

THE COLLEGIAN OCT. 1962

A LETTER FROM THE EDITORS TO THE READER

"The Collegian is published monthly." This sentence which appeared in last month's editorial note deserves repetition and comment. In the past, The Collegian has appeared irregularly, three or four times a year, whenever "adequate material" has warranted. But the irregularity of publication made it inconvenient - at times, impossible - to use some types of more than adequate material. This issue includes two examples: Miss Brann's "Note" on the Parameter, which has a special value at a time when the Sophomores are beginning Apollonius, and Mr. Bell's review of Mr. von Blankenhagen's lecture, which can be published while the lecture is still immediate to the community's memory. The monthly schedule is further useful for the traditional publication of the prize-winning student essays: this year, the essays will appear in rough correspondence with the seminar readings with which they deal, thereby becoming an integral part of the college discussion.

The editors hope that students and faculty members will take advantage of the opportunities offered by this new schedule. At the same time, we would like to repeat our invitation to all students to contribute to The Collegian: short stories, short plays, poetry, "anything that can be reproduced on a conventional mimeograph."

Richard Freis

Noel Meriam

THE COLLEGIAN

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ACHILLES AND THE SOCIAL CONTRACT:

PLATO'S REPUBLIC, BOOK 2

by Joseph P. Gonda
First Prize Freshman Essay 1962

It is to deny what the history of the world tells us is true to suppose that men of ambition and talents will not continue to spring up amongst us. And when they do, they will naturally seek the gratification of their ruling passion.

--Abraham Lincoln

συνθήκη τις ὑπὲρ τοῦ μὴ βλάπτειν μηδὲ βλάπτεσθαι
- Epicurus

The purpose of this paper is to examine the relationship between two passages which occur in Plato's Republic: Glaucon's account of the origin and nature of justice and Socrates's account of the origin of the city. It assumes as postulate that one of the primary purposes of the Republic is the education of the young interlocuters. It will show that Socrates's Construction of the City of Pigs is designed to create a rendezvous between the State and Glaucon. The paper has no intention of being a comprehensive study of these two accounts, and the almost complete omission of Adeimantus is intentional.

In the opening of Book 2 of the Republic the young and energetic Glaucon offers a speech on the origin and nature of justice. It is offered as a defense of the Thrasymachian position of Book 1. This speech does not proceed from a strict adherence to Thrasymachus' view of justice, but rather springs from a dissatisfaction with Thrasymachus' defense and subsequent defeat at the hands of Socrates. Moreover, this dissatisfaction is strengthened by the relationship between Glaucon, the ambitious and future statesman, and Thrasymachus, the sophist, who can give the gift of persuasive speech. This relationship becomes clear with the exposition of Glaucon's argument.

Glaucon begins his account of justice by describing the nature of injustice:

By nature...to commit injustice is good and to suffer it is an evil. 1

Because the majority of men lack the power to pursue the greatest good (i.e. the pursuit of injustice) and because "...the excess of evil in being wronged is greater than the excess of good in doing wrong,"² the following results:

It is for their (i.e. the weak) profit to make a compact with one another neither to commit nor to suffer injustice; and this is the beginning of legislation and covenants between men. 3

The words underlined point to the essence of Glaucon's speech. The word ἐνοθέσθαι, which is translated: "to make a compact," can only be understood within the context of social contract theory. And indeed this is what Glaucon presents, a social contract. Here "social contract" signifies the deliberate creation by men, through speech, of the political community. The description of the state as created in speech necessarily implies that individuals, as the possessors and users of speech, are logically prior to the state. However, it must be remembered that in Glaucon's account, this contract creates but a compromise between the best and worst lives. An energetic and ambitious individual, a "true man" (ἀληθὺς ἄνθρωπος),⁴ or to catch the flavor of Glaucon's phrase better in English, a "real man," would never agree to live by it, for it would restrict the exercise of his talents and ambitions. This, then, is the problem presented by Glaucon: How does a "real man" abide in a city created by social contract. Glaucon answers the problem with the tale of the Ring of Gyges. This concerns a magic ring which makes the wearer invisible and allows him the greatest freedom from the restrictions of his society. To see how this answers the problem let us look at Glaucon's description of the perfectly unjust and the perfectly just man. The unjust man turns out to have all the appearances of justice plus the abilities of a clever craftsman.⁵ If he happens to make a mistake, "...we must concede to him the power to correct his mistakes by his ability

to speak persuasively."⁶ In other words we must concede to him a verbal Ring of Gyges provided by the sophists who teach him to duel in the law courts and the political arena. Therefore, Thrasymachus, as sophist, and not the Thrasymachus who loses the argument so ineptly in Book 1, is the means through which a "real man" will succeed in a society which abides by a social contract which limits his actions. This is why Glaucon attempts to protect the position of Thrasymachus as sophist. It is almost unnecessary to add that the perfectly just man, according to Glaucon, has all the appearances of injustice, is unable to protect himself, and suffers the greatest injustice

The argument we have just paraphrased presents both a problem and an opportunity for Socrates. The problem is whether a "real man" can be made to agree to a social contract; and if he can, whether he has any other means for surmounting the restrictions placed on his talents than the unjust speech of the sophists. The opportunity for solving this problem is the magic Ring of Gyges. For now that magic has been introduced into the dialogue, the minds of the interlocutors are free to use the magic of logos and to turn to the fanciful creation of a state. (After Glaucon finishes his account, Adeimantus presents a speech on justice. Following Adeimantus' speech, Socrates gives him his account of the origin of the city.)

"We, taken individually, are not self-sufficient."⁷ This simple dictum is, according to Socrates, the ἀρχή of the establishment of the city. Men, not only motivated but bound by this principle, call and gather themselves into one place so that they can act as partners to satisfy their needs; and to this gathering place we give the name "City." With the city seemingly well on its way, Socrates interrupts his narrative and says:

Come let us create from the first (ἀπ' ἀρχῆς)
a city in our speech (τῷ λόγῳ). 8

This enigmatic interruption seems to imply a second $\alpha\rho\chi\eta$; or at least points to an essential alteration of the first. To understand this interruption, we have to understand the gift of the Ring of Gyges which Glaucon gave to himself as the gift of sophistry, but which, in the hands of Socrates, becomes the gift of magic, the magic of logos. For logos as the true vehicle of discourse depends on all the facets of the mind. That is, logos is not dependent on magic but rather the magic of the inventive mind is an integral part of logos. Here we might substitute for the word magic the act of enlarging small letters into large letters so that the operations of a state can be witnessed.

The meaning of the interruption becomes clear when we examine a phrase which Socrates has used in his first description of the city: $\tau\acute{\alpha}\upsilon\tau\eta\ \tau\eta\ \xi\upsilon\nu\omicron\iota\kappa\acute{\iota}\theta\epsilon\ \epsilon\theta\acute{\epsilon}\mu\epsilon\theta\alpha\ \pi\acute{o}\lambda\iota\nu\ \acute{\omicron}\nu\omicron\mu\alpha$.

The phrase is translated, "to this dwelling together we give the name city or state." The Greek, however, carries important implications, both in the formal grammatical structure and in the choice of words, which the English does not reveal. Let us examine the Greek. The verb, $\epsilon\theta\acute{\epsilon}\mu\epsilon\theta\alpha$, is translated "we give." In form, it is the middle aorist indicative of $\tau\acute{\iota}\theta\eta\mu\iota$, whose meaning is "place" or "set." The use of the middle voice indicates that the act of "placing" the name "city" is not done to an amorphous mass of figurative men, but is done by us, the interlocutors, to ourselves: we must accept the name, assume membership, and thus create the "dwelling together." Further, the aorist tense and the indicative mood present an act completed in the past and independent of any condition: the creating was a straightforward historical act. We are now in a position to render the English more carefully: "...in this dwelling together we have placed on ourselves the name city." Socrates seems to begin with a historical account of the creation of an actual city through a contract in which all present have been involved. The choice of words in the phrase also points to a

a contract. In Glaucon's speech, the word *ἑνωθέντες* signified the making of the compact. The roots of the word *ἑνωθέντες*, *σύν* and *τίθημι*, are echoed in this phrase in the words *ἑνωκίς* and *ἑθέμεθα*. When Socrates rejects the first start and replaces it with another, he tells us two things: 1) that a historical or factual approach will not answer Glaucon's problem, and 2) that to satisfy the problem, the magic of *logos* (*τῷ λόγῳ*) has to be introduced. As we shall see, by creating a new city in speech, and leading Glaucon to interrupt and thereby legislate for it, Socrates permits Glaucon to satisfy his ruling passion without recourse to the unjust rhetoric of the sophists.

The new start invokes basically the same principle:

Our needs...create this city. 10

From this opening statement the city is created. No "calling together," no "making of compact," is mentioned. All we are given is the result of our needs; a city of five people--a farmer, a house-builder, a weaver, a shoemaker, and servant for the body. This is the nucleus for the city. Far from being static, the advantage of the city, i.e. division of labor, gives it an impetus and calls for new citizens. Here is a partial list: carpenters, smiths, shepherds, and merchants, for the city is to have both imports and exports. Once the city is seemingly completed, Socrates turns it into a pastoral idyll:

Reclined on rustic beds strewn with bryony
and myrtle, they will feast with their children,
drinking hymns to the gods in pleasant
fellowship. 11

The reader is familiar with Glaucon's interruption which introduces the fatal sweetmeats to what he calls the City of Pigs. This interruption not only affects the tastes of the city but also its make-up. With this interruption, the "real man" is introduced, and the whole warrior class; for the city, keeping its principle of the division of labor, cannot have citizen-warriors but must have professional soldiers. Let us compare Glaucon's and

and Socrates' cities.

From the first, a problem presents itself--how to consider the first abortive attempt by Socrates to create a city. I propose to answer this question after a comparison of Socrates' City of Pigs and Glaucon's city has been made.

The first similarity between Glaucon's and Socrates' cities is their "raison d'etre." For Glaucon, men are not able to avoid injustice; that is, they are not able to avoid suffering evil. For Socrates, men, taken individually, are not able to provide for their needs. In both accounts these two factors impel men to gather themselves and form cities in order that they can have respite from their inadequacies. Here, at the point of actual creation, a difference can be seen. In Glaucon's account, an implicit social contract, which becomes the basis for the actions of the citizens of the state, is evident. In the first creation of the city, Socrates claims, a rhetorical social contract can be made out, as was shown earlier, in the christening of that "dwelling together." In the second city there is no social contract. Turning to the citizens of the two cities, we find in Glaucon's, if we accept his definition for the motivation of mankind, a cross-section of what he calls man; both the weak and the strong are present. In Socrates' City of Pigs--the citizens are uniformly mediocre--merchants, husbandmen, weavers, cobblers, etc. From this insurmountable dichotomy the two cities separate completely. Glaucon's city turns to a bitter competitive existence in which the best weapon is an ability to speak well. While Socrates' city, on the other hand, turns to a temporary idyllic reverie before its final rendezvous with Glaucon.

It remains to be seen what Socrates has accomplished with this City of Pigs. Let us remind ourselves of Glaucon's problem: Is the state possible for the "real man?" Furthermore this problem

is couched in terms of the social contract, and these terms demand, if the "real man" is to be in the state, that he hide behind a facade of sophistry. Now we must turn to the problem of Socrates's two cities.

The easiest way to deal with the situation would be to dismiss the first city as just part of the dramatic setting of the dialogue. Nevertheless we must remember the paucity of words with which Socrates attacks any given situation, or rather that, in all situations, Socrates' words are measured and point to a preconceived end. Therefore the two cities must be regarded as two distinct starts of two distinct cities. The first city presents an implied social contract; and, furthermore, the fact that the second city is put in logos implies that the first city is a historical account. Hence, the opening city presents the situation whereby Glaucon's solution to the problem can be refuted. It states clearly that the problem will be faced directly in the creation of a new city. True, with the first city, Socrates grants that the state can be recognized as arising out of a social contract; this is the purpose of the first city. In order to show Glaucon that the state is not possible without the "real man", Socrates creates a city without the "real man"; a city composed of merchants and craftsmen, whose advantage--one man to one job--also excludes the "real man" who in Glaucon's city is both a clever craftsman and an able rhetorician. Since this new city is in logos, Glaucon, as the representative of the "real man", is excluded from the discourse. Socrates' interlocutor is Adeimantus. Now to a point of speculation: If the historical context and the social contract have been abandoned, is nature the motivating principle? If not, convention, is it nature? This is not stated but it must be inferred; thus the resultant city is even more binding (or, in the case of the "real man", more exclusive) than the previous one. The City of Pigs, therefore, which is given a fluid principle by Socrates, moves on to

its meeting with Glaucon. The interruption which destroys the city is heard. The magic of Socrates' logos has worked. With this creation and destruction of a city, Socrates is telling Glaucon that the city which excludes both him and his opportunities is possible to create, but it cannot endure without him. Glaucon with his interruption has not only entered the city but has directed its future. Glaucon did not need sophistry to act in the City of Pigs, his interruption was successful.

We have seen the fortunes of the "real man" coincide with those of the state; to see them coincide with the fortunes of the philosophic life we have to turn to the rest of the Republic.

Bibliography and Footnotes

Plato, The Republic, Paul Shorey Translator
Vol. 2, William Heinemann, London; 1930.

1. Ibid, p. 115
2. Loc. Cit., p. 115
3. Loc. Cit., p. 115
4. Ibid, p. 114 ()
5. Ibid, p. 120
6. Ibid, p. 123
7. Ibid, p. 148 (Steph. 369 B 5-7; My Reading)
8. Loc. Cit., p. 148 (Steph. 369 C 7-8; My Reading)
9. Loc. Cit., p. 148 (Steph. 369 C 4)
10. Ibid, p. 150
11. Ibid, p. 159

Pagan Heresy

And if the moon were really
One thousand white mares galloping
In frenzied circles
Chilling the atmosphere
With their frosty breath
And all the crusted craters grooves
Left by their silent, silver hooves
That make the sparks called meteors fly?

And if the mist of dawn
Were their chaste breath
When heated by the sun? Mighty sun!
Golden stallion - awesome stallion
Who courts with fervent heat
The chilled mare maidens of the moon
Until he wins them?

Then might not other stars and moons
Their children be
Each comet one more untamed foal
Racing into eternity
And all the radiant, glistening elements
Their progeny?

Susan A. Kennedy

Indigo

There is the blue of morning: awakening bruised
In the solitary dawn.
There is the blue of noontime: blank monotone
Riding high behind a brassy sun.
There is the blue of dusk: crouching thief
Everywhere and always feasting upon the empty heart.
There is the blue of evening: frozen
Into dark dreams by hopeless wishing -
Pastel searchers wandering
Starless, moondrugged and alone.

Susan A. Kennedy

Carefree

The sun rises, stretches in the laughing sky and sets
Scattering its purse of summer gold
While setting fire to the dewy meadows
It shares the day with the lark's love caress.

Susan A. Kennedy

Season

I have seen sixteen winters and fifteen summers
I have gathered closed buds from the green skirts of time.
I have fondled warm stones and caressed the snow-cheek
Sleepy I have lain in the gold of the sun.

Now the roots of wild flowers take hold
And search deep into dark, strange soil.
The still brook boils with turbulent flow
Bull rushes ripped by a new wind tumble and drift askew.

A crocus laughs, a sunbeam glows
Deer and faun cross high legged through the wild wood.
On my own path I too prance in nameless joy
The days assemble - my Spring is here!

Susan A. Kennedy

A Note on Apollonius' Parameter

Eva Brann

In Propositions 11-13 of the Conics of Apollonius the three conic sections are defined by means of a line called the "parameter" of the ordinates: ἡ παρ' ἣν δύνανται αἱ κατὰ γόμεναι τεταγμένως, literally "[the line] to which [are applied] in square the lines drawn down ordinately". That is to say, a square is to be raised on the ordinate and its area transformed into a rectangle under the abscissa of the ordinate, i.e. under a segment of the diameter toward the vertex cut off by the foot of the ordinate. As the area is one falling alongside, or falling beyond (ὑπερβάλλον), or falling short (ἐλλείπον), the ordinate is known to belong to the section called a parabola or a hyperbola or an ellipse.

For those studying Apollonius for the first time it is sometimes difficult either to catch the implications of the way in which the parameter is derived, or to see that these derivations are really similar for all the sections. A conspectus of these derivations may therefore aid the understanding.

This conspectus is here given in partially modern notation for the sake of brevity. But this is not meant to be prejudicial to the special standing of the ancient mathematical objects. Such matters are wonderful topics for discussion: whether the "application of areas" is a kind of proto-algebra, a "geometrical algebra" or a bona fide geometric procedure based on a particular use made of the theory of proportion such as is made in Euclid VI (particularly Propositions 27 ff.); whether the compounding of ratios can really be justified within the ancient understanding of ratio; whether the sections themselves are really graphs of functions plotted in crypto-coordinates or plane figures made by passing a plane through a solid; and so on. O. Neugebauer in an article significantly entitled: "Apollonius-Studien. Studien zur Geschichte der antiken Algebra," Quellen und Studien, III, 3, 215 ff. (from which article, incidentally, the present note is largely taken) holds that the Conics contain a "latent algebraic component" and that the "material content" of Greek and earlier modern mathematics does not basically differ. The whole question of their difference therefore becomes for him a question of method or style, which he takes to be equivalent terms, and quite separable from the objects to which they are applied.

Descartes precedes Neugebauer in granting that the ancients may have been in some respects as good as modern. But since he thinks that exclusively such objects should engage our attention as can be pursued by a method, (cf. titles of Regulae II and IV), since he, indeed, supposes such a method to be a scientia mirabilis (Adam-Tannery X, 179), that very wonderful knowledge which David found too high--he could

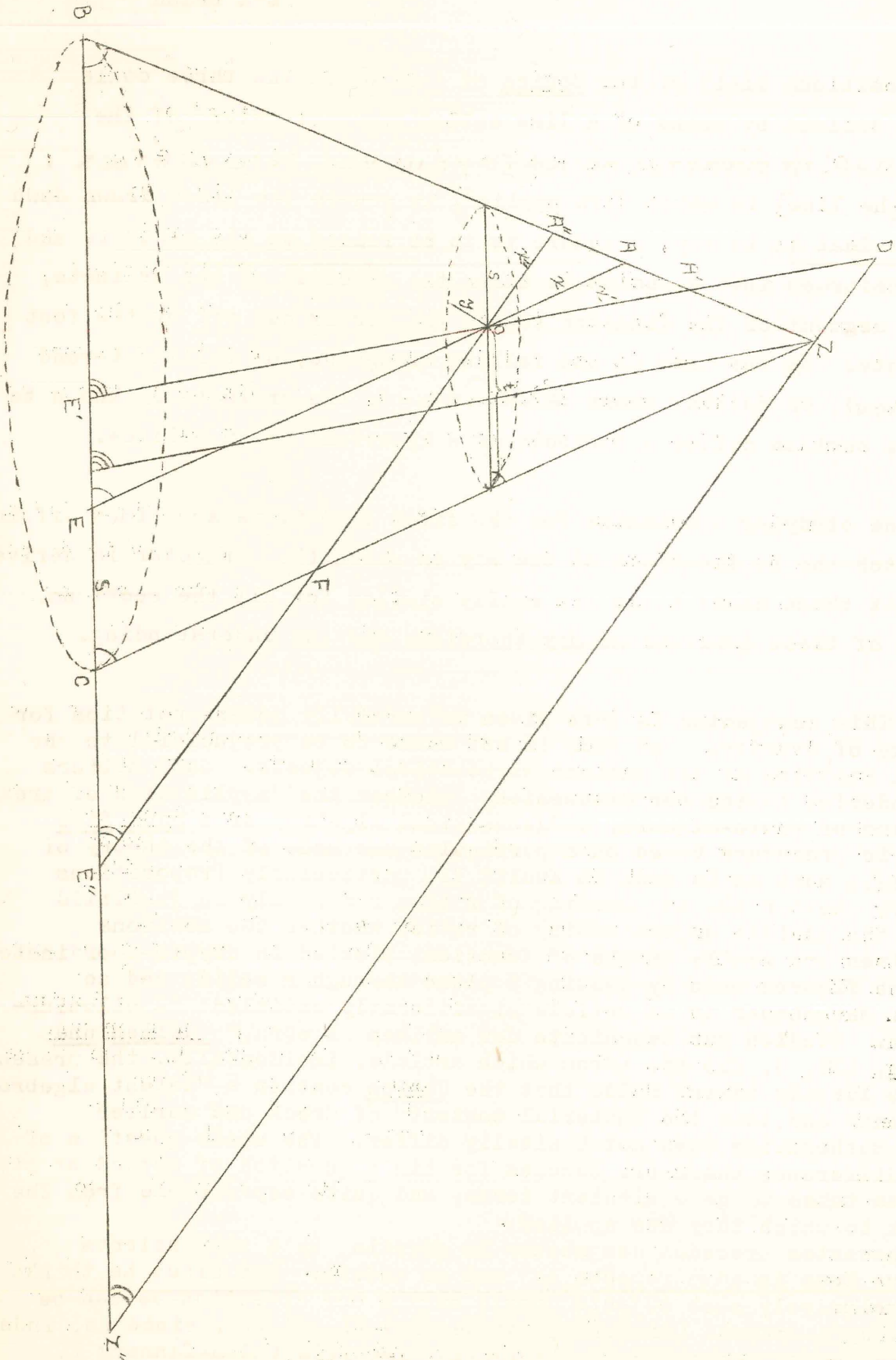


Fig. I

not attain unto it (Psalm 139, 6)--, he credits certain ancient mathematicians with knowing his own analytic method, which is the "true mathematics (Regula IV): "...thus by the same illumination of the mind by which they [the ancients] saw that virtue is to be preferred to pleasure, and what is honest to what is useful, although they were ignorant of why this was so [sic!]; they recognized true notions in philosophy as well as in mathematics, although they were not yet able to grasp these sciences through and through. Indeed, certain traces of this true mathematics seem to me to appear in Pappus and Diophantus who, though they were not of the earliest age, yet lived many centuries before our time. But I believe that it was then suppressed by these authors from a certain low cunning (perniciosa quadam astutia); for perhaps they feared, as we know many craftsmen to have done in respect to their inventions, that once it was commonly known, it would be held cheap because it was very easy and simple; and they preferred to exhibit for us in its place, as the effects of their art, certain fruitless truths, very cleverly demonstrated by deduction, so that we might admire them, but they did not teach us the art itself, which would have put an end to our admiration once and for all".

The Pappus mentioned has given his name to the three- and four-line locus problem treated earlier by Apollonius (E.B. edition pp. 799 ff.). This locus problem has a sort of intermediate nature between conics and analytic geometry, and it is indeed its general solution in the first book of Descartes' Geometry which marks the real beginning of that latter science.

In Fig. I let BZC be the axial triangle of a right cone, i.e., a cone with a base parallel to the plane of the generating circle.

Now pass a plane through the cone parallel to the base. This will produce a circle. Draw one of its ordinates y cutting the diameter into segments s and t . By Euclid VI, 13

$$s \cdot t = y^2$$

and this holds wherever the foot O of the ordinate falls and wherever the plane is passed through the cone.

Now pass three planes through the cone, such that each cuts the circle in line y , and so that one is parallel to, the second is neither parallel to nor cuts, and the third cuts side ZC of the cone. These planes will cut the axial triangle in lines AE , $A'E'$, and $A''E''$ and will produce respectively a parabola, a hyperbola, and an ellipse. The abscissas are marked x , x' , and x'' .

Now each section can be related to the axial triangle, and thus to the cone, through its ordinate, since $y^2 = s \cdot t$ and s and t appear in several proportions involving the axial triangle.

Thus, because of the similar triangles:

for the parabola

$$\frac{t}{x} = \frac{BC}{AZ}$$

$$\frac{s}{BC} = \frac{AZ}{BZ}$$

so that:

$$s = \frac{AZ}{BZ} \cdot BC$$

$$t = \frac{BC}{AZ} \cdot x$$

for the hyperbola

$$\frac{t}{x'} = \frac{BZ'}{CZ'}$$

$$\frac{s}{DO} = \frac{CZ'}{BZ'}$$

$$s = \frac{CZ'}{BZ'} \cdot DO$$

$$t = \frac{BZ'}{CZ'} \cdot x'$$

for the ellipse

$$\frac{t}{x''} = \frac{BZ''}{CZ''}$$

$$\frac{s}{OF} = \frac{CZ''}{BZ''}$$

$$s = \frac{CZ''}{BZ''} \cdot OF$$

$$t = \frac{BZ''}{CZ''} \cdot x''$$

and:

$$s \cdot t = \left(\frac{BC}{CZ} \cdot \frac{AZ}{BZ} \cdot BC \right) x$$

$$s \cdot t = \left(\frac{BZ' \cdot CZ'}{BZ'^2} \cdot DO \right) x'$$

$$s \cdot t = \left(\frac{BZ'' \cdot CZ''}{BZ''^2} \cdot OF \right) x''$$

Therefore for each section the square on the ordinate is equal to an area produced by the abscissa and a magnitude derived for that particular situation of the section in that particular cone.

For the parabola this magnitude is constant for any y and is, when taken as the length of a line, its parameter P .

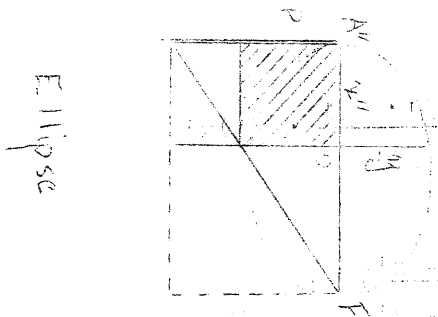
For the hyperbola this magnitude includes a changing factor: OD , the diameter plus the abscissa x' changes as O is taken differently. Subtract x' from OD ; then the parameter is:

$$P_h = \left[\frac{BZ' \cdot CZ'}{BZ'^2} \cdot (OD - x') \right]$$

For the ellipse the magnitude within the parentheses will become constant for

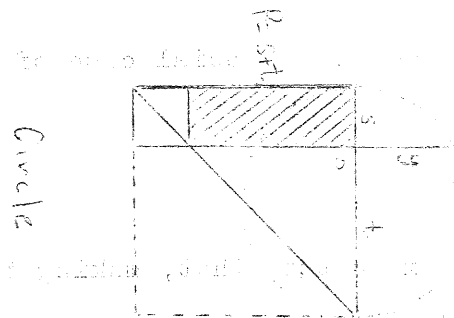
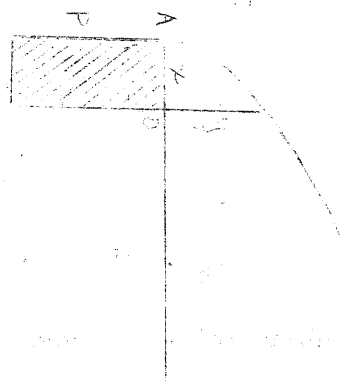
$$P_e = \left[\frac{BZ'' \cdot CZ''}{BZ''^2} \cdot (OF + x'') \right]$$

The latter two sections, the so-called central conics, which have diameters, are also each associated with a figure or shape ($\epsilon\acute{\iota}\delta\omicron\varsigma$). Behind the figure lies a ratio ($\lambda\acute{o}\gamma\omicron\varsigma$) which gives the same look ($\epsilon\acute{\iota}\delta\omicron\varsigma$) to all similar figures, namely the ratio of the diameter of the section to its parameter. (The parameter therefore has no proper position, and it certainly is not fixed into the cone like a nail.)



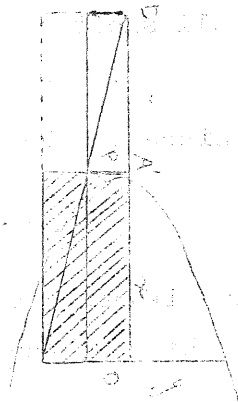
Ellipse

Parabola



Circle

Hyperbola



Here the algebraic expressions will show very clearly how the figure helps to define the particular section. See also Fig. II.
 Rewrite the expression for P_h :

$$P_h = \frac{BZ' \cdot CZ'}{ZZ'^2} \cdot OD - \frac{BZ' \cdot CZ'}{ZZ'^2} \cdot x'$$

Multiply by x' :

$$P_h \cdot x' = \left(\frac{BZ' \cdot CZ'}{ZZ'^2} \cdot OD \right) x' - \left(\frac{BZ' \cdot CZ'}{ZZ'^2} \cdot x' \right) x'$$

$$P_h \cdot x' = s \cdot t - \left(\frac{BZ' \cdot CZ'}{ZZ'^2} \cdot \frac{OD - x'}{OD - x'} \right) x'^2$$

The subtractive expression on the right side can be seen to be:

$$\frac{\text{parameter}}{A'D \cdot \text{diameter}} \cdot \text{abscissa}^2 \text{ so that } y^2 = P_h \cdot x' + \frac{P_h}{A'D} \cdot x'^2,$$

or the square on the ordinate as an area falls beyond or exceeds the area contained by the parameter and the abscissa by an area (equal to the square on the abscissa) which has sides in the ratio of the parameter to the diameter;
this is the λόγος of the ἑίδος.

The same thing can be done for the ellipse, in which case the expression will in the end be: $y^2 = P_e \cdot x'' - \frac{P_e}{A''F}$
 and y^2 will fall short of $P_e \cdot x''$.

The circle is, in the derivation of its parameter, a special case of the ellipse, since in the expression:

$$s \cdot t = \left(\frac{BZ'' \cdot CZ''}{ZZ''^2} \cdot OF \right) x''$$

none of the magnitudes are finite but $OF = s$ and $x'' = t$; so that, making the expression in the parenthesis a constant,

$$P_e = s + t = \text{diameter}$$

$$\text{and } y^2 = P_e \cdot s - \frac{P_e}{\text{diam}} \cdot s^2 = P_e \cdot s - s^2,$$

and thus the ἑίδος of a circle is a square.

But whether it is really right to call the circle merely a "special case" of the ellipse, as has been done above, is an interesting question--both in view of the general observation that special cases, which usually have a low standing in modern mathematics appear to have a prime standing in ancient mathematics, but also in view of the particular role the circle plays in the Conics in connection with the parameter. We are, as so often in Apollonius, by reason of his concluding, left full of admiration for the device but quite in the dark concerning its discovery. How did he come to think of it? (Since it seems to be agreed that it was Apollonius who named the sections according to their falling alongside, beyond, or short of a parameter, there seems to be good reason to think that he too first derived parameters for all three sections.) Perhaps, we might answer, he found the parameter through considerations centered on the circle in some such manner.

The circle is in a way responsible for and prior to the cone since it guides its generation, while it is also itself a section. It might therefore be possible to refer the other sections to it. Now the coordinate of the circle has a property well known from Euclid-- its square is equal to the product of the segments of the diameter, one of which may be considered as an abscissa. If then the sections are made to have this ordinate in common with the circle, several proportions arise by which their abscissas and, in the case of the central conics, some part or extension of their diameter are related both to the axial triangle of the cone and to the rectangle contained by these very abscissas of the circle. That is to say, the rectangle with an abscissa as one side and some magnitude derived from the axial triangle through these segments (and thus constant for that cone and that conic and hence "parametric"), will equal the square on the ordinate if there be added or subtracted a certain area. And on examination, this area proves to have the magnitude of the square on the abscissa and the look of a rectangle contained by the diameter and the parameter.

No final request

Into the North,
the vital land,
neat-set in the hills and built with teeming cities,

he came, a longtime past,

From the soft, caressing

land of his fathers--

his birth-land, flat with its cotton and tobacco and beans

and peanuts and red clay,

Where the thick pine woods

are dense and sweet

and hot in the haze of dust from the roads and feet

of the pickers, and the river lazes east.

North he came

and strode through

that alien, far-from-his-life land, and like so many of his kind

dreamed and did, and all his

Life was sweat and pain.

But he said

it was good, and he had learned of men and ways -- wise in all this,
and in his quietness.

And like so many

of his kind, there was

"down home" always, beloved and imaged like old satin

glowing from age and love

In his memory.

But he got old, and

then an artery broke and the warm love of the sun tempered, and

made taut by an

In some copies of The Collegian for October 1962
several items in A Note on Apollonius' Parameter are illegible.

They are:

p. 2, bottom of close-spaced section: "marks"
opposite p 2: in Fig. I, on line BC add Z'
p. 3, ratio at top for the parabola:

$$\frac{t}{x} = \frac{BC}{ZC}$$

first three ratios for the hyperbola:

$$\frac{t}{x} = \frac{BZ'}{ZZ'}$$

$$\frac{s}{DO} = \frac{CZ'}{ZZ'}$$

$$s = \frac{CZ'}{ZZ'} \cdot DO$$

opposite p. 3: this is Fig. II; the four sections are
only faintly visible.

p. 4, toward bottom, the expression for the circle:

$$s \cdot t = \left(\frac{BZ'' \cdot Z''E \cdot OF}{ZZ''^2} \right) x''$$

p. 5, line 7: "high cunning"

line 13: "manner"

line 7 from bottom: "contained by these very
segments"

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Alien climate poured out, and

with it him--as if

striving, he and the warm love, to find their way back to the
flat and the clay both loved.

In the cemetery,

in the family plot,

there are three azaleas, and a honey-and-bee-heavy wisteria
climbing on a cream-dotted magnolia.

Quiet, haze, heat,

heavy scent, rest;

and so many of his kind there, in the coolness to know only

"I am home."

He'll dream about that

when he looks out

from his mountain-cold grave north--oh, he had a fine military
funeral, just as he would have liked.

"He would have liked."

An alien in an alien place

foreign to all he ever knew or loved;

forever no more "down home".

— Francis Brooke III

Autumn

Fading in the mist a bow-legged peasant goes
Slowly off with his ox in the autumn mist
That hides the humble shabby villages

And yonder as he goes the peasant sings
A song of love and infidelity
Which tells of a ring and a heart that someone breaks

Oh the autumn the autumn has made the summer die
And fading in the mist are two grey silhouettes

---translated by Noel Meriam

Automne

Dans le brouillard s'en vont un paysan cagneux
Et son boeuf lentement dans le brouillard d'automne
Qui cache les hameaux pauvres et vergogneux

Et s'en allant là-bas le paysan chantonne
Une chanson d'amour et d'infidélité
Qui parle d'une bague et d'un cœur que l'on brise

Oh! l'automne l'automne a fait mourir l'été
Dans le brouillard s'en vont deux silhouettes grises

---by Guillaume Apollinaire

The Blankenhagen Affair

Charles G. Bell

Feuds are among relatives, the hottest arguments among those who almost agree. This springs no doubt from the hyphen between the One-many, what has since been called the identity of opposites. Discussion arises in the ground of what is shared.

The other night Prof. P.H. von Blankenhagen gave one of his most winning lectures on Progress and Change in Greek Sculpture. In a carefully chosen series of monumental standing figures, he focused on the transformation of the male nude body through the sixth and fifth centuries B.C. The slides illustrated a progress, within narrowly defined limits, to an acme, as the notion implied by an emphasis on knees, hip-joints, elbows, worked itself out to the harmonious contraposto of Polyclitus. This progress was succeeded by mere change as details explored in the lesser arts of vase-painting and relief were taken up by a novelty-seeking sculpture for monumental designs. The illustrations were beautiful; the lecture, under an apparent simplicity, was rich in implications. The audience felt pleasure and admiration, not the least, perhaps, those who in the question period raised their doubts.

What issues were at stake?

(This question is asked by a party to the discussion, one who necessarily saw through his own eyes, and who from this point on, having no knack at scholarly periphrasis: "the present writer", etc., will indicate his involvement by the pronoun "I".)

Let me draw out three threads which are obviously intertwined: subjectivity, evidence, Geistesgeschichte. The most peripheral comes first.

Mr. Kiley wished to get Mr. Blankenhagen metaphysically classified. Obviously one's metaphysical assumptions will color what he has to say; but it is not always easy to get a man to label himself. Mr. Blankenhagen resisted the endeavor. My own concern here was the historical and aesthetic coloring. In particular it seemed that the closing fiction of a Roman connoisseur talking of the "Barberini Faun" (as restored by Bernini)--which for me suggests a man who, to avoid a worse term, has lechered himself out--that a Roman could be postulated who would see such a work as Mr. Blankenhagen did, a symbolic satyr dreaming of the world's lost outwardness ("What pipes and timbrels, what wild ecstasy;" "Ces nymphes, je les veux perpetuer;" and "The nymphs are departed.") seemed to endow the antique with post-Romantic personality. Like anyone who would rather be a historian (scholar, scientist) than a poet, von Blankenhagen denied the imputation.

This was a minor point. The main quarry, I think, was flushed by James Gilbert, painter, a newcomer to this community, though not to me. It is unlike him to enter a public discussion until he is roused enough to charge in like a bull in a china shop, though when properly viewed he appears a Jovial bull. The underlying cleavage between him and von Blankenhagen was no doubt what will always exist between artist and art-historian, but what had brought Gilbert to a speaking-heat was the single statement that monumental bronzes bear witness to the same development as votive marbles. It is a well known fact that after the invention of hollow bronze casting in the 6th century B.C. the most admired statues were in that medium (En. Brit.), and that of monumental bronzes from the best period only the Delphic Charioteer and the Poseidon discovered in the sea about 30 years ago remain. In particular we have no bronze by any of the masters celebrated in antiquity. Mr. Gilbert was insisting that if we don't know a thing it is better to say so than to build syntheses over our ignorance; what lurked under his words, I suspect, was the artist's mistrust of all Hegelian abstractions which soar over the work itself.

As a notorious admirer of Hegel, I am a more troublesome offender in that kind than von Blankenhagen has any intention of being; so I didn't exactly share Gilbert's position; though as a trafficker in polarities I assume its validity. But the suspicion about all scholarly generalizations from art, whether historical or iconographic, is that they reduce the work to an element, an illustration in quite another story; and something of this kind had troubled me. That the evolution von Blankenhagen traced could be made to rest at its very pivot on a reconstruction of Polyclitus' Doryphorus patched up from Roman copies seemed to hint at an aesthetic hollowness in the historical method.

Mr. Bart had just thrown doubt on the whole notion of a single development to a clearly defined acme, by suggesting that the keen clarity of the 6th century Apollo may have been exactly what the earlier artist would insist he had aimed at, that the perfection of body might be at the cost of some fervor less bodily, the emphasis merely shifting from head to belly, or in terms of a related vice, from Homeric prode to something more of the lower organs. At this point of suspension I decried the hideous pseudo-Polyclitus and asked how any aesthetic argument could be made to rest on so abysmal a copy.

This was mere pet. It is not Prof. Blankenhagen's fault that the Doryphorus and in fact all free-standing works of Polyclitus' time have perished. My unrest at this point had a deeper cause, the opposite, indeed, from Mr. Gilbert's. As usual Hegel had taken some drubbing, and the concept of studying a cultural development in its entirety as an evolution of soul and form had been repudiated as dangerous.

But for me, what could be treasured from the sequence of carvings so seductively chosen, what gave it confirmation and validity, was the larger motion, which could be traced as well in pediments or vase paintings, or in works of literature or philosophy. Between the poles of Egyptian and Minoan: like Apollonian and P...

Dionysian--monumental immobility and express action--we had seen the ripening of motion in repose, an outward exploration leading to a periclean acme; we had seen a style of restlessness and change succeed, offering choices of novelty, softening, or at the best internalization, as the ripeness of body opened to subjective soul. This was so much like Hegel's account of Greek history through Plato and the Alexandrian, so reminiscent of Nietzsche's study of Greek drama (the poles, the accomplishment, the times of critical transformation being all similar) as to hint at mysteries crying to be revealed.

But what is revealed in a question period? Enough if the participant gets a lead for his own deliberation. Whatever problems were raised, the lecture remained, like one of the carvings it dealt with, a sort of art-work, abiding the question, drawing us on.