖ ποιεῖν ὥς προεῖρηται, πρὸς μὲν τοὺς<sup>3</sup> θεοὺς ὁσίως, πρὸς δὲ τὰς δαπάνας μετρίως, πρὸς δὲ τὰς θεωρίας λαμπρῶς, πρὸς δὲ τοὺς πολίτας ὠφελίμως. καὶ πρὸς μὲν τοὺς θεοὺς ὁσίως ἔξουσιν ἐὰν κατὰ τὰ πάτρια θύωμεν· πρὸς  
1446 b δὲ τὰς δαπάνας μετρίως ἐὰν μὴ τὰ πεμπόμενα πάντα τοῖς δαπανωμένοις συναναλίσκηται· πρὸς δὲ τὰς θεωρίας λαμπρῶς ἐὰν μεγαλοπρεπῶς ὥσι κατεσκευασμένα· πρὸς δὲ τοὺς πολίτας ὠφελίμως  
5 ἐὰν ἱππεῖς καὶ ὀπλίται διεσκευασμένοι συμπέμπωσιν. τὰ μὲν δὴ πρὸς τοὺς θεοὺς οὕτω γινόμενα ὁσίως ἂν ἔχοι.

Φιλίαν δὲ συστησόμεθα πρὸς τοὺς ὁμοιοτρόπους ἡμῖν καὶ οἷς ταῦτὰ συμφέρει καὶ οἷς περὶ τὰ μέγιστα ἀναγκαῖόν ἐστιν ἡμῖν κοινωνεῖν· ἡ γὰρ

<sup>1</sup> v.l. λελεγμένων μνημονικοὺς ποιήσομεν.

<sup>2</sup> δὲ hic Finckh: post ὧν aut om. codd.

<sup>3</sup> τοὺς add. Rac.

Under the peroration we shall remind our hearers about what has been said by giving a summary repetition of the facts, while we shall remind them of our past acts by reference to our present actions on the same lines, when we are adopting courses of action that are the same as or similar to our former ones.

They will be favourably disposed towards us if we follow lines of action that they think to have been or to be or to be likely to be conducive to their advantage. Our actions will be important if we embark on policies productive of many and creditable results.

This is the manner in which the orator must regulate his personal conduct. His oratorical training must follow the system previously stated.

<sup>a</sup>[Sacrifices should be performed as has been said before, with piety towards the gods, moderation in expenses, splendour as a spectacle, and benefit to the public. They will be performed with piety towards the gods if we conduct them according to the ancestral ritual; with moderation in expenditure if the whole amount of the contributions is not lavished on the expenses; with spectacular splendour if they are magnificently equipped; with public benefit if cavalry and infantry in full equipment join in the procession. Our duties to the gods will be piously performed if carried out in this way.]

*Miscellaneous political considerations.*

We shall establish relations of friendship with people with manners like our own, and those with the same interests, and those with whom we are compelled to be in partnership as to matters of the highest

<sup>a</sup> As to the spuriousness of the following passage see Introduction, p. 265.

τοιαύτη μάλιστα συμμένει φιλία. συμμάχους δὲ  
 10 δεῖ ποιεῖσθαι τοὺς δικαιοτάτους καὶ τοὺς δύναμιν  
 πολλὴν ἔχοντας καὶ τοὺς πλησίον κατοικοῦντας,  
 ἐχθροὺς δὲ τοὺς ἐναντίους τούτοις.

Πόλεμον δὲ αἰρεῖσθαι πρὸς τοὺς ἀδικεῖν ἐπι-  
 χειροῦντας τὴν πόλιν ἢ τοὺς φίλους ἢ τοὺς συμ-  
 μάχους αὐτῆς. τὰς δὲ φυλακὰς ἀναγκαῖον ἔχειν  
 15 ἢ δι' αὐτῶν ἢ διὰ τῶν συμμάχων ἢ διὰ ξένων,  
 καὶ κράτιστον<sup>1</sup> μὲν δι' ἐαυτῶν, δεύτερον δὲ διὰ  
 τῶν συμμάχων, τρίτον δὲ διὰ ξένων.

Περὶ δὲ πόρου χρημάτων, κράτιστον μὲν ἀπὸ  
 τῶν ἰδίων προσόδων ἢ κτημάτων, δεύτερον δὲ  
 ἀπὸ τῶν τιμημάτων, τρίτον δὲ τῶν πενήτων τὰ  
 σώματα παρεχόντων λειτουργεῖν, τῶν δὲ τεχνιτῶν  
 20 ὄπλα, τῶν δὲ πλουσίων χρήματα.

Περὶ πολιτείας δέ, δημοκρατία μὲν ἀρίστη ἐν  
 ἡ οἱ νόμοι τοῖς ἀρίστοις τὰς τιμὰς ἀπονέμουσι τὸ  
 δὲ πλῆθος μήτε χειροτονίας μήτε ψηφηφορίας  
 ἐστέρηται, κακίστη δὲ ἐν ἡ τῷ πλῆθει παρα-  
 διδόασιν οἱ νόμοι τοὺς πλουτοῦντας ὑβρίζειν. ὀλιγ-  
 25 αρχῶν δ' εἰσὶ δύο τρόποι· ἡ γὰρ ἐξ ἐταιρείας ἢ  
 ἀπὸ τιμημάτων.

Ποιεῖσθαι δὲ συμμάχους ἀναγκαῖόν ἐστιν ὅταν  
 οἱ πολῖται μὴ τυγχάνωσι δι' ἐαυτῶν δυνατοὶ τὴν  
 χώραν καὶ τὰ φρουρία φυλάττειν ἢ τοὺς πολεμίους  
 ἀμύνεσθαι· παρίεσθαι δὲ δεῖ συμμαχίαν ὅταν μὴ  
 30 ἀνάγκη τις ἢ ποιεῖσθαι αὐτὴν ἢ μακρὰν τοῖς τόποις  
 ἀπέχωσι καὶ ἀδύνατοι ᾧσι κατὰ τοὺς προσήκοντας  
 παραγίνεσθαι καιροῦς.

Πολίτης δὲ ἀγαθός ἐστιν ὅστις φίλους μὲν  
 χρησιμωτάτους τῇ πόλει παρασκευάζει ἐχθροὺς  
 δὲ ἐλαχίστους καὶ ἀσθενεστάτους, καὶ ὅστις προσ-

importance ; for this is the most permanent kind of friendship. We should form alliances with the most just and with the very powerful and with those who are our neighbours, and we should have the opposite of these as our enemies. 1446 b

We should levy war against those who attempt to injure our state or her friends or allies. We must guard our country either by serving in person or by means of our allies or of mercenaries—best of all by personal service, second best by means of allies and third by mercenaries. 10

As to financial provisions, the best thing is to derive funds from our own revenues or estates, second best from a tax on property, third by means of national contributions—the poor furnishing bodily service, the artisans arms, and the rich money. 20

As to constitution, the best form of democracy is that in which the laws assign the offices to the best people while the multitude is not deprived of the function of voting in parliament and at elections ; the worst form is that in which the laws hand over the wealthy to the violence of the multitude. Oligarchy is of two forms : it is based either on party or on property-qualifications. 25

It is necessary to obtain allies on occasions when the citizens are not able to guard the country and the forts or to keep off the enemy by their own efforts ; but an alliance should be forgone when there is no necessity to form it or when the people concerned are far distant in locality and unable to come to our aid at the proper occasions.

A good citizen is one who procures for the state the most serviceable friends and the fewest and weakest

<sup>1</sup> v.l. *πρώτον*.

1446 b

85 ὁδους παρασκευάζει πλείστας τῶν ἰδιωτῶν μηδένα  
δημεύων, καὶ ὅστις ἑαυτὸν δίκαιον παρέχων τοὺς  
ἀδικοῦντάς τι τῶν κοινῶν ἐξετάζει.

Δωροῦνται δὲ πάντες ἐλπίζοντες ὠφεληθήσεσθαι  
ἢ τῶν προτέρων εὐεργεσιῶν χάριν ἀποδιδόντες.  
ὑπηρετοῦσι δὲ πάντες κέρδους ἕνεκεν ἢ τιμῆς ἢ  
ἡδονῆς ἢ φόβου. συναλλάττουσι δὲ πάντες ἢ κατὰ  
1447 a προαίρεσιν ἢ ἀκουσίως· αἱ γὰρ πράξεις ἐπι-  
τελοῦνται πάσαι ἢ διὰ βίας ἢ διὰ πειθοῦς ἢ δι'  
ἀπάτης ἢ διὰ προφάσεως.

Ἐν δὲ πολέμῳ περιγίνονται πολεμοῦντες ἢ διὰ  
τύχην ἢ διὰ σωμάτων πλήθος ἢ ῥώμην ἢ διὰ  
5 χρημάτων εὐπορίαν ἢ διὰ τόπων εὐφυΐαν ἢ δι'  
ἀρετὴν συμμαχῶν ἢ διὰ στρατηγοῦ γνώμην.

Ἐγκαταλιπεῖν δὲ τοὺς συμμαχοὺς ὑπολαμβάνου-  
νους δεῖν ἢ διὰ τὸ μᾶλλον συμφέρειν τοῦτο ἢ διὰ  
1447 b τὸ καταλύσασθαι τὸν πόλεμον.

Δίκαια δὲ πράττειν ἐστὶ τὸ τοῖς κοινοῖς τῆς  
πόλεως ἔθεσιν<sup>1</sup> ἔπεσθαι, τοῖς νόμοις πείθεσθαι,  
ταῖς ἰδίαις ὁμολογίαις ἐμμένειν.

Συμφέρει δὲ σώματι μὲν εὐεξία καὶ κάλλος καὶ  
5 ῥώμη καὶ ὑγίεια, ψυχῇ δὲ σοφία φρόνησις ἀνδρεία  
σωφροσύνη δικαιοσύνη, συναμφοτέροις δὲ τούτοις  
χρήματα καὶ φίλοι. ἀσύμφορα δὲ τὰναντία τούτων.  
πόλει δὲ συμφέρον πλήθος πολιτῶν ἀγαθῶν.<sup>2</sup>]

<sup>1</sup> v.l. ἡθεσιν.

<sup>2</sup> ἀγαθῶν v.l. om.

enemies, and who procures most revenues without  
confiscating the property of any private citizen, and  
who, while himself behaving justly, exposes those 25  
who are injuring some public interest.

Men always give presents in the hope of receiving  
some benefit or as a recompense for former good  
offices. Services are always rendered for the sake of  
profit or honour or pleasure, or from fear. People  
always have mutual dealings either from choice or  
unwillingly ; for all actions are performed either 1447 a  
under compulsion or through persuasion or through  
fraud or with some pretext.

In war one side gains the upper hand owing either  
to luck or to numbers or efficiency or financial  
resources or geographical advantages or to having 5  
good allies or a wise commander.

Men think proper to abandon their allies either  
because it pays them better to do so or as a means  
of bringing the war to an end.

Righteous conduct is to follow the common customs  
of the state, to obey the laws, to abide by private  
contracts.

Bodily advantages are good condition, beauty,  
strength, health ; mental advantages are wisdom,  
prudence, courage, temperance, justice ; advantage- 6  
ous to both mind and body jointly are wealth and  
friends. Their opposites are disadvantageous. A  
multitude of good citizens is advantageous to the  
state.]





# INDEX TO PROBLEMS

## I.—INDEX NOMINUM

Aegean, 982 a 22  
 Africa, 896 a 26, 906 b 19, 933 b 33,  
     942 a 13, 945 b 35  
 Agathyrsi, 920 a 1  
 Ajax, 953 a 21  
 Alemaeon, 916 a 34  
 Aleimn, 953 a 24  
 Anaxagoras, 903 a 7, 914 b 10  
 Aphrodite, 953 b 31  
 Arabia, 906 b 19, 908 a 14  
 Arcadia, 947 a 15, 18  
 Archelaus, 954 b 32  
 Archytas, 915 a 29  
 Arcturus, 959 a 23  
 Artemis, 894 b 34  
 Atarneus, 937 b 7  
 Athos, Mount, 944 b 13  
 Atlantic Ocean, 946 a 29  
 Attica, 925 a 8, 942 a 19, 946 b 32,  
     947 a 2  
 Bacis, 954 a 36  
 Bellerophon, 953 a 21  
 Chaeremon, 872 a 25  
 Cypris, 896 a 24  
 Cyrene, 946 b 34  
 Dionysius, 949 a 25  
 Dionysus, 953 b 31  
 Dog-star, 859 a 23, 941 a 37, 944 a 4  
 Egypt, 926 b 6, 945 a 19  
 Egyptian, 909 a 27  
 Elysian Plain, 943 b 22  
 Empedocles, 910 a 15, 929 b 16,  
     937 a 15, 953 a 27  
 Ethiopians, 898 b 12, 909 a 27  
 Geryones, 922 b 13  
 Greeks, 910 b 23, 956 b 23  
 Hellespont, 946 b 34

Heracleitus, 934 b 34  
 Heracles, 953 a 14  
 Homer, 894 b 34, 934 a 14, 943 b 22,  
     953 a 23, 953 b 11  
 Indians, 895 b 25  
 Lesbos, 946 b 34, 947 a 4  
 Lysander, 953 a 20  
 Macedonia, 954 b 32  
 Magnesia, 896 a 26, 937 b 7, 11  
 Maracus, 954 a 38  
 Melitaeon Puppies, 892 a 21  
 Memphis, 945 a 22  
 Messene, 932 a 5  
 Neocles, 956 a 12  
 Oeta, Mount, 953 a 18  
 Olympia, 956 a 19  
 Orchomenus, 926 b 5  
 Orion, 859 a 23, 941 b 24  
 Paesa, Lake, 935 b 34  
 Parmeno, 948 a 8  
 Philoxenus, 950 a 3  
 Phoenician lyre, 918 b 8  
 Phrynichus, 920 a 11  
 Plato, 953 a 27, 956 a 12  
 Pleias, 859 a 23, 861 a 20  
 Pontus, 909 a 18, 938 a 37  
 Pythagoreans, 910 b 37  
 Salamis, 956 a 20  
 Satyrus of Clazomenae, 875 a 34  
 Scythians, 925 a 25  
 Sibylla, 954 a 36  
 Socrates, 953 a 27  
 Syria, 906 b 18, 908 a 14  
 Terpander, 920 a 17  
 Thracians, 911 a 1  
 Thriasian Plain, 942 a 19  
 Troy, 916 a 19

## II.—INDEX RERUM

*(The references in this index are to Books and Problems)*

Acorns, **xxii.** 11  
 Actors, **xxx.** 10  
 Air, pressure, **xxv.** 1; and moisture, **xxv.** 3, 11; penetration of, **xxv.** 9, 12  
 Annuals, **xx.** 7  
 Antiphony, **xix.** 16  
 Antistrophe, **xix.** 35  
 Argument, **xviii.** 8  
 Astuteness, **xviii.** 8  
 Asymmetry, **xvii.** 1  
 Athletic competitions, **xxx.** 11  
  
 Barley-meal and oil, **xxi.** 1, 2, 3, 7, 9, 13, 24  
 Beans, **xxii.** 7  
 Before and after, **xvii.** 3  
 Belching, **x.** 44  
 Birth, **x.** 13, 35, 61, 65  
 Bleaching, **xxxviii.** 1  
 Bleeding of gums, **i.** 38  
 Blindness, **xxxi.** 5  
 Bodies, moving, **xvi.** 12; travelling in a circle, **xvi.** 3  
 Books with cut edges, **xvi.** 6  
 Bread, **xxi.** 4, 5, 6, 12, 17, 25; **xxii.** 7  
 Breath, holding the, **xi.** 48; hot and cold, **xxxiv.** 7  
 Bruises, cause of, **ix.** 14; colour of, **ix.** 2, 3, 4, 5, 7, 11; hairs on, **ix.** 13; pain of, **ix.** 8; prevention of, **ix.** 1, 6, 9, 10, 12  
 Bubbles, **xvi.** 1, 2  
  
 Calm, production of, **xxiii.** 4; weather, **xxv.** 12  
 Caper plant, **xx.** 12  
 Cautery, **i.** 32, 34  
 Celery, **xx.** 8

Change, effects of, **i.** 15  
 Chestnuts, **xxii.** 7  
 Chilblains, **i.** 53, 54  
 Chill and shivering and anger, **vii.** 20; and athletes, **vii.** 4, 10; and fat, **vii.** 7; and fire, **vii.** 18, 19; and hot and cold water, **vii.** 11; and hunger, **vii.** 9; and making water, **vii.** 13; and running, **vii.** 16; and sleep, **vii.** 2, 22; and sneezing, **vii.** 8; at dawn, **vii.** 17: effects of, **vii.** 5, 6; livid colour due to, **vii.** 1; of hair, **vii.** 12, 15, 21  
 Choking, **xxxiv.** 9  
 Circular objects in nature, **xvi.** 10; objects thrown, **xvi.** 11; parts of plants and animals, **xvi.** 9  
 Climate and age, **xiv.** 7, 9, 10; and bravery, **xiv.** 8, 16; and intelligence, **xiv.** 15  
 Cohabitation, **x.** 47, 52  
 Cold at dawn, **xxv.** 5, 15  
 Colocynth, **xx.** 9, 13  
 Colour in animals, **x.** 7, 11; of eyes, **xiv.** 14  
 Complexion, **xiv.** 12; **xxxviii.** 3, 4, 5, 9, 10, 11  
 Continence, **xxviii.** 1, 4; restricted meaning of, **xxxviii.** 2, 3, 7  
 Cooking of vegetables, **xx.** 4, 5  
 Corn near water, **xxiii.** 34; preservation of, **xiv.** 2  
 Cough, **i.** 12, **x.** 1, **xxxiii.** 7  
 Counting, **xv.** 3  
 Courage and wine, **xxvii.** 4; honours for, **xxvii.** 5  
 Cucumber, **xx.** 3, 9  
 Cylinder and cone, **xvi.** 5

# INDEX TO PROBLEMS

- Deaf, the, xxxiii. 14  
 Decapitation, x. 67  
 Decomposition, xxv. 17, 20  
 Deformities, xiv. 4  
 Deposit of money, xxix. 2, 6  
 Diagonal, xv. 1, 2  
 Disease, cause and cure, i. 1, 2, 5, 7;  
   the sacred, xxx. 1  
 Discussions train the mind, xviii. 2  
 Distance between the eyes, x. 15  
 Dithyramb, xix. 15  
 Divers, xxxii. 2, 3, 5, 11  
 Doctors, xxx. 8  
 Double sensation, xxxv. 10  
 Dough, xxi. 9, 10, 15, 23  
 Dreams, xxx. 14  
 Drugs for sores, i. 49; making  
   water, i. 48; purgative, i. 42, 43,  
   47  
 Dwarfs, x. 12
- Ear-drums, xxxii. 2, 3, 11  
 Ears, dirt in, xxxii. 4; humming  
   in, xxxii. 9; piercing of, xxxii. 7;  
   redness of, xxxii. 1, 8, 12; scratch-  
   ing, xxxii. 6, 13; water in, xxxii.  
   18  
 Echo, xi. 7, 8, 9, 23, 51; xix. 11  
 Eclipse and wind, xxvi. 18  
 Edible and inedible plants, xx. 5  
 Emetics, i. 4  
 Enharmonic scale, xix. 15  
 Eunuchs, x. 36, 37, 42, 57  
 Evaporation, xxvi. 28  
 Evil eye, xx. 34  
 Excrement, x. 59  
 Exhaling and inhaling, xxxiv. 8,  
   11, 12  
 Eyes, movement of, xxxi. 7; press-  
   ing of, xxxi. 4; prominent, xxxi.  
   6; use of, xxi. 2
- Fatigue, i. 39  
 Fat, x. 3  
 Fear and anger, xxvii. 3; and  
   silence, xxvii. 9; and thirst,  
   xxvii. 2, 8; and trembling, xxvii.  
   6, 7  
 Feet, x. 26, 30  
 Fevers, i. 55, 56  
 Figs, xxii. 9, 10, 14  
 Flesh, x. 60; healthy, i. 52  
 Floating, xxv. 18  
 Flute, xix. 1, 9, 10
- Food and exercise, i. 46  
 Fresh water, xxxiii. 40  
 Frogs, i. 22  
 Fruit, eating of, xxii. 1, 2, 3, 5, 8, 12
- Garlic, xx. 27, 28, 30  
 Gestation, x. 9, 14  
 Gourd, xx. 3, 13, 31, 32  
 Growth, direction of, xvii. 2  
 Gruel, i. 37
- Habit, xxx. 2  
 Hair, x. 24, 53, 62, 63; on scars,  
   x. 27, 29; red, xxxviii. 2  
 Hearing and inhaling, xi. 41; in  
   houses, xi. 37  
 Heavenly bodies, appearance of,  
   xv. 4  
 Hiccough, xxxiii. 1, 5, 13, 17  
 Homicide, xxix. 11  
 Hot water, xxiv.  
 Hunger, xxviii. 5, 6  
 Hurricanes, xxvi. 6  
 Hypodorian, xix. 30  
 Hypophrygian, xix. 30, 48
- Image, double, xxxi. 11, 17  
 Incontinence, effect of, i. 50  
 Inferior pursuits, xviii. 6  
 Inflammation, i. 44  
 Injustice, xxix. 7; in law-courts,  
   xxix. 8, 12, 13, 15; in money  
   matters, xxix. 1, 2, 5  
 Intelligence and action, xxx. 12, 13;  
   and age, xxx. 5, and melancholy,  
   xxx. 1; and pleasure, xxx. 7; in  
   man, xxx. 3
- Jaundice, i. 5, 6  
 Journeys, long and short, xxx. 4  
 Justice, infectious, xxix. 10
- Lameness, x. 41  
 Laughter, xxviii. 8  
 Leeks, xx. 26, 27  
 Leprosy, x. 33, 34, 45  
 Lilies, xx. 26  
 Line of life, x. 49; xxxiv. 10  
 Longevity, xxxiv. 1  
 Lyre, xix. 9, 10, 43
- Magadizing, xix. 18, 39  
 Magnitudes divided appear smaller,  
   xv. 7, 8

# ARISTOTLE

- Manes, x. 25  
 Marine animals, x. 55  
 Marjoram, xx. 22, 35  
 Marshy districts, i. 18, xiv. 6  
 Massage, xxxvii. 8, 5, 6  
 Meal, xxi. 8, 9, 10, 15, 16, 18, 19, 20, 22, 23  
 Milk, x. 6  
 Mint, xx. 2  
 Moon, appearance of, xv. 7, 8  
 Moulting, x. 21  
 Movement of head, x. 17  
 Mulberry, xx. 8  
 Music and morals, xix. 27  
 Musical intervals, fifth, xix. 17, 34, 41; fourth, xix. 17, 34, 41; octave, xix. 13, 14, 17, 18, 34, 35, 39, 50  
 Myrtle, xx. 23, 24, 31, 36; xxii. 11  
  
 Navel, x. 46, 64  
 Nomes, xix. 15, 28  
 Nose bleeding, xxxiii. 6, x. 2  
 Notes, Hypate, xix. 4, 7, 12, 23, 35, 39; Lichanos, xix. 20; Mese, xix. 12, 20, 25, 36, 44; Nete, xix. 3, 7, 23, 24, 35, 39; Paramese, xix. 12, 47; Parhypate, xix. 3, 4  
  
 Obedience to man, xxx. 6  
 Offences, comparison of, xxix. 5, 6  
 One-eyed, xxxi. 16, 22  
 Onion, xx. 22, 26  
 Ophthalmia, xxxi. 9  
 Orators and philosophers, xviii. 5  
 Oratory, xviii. 3  
  
 Parhelion, xv. 12  
 Parsley, xx. 1  
 Pennyroyal, xx. 21  
 Philosophers, xxx. 9  
 Pimples, xxxvi. 3  
 Plague, i. 21  
 Plants, acrid, xx. 10  
 Portraits, xxxvi. 1  
 Positions, cause of numbness, vi. 6; effects of lying down, vi. 3, 57; of sitting, vi. 1; standing up, vi. 4; of stretching, vi. 2  
 Poultices, i. 30, 45  
 Poverty and virtue, xxix. 4  
  
 Radishes, xx. 11, 13  
 Rebound, angle of, xvi. 4, 13  
  
 Redness, xxxi. 3  
 Resemblance of offspring, x. 10, 32  
 Right-handedness, xxxi. 12, 13, 18, 24, 29  
 Rue, xx. 18, 33, 34  
  
 Salt, crackling of, xi. 26, 42, 43  
 Season, changes of, i. 3, 8, 9, 10, 11, 19, 20, 25, 26, 27, 28, 29; of death, i. 17  
 Seaweed, xx. 31  
 Semen, x. 16  
 Shadows, xv. 5, 9, 10, 13  
 Sheep's wool, x. 22, 23  
 Size and sex, x. 8  
 Sleep, x. 31: and study, xviii. 1, 7  
 Sleepiness, xiv. 11  
 Smell and eating, xiii. 2, 7; and movement, xii. 5, 12; at a distance, xii. 4, 9; hot and cold, xiii. 5; in winter, xii. 6; of animals, xiii. 4; of ashes, xii. 7; of burning spices, xii. 1, 2; of flowers, xii. 8; of men, xii. 8, 9, 10; of ointment, xii. 11; of rainbow, xii. 3; of water, xii. 1, 6, 12; of wine, xii. 13; what it is, xii. 10  
 Smoke, x. 51  
 Sneezing, x. 18, 54  
 Sound travel, xi. 49, 52, 58  
 Sounds of inanimate objects, xi. 28  
 South wind, i. 24  
 Speech, x. 39  
 Squinting, x. 50  
 Stomach, i. 40, 41  
 Stone, x. 43  
 Styptic, i. 33  
 Sun through wickerwork, xv. 6  
 Suppuration, i. 31  
 Surgery, i. 35  
 Sweat and redness of face, ii. 27; and shivering, ii. 34; and sickness, ii. 18; and weight, ii. 22; occurrence of, ii. 1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 14, 15, 16, 17, 19, 20, 23, 24, 25, 26, 28, 29, 31, 32, 36, 37, 38, 39, 40, 41, 42; saltiness of, ii. 3, 13; smell of, ii. 6; value of, ii. 21, 30, 33, 35  
 Sympathy, vii. 4; infection, vii. 4, 8; inflammation of gums, vii. 9; making water, vii. 3; pain, vii. 7; shuddering, vii. 5

## INDEX TO PROBLEMS

Tales, xviii. 9, 10  
 Tame animals, x. 45  
 Tears, xxxi. 23  
 Teeth, x. 48, 66; xxxiv. 1, 2, 3  
 Theft and assault, xxix. 16  
 Thirst, xxviii. 5, 6  
 Thyme, xx. 20  
 Tickling, xxxv. 2, 6, 7, 8  
 Tongue, x. 19, xxxiv. 4, 5; colours of, xxxiv. 7  
 Touch, xxxv. 4  
 Trembling, xxxi. 22

Unison, sounds in, xix. 39

Vision and colour, xxxi. 19; and exercise, xxxi. 14

Voice and hearing, xi. 1, 2, 4; at a distance, xi. 6; at night, xi. 5, 32; clear and leeks, xi. 39; cracked, xi. 12, 46; deep, xi. 17, 18, 19, 32, 61; development of, xi. 1, 57; loud, xi. 8; of children, xi. 27; roughness of, xi. 11; shouting, xi. 22; shrill, xi. 13, 14, 15, 16, 20, 21, 24, 34, 40, 47, 50, 53, 56, 62

Water, x. 20; change of, i. 13, 14, 16; colour of, i. 51, xxiii. 23, 41; sound of, xi. 10; temperature of, xxiii. 7; transparency of, xxiii. 8, 9, 38

Water-clock, xvi. 8

Watering plants, xx. 15, 29

Waves, xxiii. 1, 2, 24; and shore, xxiii. 29; and wind, xxiii. 11, 12, 17, 28

Wealth, xxix. 8

Weariness and breathing, v. 16; and choking, v. 11; and food, v. 28, 30, 33; and health, v. 34; and heat, v. 36; and massage, v. 32; and riding, v. 13, 37, 42; and running, v. 17, 18, 29, 39; causes of, v. 11, 12; cure of, v. 6, 38; due to walking, v. 1, 10, 19, 20, 23, 24, 25, 35, 40, 41; effects of, v. 2, 3, 4, 8, 9, 15, 22, 26, 27, 31; stomach, v. 5, 7, 14

Wheat flour, xxi. 2, 3, 7, 9, 11, 13, 21, 22, 24, 26

Whirlpool, xxiii. 5

Wind and fever, xxvi. 50; and rain, xxvi. 56; and sunrise, xxvi. 33, 34; cold, xxvi. 48, 58; east, xxvi. 1, 21, 31, 53; north, xxvi. 2, 9, 10, 14, 15, 21, 27, 35, 37, 39, 41, 43, 46, 47, 60, 62; north-east, xxvi. 27, 29; south, xxvi. 3, 10, 11, 12, 16, 17, 19, 24, 27, 32, 35, 37, 38, 41, 42, 44, 45, 46, 47, 49; south-east, xxvi. 27, 31; south-west, xxvi. 26, 33, 35, 52; variable, xxvi. 4, 5, 40; west, xxvi. 21, 22, 55

Wine and behaviour, iii. 2; and disease, iii. 1, 5, 6; and drunkenness, iii. 15; effects of, iii. 3, 4, 8, 9, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 25a, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35; love of, iii. 7

Yawning, vii. 1, 2, 6; and hearing, xi. 29, 44



# INDEX TO RHETORIC TO ALEXANDER

References are to the pages, columns (a and b), and lines of the Berlin edition of Aristotle, 1831, marked in the left-hand margin of the text. The two first figures of the page-numbers are omitted, 20 a to 47 b standing for 1420 a to 1447 b.

αἶτημα 33 b 17  
 ἀμφίβολα 35 b 18  
 ἀντιδίκους, τὰ πρὸς τοὺς, 43 a 6  
 ἀντίθετον 35 b 25  
 ἀπαγγελία 38 a 8, b 10, 23, 42 b 30  
 ἀπολογητικὸν εἶδος 26 b 23, 27 a 22  
 ἀπολογία 43 b 23  
 ἀποτροπή 21 b 18, 25, 39 b 36  
 ἄρθρα 35 a 35  
 ὁπτεῖα 34 a 33  
 αὐξήσεις 25 b 37, 26 a 19  
  
 βάσανος 32 a 12  
 βεβαίωσις, 38 b 29, 42 b 32  
 βραχυλογεῖν 34 b 10  
  
 γεναεολογεῖν 40 b 29  
  
 δήλωσις 38 b 15, 23  
 δημηγορικὸν εἶδος 21 b 7, 36 a 39,  
 37 a 30  
 διήγησις 38 b 28  
 δίκαιον 21 b 35  
 δικανικὸν γένος 21 b 8, 41 b 31  
 Διονύσιος 29 b 17  
 Δίων 29 b 15  
 δυνατὸν 22 a 19  
  
 ἐγκωμιαστικὸν εἶδος 40 b 5  
 εἰκός 28 a 25  
 εἰρωνεία 34 a 17  
 ἔλεγχος 28 a 21, 31 a 6  
 ἐνθύμημα 30 a 23  
 ἐξεταστικὸν εἶδος 41 b 31, 45 a 30  
 ἐπενθύμημα 38 b 34  
 ἐπιβεβαίωσις 38 b 29  
 ἐπιδεικτικὸν γένος 21 b 8  
 ἐρμηνεία 35 a 3  
 εὐμένεια 41 b 36  
 Εὐριπίδης 33 b 11  
  
 Θεοδέκτης 21 b 2  
  
 κακολογικὸν εἶδος 40 b 5

Καρχηδόνιοι 29 b 19  
 κατάστασις 38 a 2  
 κατηγορικὸν εἶδος 26 b 22, 41 b 30  
 Κόραξ 21 a 2  
  
 Λεῦκτρα 29 b 14  
 Λυσίθειδης 22 b 22  
  
 μαρτυρία 31 b 20  
 μηκύνειν 34 b 1  
  
 νόμος 21 b 40 f.  
  
 ὁμοιότης 35 b 25  
 ὄρκος 32 a 33  
  
 παλιλλογία 33 b 29, 44 b 21  
 παράδειγμα 29 a 21  
 Πάριοι 21 a 32  
 παρίστωσις 35 b 25  
 παρομοίωσις 36 a 5  
 πίστις 25 a 15  
 πολιτικὸς λόγος 20 a 8, 21 b 7  
 πρόθεσις 23 b 21, 40 b 7  
 προκατάληψις 32 b 11, 37 b 22,  
 39 b 2  
 προοίμιον 36 a 33  
 πρόρρησις 38 b 11, 24  
 προτροπή 21 b 17  
  
 σημεῖον 30 b 30  
 σκώπτειν 41 b 15  
 σοφισταί 21 a 32  
 Σπάρτη 23 a 7  
 Συρακόσιοι 29 b 13  
  
 τάξις 36 a 29  
 ταπεινώσις 25 b 39  
 τεκμήριον 30 a 14  
  
 Φιλοκλήτης 33 b 11  
 Φυλή 29 b 18  
  
 ψεκτικὸν εἶδος 21 b 9, 25 b 38

Printed in Great Britain by R. & R. CLARK, LIMITED, Edinburgh

# THE LOEB CLASSICAL LIBRARY

---

## VOLUMES ALREADY PUBLISHED

---

### LATIN AUTHORS

---

- AMMIANUS MARCELLINUS. J. C. Rolfe. 3 Vols. (Vols. and II 3rd *Imp.*, Vol. III 2nd *Imp. revised.*)
- APULEIUS: THE GOLDEN ASS (METAMORPHOSES). W. Adlington (1566). Revised by S. Gaselee. (7th *Imp.*)
- ST. AUGUSTINE: CITY OF GOD. 7 Vols. Vol. I. G. E. McCracken.
- ST. AUGUSTINE, CONFESSIONS OF. W. Watts (1631). 2 Vols. (Vol. I 7th *Imp.*, Vol. II 6th *Imp.*)
- ST. AUGUSTINE: SELECT LETTERS. J. H. Baxter. (2nd *Imp.*)
- AUSONIUS. H. G. Evelyn White. 2 Vols. (2nd *Imp.*)
- BEDE. J. E. King. 2 Vols. (2nd *Imp.*)
- BOETHIUS: TRACTS AND DE CONSOLATIONE PHILOSOPHIAE. Rev. H. F. Stewart and E. K. Rand. (6th *Imp.*)
- CAESAR: ALEXANDRIAN, AFRICAN AND SPANISH WARS. A. G. Way.
- CAESAR: CIVIL WARS. A. G. Peskett. (6th *Imp.*)
- CAESAR: GALLIC WAR. H. J. Edwards. (10th *Imp.*)
- CATO AND VARRO: DE RE RUSTICA. H. B. Ash and W. D. Hooper. (3rd *Imp.*)
- CATULLUS. F. W. Cornish; TIBULLUS. J. B. Postgate; and PERVIGILUM VENERIS. J. W. Mackail. (13th *Imp.*)
- CELSUS: DE MEDICINA. W. G. Spencer. 3 Vols. (Vol. I 3rd *Imp. revised*, Vols. II and III 2nd *Imp.*)
- CICERO: BRUTUS AND ORATOR. G. L. Hendrickson and H. M. Hubbell. (3rd *Imp.*)
- CICERO: DE FATO; PARADOXA STOICORUM; DE PARTITIONE ORATORIA. H. Rackham. (With De Oratore, Vol. II.) (2nd *Imp.*)

## THE LOEB CLASSICAL LIBRARY

- CICERO : DE FINIBUS. H. Rackham. (*4th Imp. revised.*)  
 CICERO : DE INVENTIONE, etc. H. M. Hubbell.  
 CICERO : DE NATURA DEORUM AND ACADEMICA. H. Rackham. (*3rd Imp.*)  
 CICERO : DE OFFICIIS. Walter Miller. (*7th Imp.*)  
 CICERO : DE ORATORE. E. W. Sutton and H. Rackham. 2 Vols. (*2nd Imp.*)  
 CICERO : DE REPUBLICA AND DE LEGIBUS. Clinton W. Keyes. (*4th Imp.*)  
 CICERO : DE SENECTUTE, DE AMICITIA, DE DIVINATIONE. W. A. Falconer. (*6th Imp.*)  
 CICERO : IN CATILINAM, PRO MURENA, PRO SULLA, PRO FLACCO. Louis E. Lord. (*3rd Imp. revised.*)  
 CICERO : LETTERS TO ATTICUS. E. O. Winstedt. 3 Vols. (Vol. I *7th Imp.*, Vols. II and III *4th Imp.*)  
 CICERO : LETTERS TO HIS FRIENDS. W. Glynn Williams. 3 Vols. (Vols. I and II *3rd Imp.*, Vol. III *2nd Imp. revised and enlarged.*)  
 CICERO : PHILIPPICS. W. C. A. Ker. (*4th Imp.*)  
 CICERO : PRO ARCHIA, POST REDITUM, DE DOMO, DE HARUSPICUM RESPONSIS, PRO PLANCIO. N. H. Watts. (*3rd Imp.*)  
 CICERO : PRO CAECINA, PRO LEGE MANILIA, PRO CLUENTIO, PRO RABIRIO. H. Grose Hodge. (*3rd Imp.*)  
 CICERO : PRO CAELIO, DE PROVINCIIS CONSULARIBUS, PRO BALBO. J. H. Freese and R. Gardner.  
 CICERO : PRO MILONE, IN PISONEM, PRO SCAURO, PRO FONTEIO, PRO RABIRIO POSTUMO, PRO MARCELLO, PRO LIGARIO, PRO REGE DEIOTARO. N. H. Watts. (*3rd Imp.*)  
 CICERO : PRO QUINCTIO, PRO ROSCIO AMERINO, PRO ROSCIO COMOEDO, CONTRA RULLUM. J. H. Freese. (*3rd Imp.*)  
 CICERO : PRO SESTIO, IN VATINIUM. J. H. Freese and R. Gardner.  
 [CICERO] : RHETORICA AD HERENNIIUM. H. Caplan.  
 CICERO : TUSCULAN DISPUTATIONS. J. E. King. (*4th Imp.*)  
 CICERO : VERRINE ORATIONS. L. H. G. Greenwood. 2 Vols. (Vol. I *3rd Imp.*, Vol. II *2nd Imp.*)  
 CLAUDIAN. M. Platnauer. 2 Vols. (*2nd Imp.*)  
 COLUMELLA : DE RE RUSTICA ; DE ARBORIBUS. H. B. Ash, E. S. Forster, E. Heffner. 3 Vols. (Vol. I *2nd Imp.*)  
 CURTIUS, Q. : HISTORY OF ALEXANDER. J. C. Rolfe. 2 Vols. (*2nd Imp.*)

## THE LOEB CLASSICAL LIBRARY

- FLORUS. E. S. Forster; and CORNELIUS NEPOS. J. C. Rolfe. (2nd Imp.)
- FRONTINUS: STRATAGEMS AND AQUEDUCTS. C. E. Bennett and M. B. McElwain. (2nd Imp.)
- FRONTO: CORRESPONDENCE. C. R. Haines. 2 Vols. (3rd Imp.)
- GELLIUS. J. C. Rolfe. 3 Vols. (Vol. I 3rd Imp., Vols. II and III 2nd Imp.)
- HORACE: ODES AND EPODES. C. E. Bennett. (14th Imp. revised.)
- HORACE: SATIRES, EPISTLES, *ARS POETICA*. H. R. Fairclough. (9th Imp. revised.)
- JEROME: SELECT LETTERS. F. A. Wright. (2nd Imp.)
- JUVENAL AND PERSIUS. G. G. Ramsay. (8th Imp.)
- LIVY. B. O. Foster, F. G. Moore, Evan T. Sage and A. C. Schlesinger. 14 Vols. Vols. I-XIII. (Vol. I 5th Imp., Vols. II, V and IX-XII 3rd Imp., Vols. VI and VIII 2nd Imp. revised.)
- LUCAN. J. D. Duff. (4th Imp.)
- LUCRETIIUS. W. H. D. Rouse. (7th Imp. revised.)
- MARTIAL. W. C. A. Ker. 2 Vols. (Vol. I 5th Imp., Vol. II 4th Imp. revised.)
- MINOR LATIN POETS: from PUBLILIUS SYRUS to RUTILIUS NAMATIUS, including GRATIUS, CALPURNIUS SICULUS, NEMESIANUS, AVIANUS, with "Aetna," "Phoenix" and other poems. J. Wight Duff and Arnold M. Duff. (3rd Imp.)
- OVID: THE ART OF LOVE AND OTHER POEMS. J. H. Mozley. (4th Imp.)
- OVID: FASTI. Sir James G. Frazer. (2nd Imp.)
- OVID: HEROIDES AND AMORES. Grant Showerman. (5th Imp.)
- OVID: METAMORPHOSES. F. J. Miller. 2 Vols. (Vol. I 11th Imp., Vol. II 9th Imp.)
- OVID: TRISTIA AND EX PONTO. A. L. Wheeler. (3rd Imp.)
- PETRONIUS. M. Heseltine; SENECA: APOCOLOCYNTOSIS. W. H. D. Rouse. (9th Imp. revised.)
- PLAUTUS. Paul Nixon. 5 Vols. (Vol. I 6th Imp., Vol. II 5th Imp., Vol. III 4th Imp., Vols. IV and V 2nd Imp.)
- PLINY: LETTERS. Melmoth's translation revised by W. M. L. Hutchinson. 2 Vols. (Vol. I 7th Imp., Vol. II 6th Imp. revised.)

## THE LOEB CLASSICAL LIBRARY

- PLINY: NATURAL HISTORY.** 10 Vols. Vols. I-V and IX.  
 H. Rackham. Vols. VI and VII. W. H. S. Jones.  
 (Vols. I-III *3rd Imp.*, Vol. IV *2nd Imp.*)
- PROPERTIUS.** H. E. Butler. (*7th Imp.*)
- PRUDENTIUS.** H. J. Thomson. 2 Vols.
- QUINTILIAN.** H. E. Butler. 4 Vols. (*3rd Imp.*)
- REMAINS OF OLD LATIN.** E. H. Warmington. 4 Vols.  
 Vol. I (Ennius and Caecilius). Vol. II (Livius, Naevius,  
 Pacuvius, Accius). Vol. III (Lucilius, Laws of the XII  
 Tables). Vol. IV (Archaic Inscriptions). (*2nd Imp.*)
- SALLUST.** J. C. Rolfe. (*4th Imp. revised.*)
- SCRIPTORES HISTORIAE AUGUSTAE.** D. Magie. 3 Vols.  
 (Vol. I *3rd Imp.*, Vols. II and III *2nd Imp. revised.*)
- SENECA: APOCOLOCYNTOSIS.** Cf. PETRONIUS.
- SENECA: EPISTULAE MORALES.** R. M. Gummere. 3 Vols.  
 (Vol. I *4th Imp.*, Vols. II and III *3rd Imp. revised.*)
- SENECA: MORAL ESSAYS.** J. W. Basore. 3 Vols. (Vol. II  
*3rd Imp. revised*, Vols. I and III *2nd Imp. revised.*)
- SENECA: TRAGEDIES.** F. J. Miller. 2 Vols. (Vol. I *4th*  
*Imp.*, Vol. II *3rd Imp. revised.*)
- SIDONIUS: POEMS AND LETTERS.** W. B. Anderson. 2 Vols.  
 (Vol. I *2nd Imp.*)
- SILIUS ITALICUS.** J. D. Duff. 2 Vols. (Vol. I *2nd Imp.*,  
 Vol. II *3rd Imp.*)
- STATIUS.** J. H. Mozley. 2 Vols. (*2nd Imp.*)
- SUETONIUS.** J. C. Rolfe. 2 Vols. (Vol. I *7th Imp.*, Vol. II  
*6th Imp.*)
- TACITUS: DIALOGUS.** Sir Wm. Peterson; and **AGRICOLA**  
**AND GERMANIA.** Maurice Hutton. (*6th Imp.*)
- TACITUS: HISTORIES AND ANNALS.** C. H. Moore and J.  
 Jackson. 4 Vols. (Vols. I and II *4th Imp.*, Vols. III and  
 IV *3rd Imp.*)
- TERENCE.** John Sargeaunt. 2 Vols. (*7th Imp.*)
- TERTULLIAN: APOLOGIA AND DE SPECTACULIS.** T. R. Glover;  
**MINUCIUS FELIX.** G. H. Rendall. (*2nd Imp.*)
- VALERIUS FLACCUS.** J. H. Mozley. (*3rd Imp. revised.*)
- VARRO: DE LINGUA LATINA.** R. G. Kent. 2 Vols. (*2nd*  
*Imp. revised.*)
- VELLEIUS PATERCULUS AND RES GESTAE DIVI AUGUSTI.**  
 F. W. Shipley. (*2nd Imp.*)
- VIRGIL.** H. R. Fairclough. 2 Vols. (Vol. I *19th Imp.*, Vol.  
 II *14th Imp. revised.*)

## THE LOEB CLASSICAL LIBRARY

VITRUVIUS: DE ARCHITECTURA. F. Granger. 2 Vols. (Vol. I 3rd Imp., Vol. II 2nd Imp.)

### GREEK AUTHORS

---

ACHILLES TATIUS. S. Gaselee. (2nd Imp.)

AENEAS TACTICUS, ASCLEPIODOTUS AND ONASANDER. The Illinois Greek Club. (2nd Imp.)

AESCHINES. C. D. Adams. (3rd Imp.)

AESCHYLUS. H. Weir Smyth. 2 Vols. (Vol. I 7th Imp., Vol. II 6th Imp.)

ALCIPHRON, AELIAN AND PHILOSTRATUS: LETTERS. A. R. Benner and F. H. Fobes.

APOLLODORUS. Sir James G. Frazer. 2 Vols. (3rd Imp.)

APOLLONIUS RHODIUS. R. C. Seaton. (5th Imp.)

THE APOSTOLIC FATHERS. Kirsopp Lake. 2 Vols. (Vol. I 8th Imp., Vol. II 6th Imp.)

APPIAN'S ROMAN HISTORY. Horace White. 4 Vols. (Vol. I 4th Imp., Vols. II-IV 3rd Imp.)

ARATUS. Cf. CALLIMACHUS.

ARISTOPHANES. Benjamin Bickley Rogers. 3 Vols. (5th Imp.) Verse trans.

ARISTOTLE: ART OF RHETORIC. J. H. Freese. (3rd Imp.)

ARISTOTLE: ATHENIAN CONSTITUTION, EUDEMIAN ETHICS, VIRTUES AND VICES. H. Rackham. (3rd Imp.)

ARISTOTLE: GENERATION OF ANIMALS. A. L. Peck. (2nd Imp.)

ARISTOTLE: METAPHYSICS. H. Tredennick. 2 Vols. (4th Imp.)

ARISTOTLE: METEOROLOGICA. H. D. P. Lee.

ARISTOTLE: MINOR WORKS. W. S. Hett. "On Colours," "On Things Heard," "Physiognomics," "On Plants," "On Marvellous Things Heard," "Mechanical Problems," "On Indivisible Lines," "Situations and Names of Winds," "On Melissus, Xenophanes, and Gorgias." (2nd Imp.)

ARISTOTLE: NICOMACHEAN ETHICS. H. Rackham. (6th Imp. revised.)

ARISTOTLE: OECONOMICA AND MAGNA MORALIA. G. C. Armstrong. (With Metaphysics, Vol. II.) (4th Imp.)

ARISTOTLE: ON THE HEAVENS. W. K. C. Guthrie. (3rd Imp.)



## THE LOEB CLASSICAL LIBRARY

- ARISTOTLE: ON THE SOUL, PARVA NATURALIA, ON BREATH. W. S. Hett. (*2nd Imp. revised.*)
- ARISTOTLE: ORGANON—THE CATEGORIES; ON INTERPRETATION. H. P. Cooke; PRIOR ANALYTICS. H. Treddenick. (*3rd Imp.*)
- ARISTOTLE: ORGANON—SOPHISTICAL REFUTATIONS. COMING-TO-BE AND PASSING-AWAY. E. S. Forster. ON THE COSMOS. D. J. Furley.
- ARISTOTLE: PARTS OF ANIMALS. A. L. Peck; MOTION AND PROGRESSION OF ANIMALS. E. S. Forster. (*3rd Imp.*)
- ARISTOTLE: PHYSICS. Rev. P. Wicksteed and F. M. Cornford. 2 Vols. (Vol. I *2nd Imp.*, Vol. II *3rd Imp.*)
- ARISTOTLE: POETICS and LONGINUS. W. Hamilton Fyfe; DEMETRIUS ON STYLE. W. Rhys Roberts. (*5th Imp. revised.*)
- ARISTOTLE: POLITICS. H. Rackham. (*4th Imp.*)
- ARISTOTLE: PROBLEMS. W. S. Hett. 2 Vols. (*2nd Imp. revised.*)
- ARISTOTLE: RHETORICA AD ALEXANDRUM. H. Rackham. (With Problems, Vol. II.)
- ARRIAN: HISTORY OF ALEXANDER AND INDICA. Rev. E. Iliffe Robson. 2 Vols. (Vol. I *3rd Imp.*, Vol. II *2nd Imp.*)
- ATHENAEUS: DEIPNOSOPHISTAE. C. B. Gulick. 7 Vols. (*2nd Imp.*)
- ST. BASIL: LETTERS. R. J. Deferrari. 4 Vols. (*2nd Imp.*)
- CALLIMACHUS: FRAGMENTS. C. A. Trypanis.
- CALLIMACHUS: HYMNS AND EPIGRAMS, AND LYCOPHRON. A. W. Mair; ARATUS. G. R. Mair. (*2nd Imp.*)
- CLEMENT OF ALEXANDRIA. Rev. G. W. Butterworth. (*3rd Imp.*)
- COLLUTHUS. Cf. OPIAN.
- DAPHNIS AND CHLOE. Cf. LONGUS.
- DEMOSTHENES I: OLYNTHIACS, PHILIPPICS AND MINOR ORATIONS: I-XVII AND XX. J. H. Vince. (*2nd Imp.*)
- DEMOSTHENES II: DE CORONA AND DE FALSA LEGATIONE. C. A. Vince and J. H. Vince. (*3rd Imp. revised.*)
- DEMOSTHENES III: MEIDIAS, ANDROTION, ARISTOCRATES, TIMOCRATES, ARISTOGEITON. J. H. Vince. (*2nd Imp.*)
- DEMOSTHENES IV-VI: PRIVATE ORATIONS AND IN NEAERAM. A. T. Murray. (Vol. IV *3rd Imp.*)
- DEMOSTHENES VII: FUNERAL SPEECH, EROTIC ESSAY, EXORDIA AND LETTERS. N. W. and N. J. DeWitt.
- DIO CASSIUS: ROMAN HISTORY. E. Cary. 9 Vols. (Vols. I and II *3rd Imp.*, Vols. III-IX *2nd Imp.*)

## THE LOEB CLASSICAL LIBRARY

- DIO CHRYSOSTOM. 5 Vols. Vols. I and II. J. W. Cohoon. Vol. III. J. W. Cohoon and H. Lamar Crosby. Vols. IV and V. H. Lamar Crosby. (Vols. I-IV *2nd Imp.*)
- DIODORUS SICULUS. 12 Vols. Vols. I-VI. C. H. Oldfather. Vol. VII. C. L. Sherman. Vols. IX and X. Russel M. Geer. Vol. XI. F. R. Walton. (Vols. I-IV *2nd Imp.*)
- DIOGENES LAERTIUS. R. D. Hicks. 2 Vols. (Vol. I *4th Imp.*, Vol. II *3rd Imp.*)
- DIONYSIUS OF HALICARNASSUS: ROMAN ANTIQUITIES. Spelman's translation revised by E. Cary. 7 Vols. (Vols. I-V *2nd Imp.*)
- EPICTETUS. W. A. Oldfather. 2 Vols. (Vol. I *3rd Imp.*, Vol. II *2nd Imp.*)
- EURIPIDES. A. S. Way. 4 Vols. (Vol. I *7th Imp.*, Vol. II *8th Imp.*, Vols. III and IV *6th Imp.*) Verse trans.
- EUSEBIUS: ECCLESIASTICAL HISTORY. Kirsopp Lake and J. E. L. Oulton. 2 Vols. (Vol. I *3rd Imp.*, Vol. II *5th Imp.*)
- GALEN: ON THE NATURAL FACULTIES. A. J. Brock. (*4th Imp.*)
- THE GREEK ANTHOLOGY. W. R. Paton. 5 Vols. (Vols. I-IV *5th Imp.*, Vol. V *3rd Imp.*)
- THE GREEK BUCOLIC POETS (THEOCRITUS, BION, MOSCHUS). J. M. Edmonds. (*7th Imp. revised.*)
- GREEK ELEGY AND IAMBUS WITH THE ANACREONTEA. J. M. Edmonds. 2 Vols. (Vol. I *3rd Imp.*, Vol. II *2nd Imp.*)
- GREEK MATHEMATICAL WORKS. Ivor Thomas. 2 Vols. (*3rd Imp.*)
- HERODES. Cf. THEOPHRASTUS: CHARACTERS.
- HERODOTUS. A. D. Godley. 4 Vols. (Vols. I and IV *4th Imp.*, Vols. II and III *5th Imp.*)
- HESIOD AND THE HOMERIC HYMNS. H. G. Evelyn White. (*7th Imp. revised and enlarged.*)
- HIPPOCRATES AND THE FRAGMENTS OF HERACLEITUS. W. H. S. Jones and E. T. Withington. 4 Vols. (Vol. I *4th Imp.*, Vols. II-IV *3rd Imp.*)
- HOMER: ILIAD. A. T. Murray. 2 Vols. (Vol. I *7th Imp.*, Vol. II *6th Imp.*)
- HOMER: ODYSSEY. A. T. Murray. 2 Vols. (*8th Imp.*)
- ISAEUS. E. S. Forster. (*3rd Imp.*)
- ISOCRATES. George Norlin and LaRue Van Hook. 3 Vols. (*2nd Imp.*)
- ST. JOHN DAMASCENE: BARLAAM AND IOASAPH. Rev. G. R. Woodward and Harold Mattingly. (*3rd Imp. revised.*)

## THE LOEB CLASSICAL LIBRARY

- JOSEPHUS. H. St. J. Thackeray and Ralph Marcus. 9 Vols. Vols. I-VII. (Vol. V *3rd Imp.*, Vols. I-IV, VI and VII *2nd Imp.*)
- JULIAN. Wilmer Cave Wright. 3 Vols. (Vols. I and II *3rd Imp.*, Vol. III *2nd Imp.*)
- LONGUS: DAPHNIS AND CHLOE. Thornley's translation revised by J. M. Edmonds; and PARTHENIUS. S. Gaselee. (*4th Imp.*)
- LUCIAN. A. M. Harmon. 8 Vols. Vols. I-V. (Vols. I and II *4th Imp.*, Vol. III *3rd Imp.*, Vols. IV and V *2nd Imp.*)
- LYCOPHRON. Cf. CALLIMACHUS.
- LYRA GRAECA. J. M. Edmonds. 3 Vols. (Vol. I *5th Imp.*, Vols. II (*revised and enlarged*) and III *4th Imp.*)
- LYSIAS. W. R. M. Lamb. (*3rd Imp.*)
- MANETHO. W. G. Waddell; PTOLEMY: TETRABIBLOS. F. E. Robbins. (*3rd Imp.*)
- MARCUS AURELIUS. C. R. Haines. (*4th Imp. revised.*)
- MENANDER. F. G. Allinson. (*3rd Imp. revised.*)
- MINOR ATTIC ORATORS. 2 Vols. K. J. Maidment and J. O. Burt. (Vol. I *2nd Imp.*)
- NONNOS: DIONYSIACA. W. H. D. Rouse. 3 Vols. (*2nd Imp.*)
- OPPIAN, COLLUTHUS, TRYPHIODORUS. A. W. Mair. (*2nd Imp.*)
- PAPYRI. NON-LITERARY SELECTIONS. A. S. Hunt and C. C. Edgar. 2 Vols. (*2nd Imp.*) LITERARY SELECTIONS. (Poetry). D. L. Page. (*3rd Imp.*)
- PARTHENIUS. Cf. LONGUS.
- PAUSANIAS: DESCRIPTION OF GREECE. W. H. S. Jones. 5 Vols. and Companion Vol. arranged by R. E. Wycherley. (Vols. I and III *3rd Imp.*, Vols. II, IV and V *2nd Imp.*)
- PHILO. 10 Vols. Vols. I-V. F. H. Colson and Rev. G. H. Whitaker; Vols. VI-IX. F. H. Colson. (Vols. I, V, VI *3rd Imp.*, Vols. II, III, VII-IX *2nd Imp.*, Vol. IV *4th Imp.*)
- Two Supplementary Vols. Translation only from an Armenian Text. Ralph Marcus.
- PHILOSTRATUS: THE LIFE OF APOLLONIUS OF TYANA. F. C. Conybeare. 2 Vols. (Vol. I *4th Imp.*, Vol. II *3rd Imp.*)
- PHILOSTRATUS: IMAGINES; CALLISTRATUS: DESCRIPTIONS. A. Fairbanks. (*2nd Imp.*)
- PHILOSTRATUS AND EUNAPIUS: LIVES OF THE SOPHISTS. Wilmer Cave Wright. (*2nd Imp.*)
- PINDAR. Sir J. E. Sandys. (*8th Imp. revised.*)

## THE LOEB CLASSICAL LIBRARY

- PLATO I: EUTHYPHRO, APOLOGY, CRITO, PHAEDO, PHAEDRUS.  
H. N. Fowler. (11th Imp.)
- PLATO II: THEAETETUS AND SOPHIST. H. N. Fowler. (4th Imp.)
- PLATO III: STATESMAN, PHILEBUS. H. N. Fowler; Ion.  
W. R. M. Lamb. (4th Imp.)
- PLATO IV: LACHES, PROTAGORAS, MENO, EUTHYDEMUS.  
W. R. M. Lamb. (3rd Imp. revised.)
- PLATO V: LYSIS, SYMPOSIUM, GORGIAS. W. R. M. Lamb.  
(5th Imp. revised.)
- PLATO VI: CRATYLUS, PARMENIDES, GREATER HIPPIAS,  
LESSER HIPPIAS. H. N. Fowler. (4th Imp.)
- PLATO VII: TIMAEUS, CRITIAS, CLITOPHO, MENEXENUS, EPI-  
STULAE. Rev. R. G. Bury. (3rd Imp.)
- PLATO VIII: CHARMIDES, ALCIBIADES, HIPPARCHUS, THE  
LOVERS, THEAGES, MINOS AND EPINOMIS. W. R. M. Lamb.  
(2nd Imp.)
- PLATO: LAWS. Rev. R. G. Bury. 2 Vols. (3rd Imp.)
- PLATO: REPUBLIC. Paul Shorey. 2 Vols. (Vol. I 5th Imp.,  
Vol. II 4th Imp.)
- PLUTARCH: MORALIA. 14 Vols. Vols. I-V. F. C. Babbitt;  
Vol. VI. W. C. Helmbold; Vol. X. H. N. Fowler; Vol.  
XII. H. Cherniss and W. C. Helmbold. (Vols. I-VI, X  
2nd Imp.)
- PLUTARCH: THE PARALLEL LIVES. B. Perrin. 11 Vols.  
(Vols. I, II, VI, VII and XI 3rd Imp., Vols. III-V and  
VIII-X 2nd Imp.)
- POLYBIUS. W. R. Paton. 6 Vols. (2nd Imp.)
- PROCOPIUS: HISTORY OF THE WARS. H. B. Dewing. 7 Vols.  
(Vol. I 3rd Imp., Vols. II-VII 2nd Imp.)
- PTOLEMY: TETRABIBLOS. Cf. MANETHO.
- QUINTUS SMYRNAEUS. A. S. Way. (3rd Imp.) Verse trans.
- SEXTUS EMPIRICUS. Rev. R. G. Bury. 4 Vols. (Vol. I 3rd  
Imp., Vols. II and III 2nd Imp.)
- SOPHOCLES. F. Storr. 2 Vols. (Vol. I 10th Imp., Vol. II  
6th Imp.) Verse trans.
- STRABO: GEOGRAPHY. Horace L. Jones. 8 Vols. (Vols. I,  
V and VIII 3rd Imp., Vols. II-IV, VI and VII 2nd Imp.)
- THEOPHRASTUS: CHARACTERS. J. M. Edmonds; HERODES,  
etc. A. D. Knox. (3rd Imp.)
- THEOPHRASTUS: ENQUIRY INTO PLANTS. Sir Arthur Hort.  
2 Vols. (2nd Imp.)

## THE LOEB CLASSICAL LIBRARY

- THUCYDIDES. C. F. Smith. 4 Vols. (Vol. I *5th Imp.*, Vols. II-IV *3rd Imp.*)  
TRYPHIODORUS. Cf. OPIAN.  
XENOPHON: CYROPAEDIA. Walter Miller. 2 Vols. (Vol. I *4th Imp.*, Vol. II *3rd Imp.*)  
XENOPHON: HELLENICA, ANABASIS, APOLOGY, AND SYMPOSIUM. C. L. Brownson and O. J. Todd. 3 Vols. (Vols. I and III *3rd Imp.*, Vol. II *4th Imp.*)  
XENOPHON: MEMORABILIA AND OECONOMICUS. E. C. Marchant. (*3rd Imp.*)  
XENOPHON: SCRIPTA MINORA. E. C. Marchant. (*3rd Imp.*)

## VOLUMES IN PREPARATION

---

### GREEK AUTHORS

---

- ÆLIAN: ON THE NATURE OF ANIMALS. A. F. Scholfield.  
ÆSOP AND OTHER FABULISTS. B. E. Perry.  
ARISTOTLE: HISTORY OF ANIMALS. A. L. Peck.  
PLOTINUS. A. H. Armstrong.

---

### LATIN AUTHORS

---

- PHAEDRUS AND OTHER FABULISTS. B. E. Perry.

### DESCRIPTIVE PROSPECTUS ON APPLICATION

---

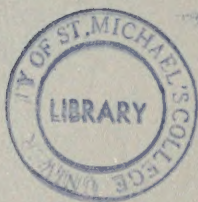
---

LONDON  
WILLIAM HEINEMANN LTD  
Cloth 15s.

CAMBRIDGE, MASS.  
HARVARD UNIV. PRESS  
Cloth \$2.50







ARISTOTELES

...Problems

PA  
3893  
.P9  
H4  
Vol.2.

