#### THE 13th INTERNATIONAL CONFERENCE OF



International Society for the Study of European Ideas

in cooperation with the University of Cyprus



## **Geometry and the Bed of Non-Meaning**

Timothy Secret
Department of Philosophy
University of Essex
Wivenhoe Park
Colchester, CO4 3SQ
United Kingdom

Email: timothyrsecret@gmail.com

#### Introduction

According to Hobbes, the doctrine of lines and figures – geometry – crosses no man's ambition, profit or lust. Putting aside anecdotal stories of punches thrown between drunken mathematicians at conferences, this seems convincing. Established geometrical proofs cannot be disputed – they can only be repressed or burnt.

Yet Hobbes did not say that geometry does not involve ambition, profit or lust, only that it is a domain where they cannot be crossed – our ambition for geometry's progress, the profit we take from it, and the lust we have for its breed of certainty, all work to bring us together rather than dividing us. Indeed, is not Hobbes entire project an *ambition* driven

by *lust* for the *profit* of geometric method? In attempting to create a politics *more geometrico*, as indisputable as Euclid's *Elements*, he aims to eradicate the possibility of civil war and found a community without internal division or dispute. Perhaps philosophy itself began with such a gesture, with Socrates and Plato stepping forward and similarly declaring their lust for geometry – the very *sophia* that we *philia* having always taken geometric proof as its ideal model.

Yes, the philosopher loves geometry – loves the non-violent compulsion to accept its indubitable statements, the power that crosses racial and religious borders, the breaking down of class divisions when even a slave boy can be guided to construct a geometric proof, the certainty of acceptance by any type of being that can grasp its concepts whether angels, aliens, the dead or the unborn. As such, the sign over our Academy still states: "Let no one ignorant of geometry enter here"; or more accurately: "Let no one ageometritos – ungeometried – enter".

Yes, you must be *geometritos* to enter the Academy. Why? Because in geometry we witness in its pure state the ideal that every philosopher must want to spread to merit the title "philosopher". We come to philosophy desirous of a community first granted by geometry – from those who congregated beneath the Stoa or in Epicurus's garden to Husserl's vision of harmonious disciples carrying out regional phenomenological studies like cartographers mapping-out the continents. If philosophy is the queen of the sciences, surely geometry remains the queen mother – the original, nurturing love-object whose traits we attempt to recapture in every later love?

According to Husserl, it was this love that gave birth to philosophy and with it to Europe. It was what differentiated what the Greeks did from the earlier Egyptians or Babylonians and from the "philosophies" of the Indians or the Chinese. In 'The Vienna Lecture', Husserl claimed that these other cultures did not have true science, they had only:

a vocation-like life-interest, leading through understandable motivations to vocational communities in which the general results are propagated or develop from generation to generation. [...] only in the Greeks do we have a universal ("cosmological") life-interest in the essentially new form of a purely "theoretical" attitude, and this as a communal form in which this interest works itself out for internal reasons, being the corresponding, essentially new [community] of philosophers, of scientists (mathematicians, astronomers, etc.). These are men who, not in isolation but with one another and for one another, i.e., in interpersonally bound communal work, strive for and bring about *theoria* and nothing but *theoria*, whose growth and constant perfection [...] is finally taken up into the will with the sense of an infinite and common task.<sup>2</sup>

A striving for *theoria* and nothing but *theoria*, *theoria* cut off from the religious-mythic attitude and practical vocational aims, *theoria* with no connection to the "understandable motivations" of a mere conceptual labourer, *theoria* taken up into the will as an entirely new structure of motivation. This new definition of what "will" *can* mean – a will without understandable motivation and thus a kind of love – transforms the relations and

priorities of all prior life-world practices: subordinating them and creating a new model of human existence. Simultaneously, and this is Husserl at his most Hegelian, this transformation only takes place in parallel with establishing individuals' mutual recognition in pursuit of this common spiritual task – a recognition that differentiates true science and its infinite community from a mere individual or collective finite vocation. Husserl is not shy to call this group a "we-subjectivity" – individuals working with and for one another in a communal form that is working itself out for internal reasons. When Husserl calls this task "infinite" it is always in connection with it being ungrounded in any particularity – the European task is for all nations as every local life-world can be transformed by joining this common purpose.

Geometry plays a special role here since Europe spreads its infinite task through geometry, while that possibility of contagion is not unrelated to the task's infinity. The Chinese or the Indian life-world was quite alien to the European; we might assume that any communication across cultural borders would have necessitated an open, unending, mutual hermeneutic labour. However, according to Husserl this was not the case as their pre-scientific life-world was already spatio-temporally structured. Through this common structure they can not only appreciate that the truths of Western geometry are valid for their own worlds and indeed for all possible life-worlds, but beyond this they can glimpse the nature of an infinite task. Later we will perhaps be able to share aesthetic, moral and political truths from the European life-world, but it will necessarily begin through geometry. Thus, the Academy's gates remain the gateway to Europe.

Yet this opens a major question with regard to one of Husserl's last texts: 'The Origin of Geometry'. Famously Husserl's genetic phenomenology seeks to avoid Platonism – it is not that triangles and squares were "out there" waiting to be discovered. Rather, at a certain moment in time, a first mental act occurred of which they were the object. From then onwards, the very possibility of future mental acts with the same noema as their object means that the noema must endure within temporality – even when it is not presently the object of any mental act in a living subjectivity. This persistence requires that the noema can move from its first occurrence in the present experience of an individual to the spoken community of a culture – a community where each member can reactivate the same experience and recognise it as the same experience – and then onward into the medium of "dead" writing. These requirements are of course transcendental rather than empirical. It is not the actual sharing nor the actual writing down that is necessary; rather, it is the possibility that geometric ideas *could* be written down and that they can persist encoded in a dead medium which would allow for their reactivation – that is the condition for their *irreal* existence, their peculiar temporality. There can be no science, no exact science at least, of that which is not ultimately grounded in a repeatable, self-present experience that could be reactivated in any subjectivity on encountering certain encoded instructions. There is an interesting discussion to be had here surrounding Fink's early claims, approved by Husserl, about the impossibility of encoding the phenomenological reduction itself in writing. We've also seen that the object of a mental act, the noema, is immortal through its capacity to return – this will of course open one of the major counterclaims in Derrida's early works where the possibility of failure and annihilation is itself a transcendental condition for the

appearance of the noema: introducing a transcendental meaning of death that contaminates the transcendental field with possibilities traditionally associated with the empirical. Neither issue is for this paper.

## **Geometry in Babylon**

What I'd like to address instead is an outstanding naïve question that hangs over Husserl's protogeometer: the mythical first founder of geometry whose original experience establishes the existence of things such as triangles and squares within a community such that other thinkers working after their mental act can be said to be thinking about *the same* noema as that protogeometer. This protogeometer, were they Babylonian or Greek?

I am not asking the phenomenologically irrelevant "philological-historical question" of "the search for the first geometers who actually uttered pure geometrical propositions". Instead, the non-philological question is whether a Babylonian uttering a geometrical truth is doing geometry. The Babylonian with his finite vocational alignment certainly *seems* to be able to attain certain truths that we'd call geometrical – it is entirely conceivable he could have worked out Pythagoras' Theorem. Furthermore, Husserl tells us they can share what they discover within a vocationally oriented community and even pass their accumulated items of knowledge from generation to generation, presumably encoded in writing. So, we seem to have the symbolic encoding of a primordial experience of a shared object, to have indubitable truths and to have a community. Yet,

this is a finite knowledge with no infinite horizon – there is no infinite task, no *theoria* for *theoria*'s sake, it is prior to "true" science and to science's infinite community.

Without having space to go into detail here, I think we must conclude from Husserl's text that the protogeometer is Greek. Not only do the Greeks establish true geometry with true science, but more controversially they have the first mental act of which the noema is a *true* geometric concept – the true-triangle's noema being infinite and having all the truths of the triangle folded up within it such that their unfolding will reveal only what was always-already true of the noema. The noema of the quasi-triangle of the Babylonian is finite – even if the quasi-geometer manages to grasp a truth such as Pythagoras' Theorem it would be an addition to this finite noema rather than an unveiling.

Husserl's science of sciences is thus intimately tied up with the love for the model of a particular objectivist science. It is a science without Bachelardian epistemic breaks or Kuhnian paradigm shifts, a science where there is:

a total acquisition of spiritual accomplishments which grows through the continued work of new spiritual acts into new acquisitions [...] geometry must have arisen out of a *first* acquisition [...] We understand its persisting manner of being [...as ] a continuous synthesis in which all acquisitions maintain their validity [...] the total acquisition is, so to speak, the total premise for the acquisitions of the new level. [...] The same is true of every science.<sup>4</sup>

This claim that what is true of geometry is true of every science is normative and eliminative rather than descriptive – Newton's laws reveal themselves as inaccurate in the light of relativity, phlogiston is denied in chemistry, etc. Of course there is an infinite task in physics and chemistry, but it is muddled in comparison to the pure infinite task in geometry. We thus encounter an interplay where, on the one hand, geometry is just another objectivist science in crisis and in need of phenomenological salvation, while at the same time geometry is the ideal model for the sciences *including phenomenology*. Not in terms of its method – which remains objectivist – but in terms of its progressive structure.

# **A Geometric Series?**

According to Hobbes, the doctrine of lines and figures – geometry – crosses no man's However, what do we actually discover in the history of phenomenology as transcendental logic and science of sciences? Does it meet Husserl's vision of harmonious disciples and their local cartographic studies? No. We discover quite the opposite. Rather than deepening investigations and occasional corrections, we find radical reformulations, rejections, and what we might call acts of parricide. For example, having moved to Freiburg to study under Husserl in 1928, Levinas was disappointed because all the major questions were already answered and, as he put it, "there was no longer any surprise". Levinas was disillusioned, yet having gone to see Husserl he found Heidegger – the son who killed the father and who had not yet closed the doors for future revolutions. Nevertheless, soon Levinas himself would be committing yet another

parricide against Heidegger. Wasn't this always the way with philosophy, from the Eleatic Stranger's parricide of Parmenides to Aristotle's rejection of Platonism?

Perhaps then philosophical work always takes place in a tension between the *necessary* fantasy of a progressive community and the desire for parricide. Is this not rooted in our implicit metaphilosophy to such an extent that we refuse to recognise as genuine "philosophy" works that lacks either element – for example, Nietzsche is an antiphilosopher insofar as he doesn't believe in the progressive accumulation of truths only the expression of a personal taste; while the average philosophy lecturer is not a "philosopher" because they have not rejected their predecessors to produce something new. If Heidegger had simply followed Husserl's methods and produced a phenomenology of religion, would he not be a technician rather than a "philosopher"?

It might be suggested that philosophy is dialectical: that rather than a linear, accumulative progress as in geometry, philosophy progresses through negation? Yet, what if philosophy cannot embrace dialectics without the fantasy that "after me there will no longer be negation, I will not be negated, now there is linear progress"? Hegel himself embodies this by saying that all previous philosophers negated each other until his absolute knowledge, which is never negated. Even Marx, who says history proper begins with communism, is saying it will no longer have the dialectical structure of our present pre-history driven by class-struggle.

Returning to the reflections with which I began: philosopher's love of geometry, non-violence, indubitability, steady progress. For all the philosophers professed love for these things and to whatever extent he must *necessarily* be aligned towards that vision, is that what he actually *loves* at all? Isn't the philosopher driven by lust for quite the opposite – for violence, polemics and wars? Wouldn't a solid, indisputable truth such as the Archimedean point of the cogito actually arrest this glorious violence? Isn't that the great meta-philosophical paradox: that one *must* fight for a model of peaceful certainty while driven by something radically opposed to that peace?

One might think it makes no difference to the truth of a science what the fantasies and secret desires of the investigators are. Surely it doesn't matter to the truth of E=mc<sup>2</sup> whether Einstein was motivated by *theoria* for *theoria*'s sake or by the desire for fame and reward? Yet, everything in Husserl implies that actually this does matter – if not in objectivist science, then at least in the science of those sciences that has to formulate the nature of desire in science as *theoria* for *theoria*'s sake to access true scientific, non-vocational idealities.

## A Science of the Science of Science

According to Hobbes, the doctrine of lines and figures – geometry – crosses no man's I would suggest then that the real crisis, the one that a *science of sciences* needs to arm us against if we are to take back the sciences from the point of oblivion, would be that phenomenology lacks a critical account of desire and community. To use a French invocation, we need to supplement the theory of *les trois* H – Hegel, Husserl and

Heidegger – fantasists of ideal communities and pure desires, with the theory of the three masters of suspicion – Marx, Nietzsche and Freud.

Here perhaps Nicolas Abraham, trained as a Husserlian phenomenologist but who turned to psychoanalysis, can help. Abraham maintains that Husserl's genetic phenomenology is the right project, yet that it does not go far enough and can never become the science of sciences. This emerges in particular in Abraham's account of the symbol.

The psychoanalytic symbol is not to be understood as a substitute: it is not that I desire X and I symbolise it with the more acceptable Y; rather, we need a dynamic account of the emergence of symbols. For example, when one is scared of snakes it is not that "serpent" is a substitute for "phallus". Instead, a patient's dream of being held by a terrifying serpent satisfies both their tactile desire to touch the "phallus" and the horror the image evokes in them through the desire's repression. The conflict of the desire and the repression of that desire produce at another level an experience that satisfies both the repressed desire and the repression. What is offered in the living present for phenomenological analysis is merely a dream about a frightening serpent; only a suspicious enquiry takes us beyond that to its dual sources. Psychoanalytic work allows the patient to correct their fear of serpents – to end up with a true and accurate horizon of their genuine risks of snakes, rather than a distorted noema caused by the projection of desires attached to another object.

Why is this relevant to philosophy and geometry? Well, psychoanalysis is a complex theory of associations – the brute materials of passive synthesis. As with the irrational fear of snakes, a distorted horizon with regard to one object (I do not desire the phallus) points to a false horizon in another (snakes are terrifying), and so we take the second object incorrectly and either produce a distorted science of it or are incapable of producing any science at all. Only a suspicious analysis aiming at our true desire allows the clarification and correction of these associations and thus grants the undistorted noema for phenomenology. Furthermore, in a community only this will allow us to know we are dealing with the same objects – snakes are a different noema for our uncured patient and to someone else. All of this can easily apply to geometry. Even if I produce theories that are true of triangles, if the noema in the mental acts of different members of the community are different due to personal distortion the science is in crisis.

One response would be to say that additional or missing associations remain an empirical issue – what matters is the possibility of a pure transcendental subjectivity having a mental act with the same content, regardless of whether empirical individuals actually bring distortions to the table. One could claim that the desire, the infinite task, Europe itself, all of these are only transcendental requirements that never need to be realised in any particular empirical individual. Yet, the Abrahamian psychoanalytic angle refuses to be relegated to the empirical. It is *necessary* that we have the fantasy of a community and its progress modelled on geometry, yet that fantasy is a symbol that appears on the basis of a prohibited desire for a very different model of the task and community. Perhaps we can only have the transcendentally necessary geometric fantasy that orients and guides

genuine science on the basis of a fundamental patricidal urge and its repression. If phenomenology is the science of the subjective acts that ground the objectivist sciences, psychoanalysis can claim to be the science of the science of sciences – the account of the secret ideological formulations that produce and allow the fantasy of an infinite task that is the basis of objectivity; while paradoxically also being only another empirical science ruled over by phenomenology.

Phenomenology (Evanston: Northwestern University Press, 1970): 280

<sup>&</sup>lt;sup>1</sup> Thomas Hobbes, *Leviathan* (Indianapolis: Hackett, 1994): 61.

<sup>&</sup>lt;sup>2</sup> Edmund Husserl, *The Crisis of European Sciences and Transcendental* 

<sup>&</sup>lt;sup>3</sup> *Ibid.*, 354.

<sup>&</sup>lt;sup>4</sup> *Ibid.*, 355

<sup>&</sup>lt;sup>5</sup> Emmanuel Lévinas, *Is it Righteous to Be?* (Stanford: Stanford University Press, 2002): 33