

WISDOM IN PRACTICE

Socrates' Conception of *Technē*

by

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ABSTRACT

The word ‘*technē*’ frequently appears in the argument and discussions of Socrates and his interlocutors in Plato’s early dialogues; the concept of *technē* as well as instances thereof often play a crucial role in effecting and rendering plausible Socrates’ argument and discussion. It is curious, therefore, that there are so few studies devoted entirely to examining Socrates’ conception of *technē*¹; this is a deficit that this thesis aims to play some role in correcting.

The first chapter is concerned with elaborating some of the problematic questions connected to the philosophical integrity and originality and the historical actuality of Socrates as he appears in Plato’s dialogues. Part of this project involves responding to questions regarding which dialogues count as ‘early’ and ‘Socratic’ – and what these designations *mean*; part involves elaborating and articulating the character of Socrates’ person and methods in the dialogues and here the importance of the concept of *technē* to Socratic reflection is introduced.

¹ Many studies of Socratic or early Platonic thought take the concept of *technē* to be crucial to understanding Socrates’ ethical reflection. Few studies, however, bother to interrogate and articulate the concept itself; fewer still bother to do so *without* regard for Socrates’ deployment of the concept in ethical contexts. Of article-length studies that aim to do the latter, I know of only two: Smith, Angela M. ‘Knowledge and Expertise in the Early Platonic Dialogues,’ *Archiv für Geschichte der Philosophie* 80 (1998) and Brumbaugh, Robert S., ‘Plato’s Relation to the Arts and Crafts,’ *Phronesis* 2 (1976); and of book-length studies, I know of only four: Balansard, Anne. Technè dans les Dialogues de Platon : l’Empreinte de la Sophistique (Sankt Augustin: Academia, 2001); Löbl, Rudolf. Texnh-Technè : Untersuchungen zur Bedeutung dieses Wortes in der Zeit von Homer bis Aristoteles (Würzburg: Königshausen & Neumann, 1997); Roochnik, David. Of Art and Wisdom: Plato’s Understanding of Technē (University Park, PA: Pennsylvania State University Press, 1996); and Waack-Erdmann, Katharina. Die Demiurgen bei Platon und ihre Technai (Darmstadt: Wissenschaftliche Buchgesellschaft, 2006). Unfortunately, due to a linguistic barrier, I am only familiar with the contents of Roochnik’s book and the two articles.

The second chapter examines the connection in Socratic thought between the concepts of wisdom, knowledge, and *technē*, and aims to bring out both their close connection as well as how they serve to illuminate each other. In this chapter, a difficulty connected with the ordinary philosophical concept of wisdom or knowledge is examined in light of the curious Socratic thesis of the sufficiency of virtue.

The third chapter discusses a controversy between two ways of understanding the significance of *technē* in Socratic thought and attempts to avoid the controversy by suggesting a third way of understanding the concept.

The fourth chapter develops and examines Socrates' own explicit account of *technē* in *Gorgias*.

The fifth, and final, chapter connects Socrates' own account to the controversy discussed in the third chapter and the difficulty examined in the second chapter and suggests a way of overcoming these controversies.

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TABLE OF CONTENTS

Abstract	i
Acknowledgements	iii
Table of Contents	iv
List of Tables	vi
Chapter 1: Introduction: Socrates: Person, Problems & Methods	1
1.1 The Problem of Socrates	1
1.2 Socrates in the Early Dialogues	4
1.3 Socrates & <i>Technē</i>	10
Chapter 2: <i>Sophia, Epistēmē Ēthikōn & Technē</i>	12
2.1 Wisdom (<i>Sophia</i>) & Knowledge (<i>Epistēmē</i>)	12
2.2 Knowledge (or Wisdom) & <i>Technē</i>	16
2.3 The <i>Technē</i> -Analogy	25
Chapter 3: The Fragmentation of <i>Technē</i> ?	27
3.1 Aristotle on <i>Technē</i> I	27
3.2 Aristotle on <i>Technē</i> II: Irwin on <i>Technē</i>	29
3.3 Roochnik <i>Contra</i> Irwin	32
3.4 A Different View of <i>Technē</i>	34
Chapter 4: Unmasking <i>Technē</i> in the <i>Gorgias</i> : ‘ <i>Aitia</i> ’, Explanation, & Structure	36
4.1 Defining <i>Technē</i> & Misunderstanding <i>Aitia</i>	36
4.2 Understanding <i>Aitia</i>	39
4.3 Understanding <i>Phusis</i>	44
4.4 Understanding <i>Logos</i>	45

4.5 Summing Up	48
Chapter 5: Theory vs. Practice in <i>Technē</i> & <i>Technai</i>	50
5.1 Theory, Practice & the Fragmentation of <i>Technē</i>	50
5.2 The Theory in Practice & the Practice in Theory	51
5.3 Generality & Particularity	56
5.4 Conclusion	59
Bibliography	61

LIST OF TABLES

Table 1: The Relationship Between <i>Aitia</i> , Action, & End in <i>Technai</i>	40
Table 2: Contrasting Theoretical Knowledge & Intentional Action	53

Chapter 1: Introduction: Socrates: Person, Problems & Methods

The genius of humanity is the real subject whose biography is written in our annals. – Emerson²

1.1 The Problem of Socrates

It is an abiding paradox of the tradition of philosophical reflection beginning in Ancient Greece – a tradition that depends so crucially for its continuity on the written word – that it should count, among its most influential and characteristic inaugurators, a thinker who managed to realize his vocation without ever bothering to write anything philosophical at all. We might even count this among the final and most persistent of Socrates' goading and enigmatic paradoxes. Indeed, some thinkers, reflecting upon the history of philosophy, apprehend Socrates' most distinctive lesson to be precisely this vocational avoidance of the written word. Martin Heidegger, for example, notes that

All through his life and right into his death, Socrates did nothing else than place himself into this draft, this current, and maintain himself in it. This is why he is the purest thinker of the West. This is why he wrote nothing.³

Now, it is reasonably obscure what precisely the terms 'draft' and 'current' are meant to call forth, in particular, with respect to Heidegger's philosophical purposes, but the terms serve well to contrast the fluctuating and indefinite character of a philosophical conversation carried out orally as opposed to prosaically. Similarly, it is obscure whether the decision to 'place himself' into the draft or current of thought satisfactorily or plausibly explains 'why he wrote nothing,' but it certainly connects his signal

² Emerson, Ralph Waldo. Representative Men: Seven Lectures (New York: Modern Library, 2004) pg. 20.

³ Heidegger, Martin. What is Called Thinking? trans. Fred. D. Wieck & J. Glenn Gray (New York, Evanston, London: Harper & Row, 1968) pg. 17.

philosophical contribution and status (“the purest thinker of the West”) to the fact of his having written nothing.

Whether or not one chooses, therefore, to locate Socrates’ most significant philosophical or intellectual contribution, or the roots thereof, in the fact of his having written nothing (I do not), focus upon this fact is a fitting propaedeutic to what was first called by R. M. Hackforth ‘the problem of Socrates’: how can we measure the fidelity of later philosophers, Plato especially⁴, to Socrates’ thought in the face of an absence of authoritative sources?⁵ The urgency of this problem becomes manifest when one undertakes to reconstruct and interpret the thought of Plato: his earliest dialogues are spoken quite plainly in *Socrates’* voice, sometimes presented as the voice of the narrator (as in, e.g., *Charmides*, *Lysis*, and *Republic*), sometimes as the voice of one among various interlocutors (as in, e.g., *Laches*, *Euthydemus*, *Gorgias*, and *Protagoras*). Indeed, even the scholarly achievement of delimiting a subclass of Plato’s dialogues as *early* hinges upon the supposition that the form and content of a class of dialogues, unified by the personality of Socrates, are reflective of the intellectual or philosophical youthfulness of Plato; reflective, that is, of a student’s mind still devoted to the methods, convictions, and *voice* of the teacher. The young Plato was young too in methods and beliefs and, therefore, content to merely replicate and represent his teacher: in this *he* is a perfect biographer.

⁴ Aristotle is often cited as a source on Socrates and, although I will make use of his work for philosophical and exegetical purposes, he was not a contemporary of Socrates and therefore his knowledge of him must have been second-hand. For information regarding Aristotle’s ‘testimony’ see Vlastos, Gregory. *Socrates: Ironist and Moral Philosopher* (Cambridge: Cambridge University Press, 1991) pp. 91 – 98, and Irwin, Terence. *Plato’s Ethics* (Oxford: Oxford University Press, 1995) pp. 8 – 11.

⁵ See Hackforth, R. M. “Socrates,” *Philosophy* 8 (1933) pp. 259 – 272. See also Ross, W. D. “The Problem of Socrates,” *Proceedings of the Classical Association* (1933) pp. 7 – 24.

In fact, the problem of Socrates threatens to multiply into the problems of Socrates by virtue of inquiry into the nature of the ‘fidelity’ to Socrates that we are concerned to interrogate. How are we to construe, if we grant, Plato’s fidelity to Socrates? Does Plato in his dialogues capture the spirit, as opposed to the exact character, of Socratic philosophical practice? Perhaps Plato retains the philosophical doctrinal content and form of Socratic thought at the expense of a literal depiction of his teacher. Perhaps, instead, Plato records in his dialogues, with greater editing and eloquence, the precise transactions of Socrates and his interlocutors. The problems of Socrates, as opposed to the problem, invite a rich and dizzying variety of stances with respect to authorial fidelity to Socrates even as they stall interpretive closure.

This elaboration of the problem (or problems) of Socrates is not wholly fair to historians and classicists: we have, after all, the evidence of Xenophon, a contemporary of Plato and a member of the circle that gathered around Socrates, in the form of his *Memorabilia*; and we have studies of the formal features of Plato’s dialogues, especially, his use of certain grammatical structures, diction, syntax, and more general stylistic features. Xenophon’s works might serve to give us some independent evidence of Socrates’ philosophical methods, arguments, and positions, while formal analysis of Plato’s dialogues might serve to help us get clear on the chronological sequence of the dialogues (taking one of the dialogues as a control, for example, the *Laws* as Plato’s formally and stylistically most mature work).⁶ Xenophon, however, shows a conspicuous and scrupulous skill in avoiding details that might explain why Socrates should have exerted such a powerful and influential hold on the consciousness of his contemporaries. Thus, Hackforth amusingly notes that Xenophon “is often tedious and humdrum, and he

⁶ For a synopsis of stylistic and formal analyses see Irwin, *op. cit.*, pp. 11 – 13.

has a genius for emphasizing unessentials.”⁷ Xenophon’s Socrates is not worthy of philosophical influence or remembrance; Plato’s Socrates is. Similarly, although we might be able to establish a rough temporal ordering of the dialogues, we can scarcely put an end to the question of whether in youth Plato was more faithful to his teacher than in old age or, indeed, how philosophically naïve the young Plato, in fact, was.

1.2 Socrates in the Early Dialogues

It is tempting to assume that a distinctively philosophical perspective might lay to rest or anyway ameliorate the urgency of the problem of Socrates. From a philosopher’s perspective, after all, what calls for elaboration, discussion and assessment are arguments, methods, and positions, and from such a vantage issues pertaining to Socrates’ historical actuality become less important, if not irrelevant. The decision to treat the unity of argument, method, and doctrine apparent in the so-called ‘early’ dialogues as the upshot of Plato’s own youthful reflections, or as faithful dramatization of Socrates’ own person and views, or, indeed, as some well-imagined and seamless chimera resulting from Plato’s reflections upon his teacher’s pronouncements, seems quite separate from interpretation and appreciation of the distinctive philosophical contribution of Plato’s dialogues – the contribution, one might say, to the shape and content of a history of philosophical reflection.

I have written of the ‘unity’ of argument, method, and doctrine in the early dialogues and I intend to suggest by this expression not only the manner in which argument, method, and doctrine are directed together and in concert – that is, in a manner mutually consistent and availing – toward certain ends, but also the manner in which they

⁷ See Hackforth, *ibid.*, pg. 259. For a discussion of Xenophon’s contribution to our knowledge of Socrates, and its reliability, see Vlastos, *op. cit.*, pp. 99 – 106.

hang together in and reflect the philosophical sensibility or attitude of Socrates. An element of this ‘unity’ is also the category of subjects that Socrates chooses to discuss in the dialogues and here the focus is entirely upon issues that we might label ‘moral’ but that I choose to label exclusively ‘ethical’ in order to avoid an anachronistic and often unconscious prejudgment that closely ties matters ‘moral’ to issues of specifically moral *obligation* or *duty* (in the manner of, most influentially, Kant⁸). It is questions and concerns regarding the best sort of life or the life worth living or the sorts of actions that are best or good – indeed, even questions of the sort of life that one ‘should’ or ‘ought’ to lead or the sorts of actions that one ‘should’ or ‘ought’ to do (where these expressions are purged of their modern moral-duty connotation) – that constitute the class of specifically ethical issues.

When I speak of the ‘early’ dialogues, I am thinking of, in particular, *Apology* (*Ap.*), *Euthyphro* (*Ep.*), *Crito* (*Cr.*), *Charmides* (*Ch.*), *Lesser Hippias* (*L.H.*), *Ion* (*I.*), *Laches* (*La.*), *Lysis* (*Ly.*), *Protagoras* (*Pr.*), *Gorgias* (*Gr.*), *Republic* Book I (*Rp.*), and *Euthydemus* (*Ed.*).⁹ The common thread running through all of these dialogues is, of course, the person of Socrates and so they are often labelled ‘Socratic’ dialogues, but

⁸ This has to do specifically with the Latin ancestry of the expression ‘moral’ and its descent and deformation (with respect to its use in Classical Latin) through the Medieval Latin of the Christian Church. For some reflection on the difference between the ethics of the Ancients and our understanding of morals or morality, see Anscombe, G. E. M. “Modern Moral Philosophy,” *Philosophy* 33 (1958) esp. pp. 1 – 2. Anscombe, it should be noted, does not conform to my terminological stricture. For Kant’s account, to which we owe more than we are often conscious of, see the Preface and First Section of Kant, Immanuel. Groundwork for the Metaphysics of Morals, ed. & tr. Allen W. Wood (New Haven: Yale University Press, 2002).

⁹ For alternative selections of the early dialogues, see Vlastos, *ibid.*, pp. 46 – 47, Irwin, *op. cit.*, pp. 11 – 13, and the introduction to Benson, Hugh H. (ed.) Essays on the Philosophy of Socrates (New York, Oxford: Oxford University Press, 1992) pp. 4 – 5. I have chosen not to include *Greater Hippias* and *Alcibiades* as there is still controversy over their ‘platonic authenticity’, see Plato. Complete Works, ed., intro. & notes John M. Cooper (Indianapolis: Hackett Publishing Company, 1997) pp. 557 – 558 and 899. I have also chosen to exclude *Menexenus* because, being a funeral oration, it lacks both the form and content of a more typical Socratic or early dialogue. All references to the dialogues in this paper are to Cooper’s edition, unless otherwise noted.

Socrates figures essentially in other Platonic dialogues and it is worth considering what precisely makes the early dialogues *more* Socratic than the later: how is Socrates different in each case?¹⁰ At the level of method, Socrates in the early dialogues pursues, most prominently and characteristically, the *elenchos*: the relentless and terrible ‘trial’, ‘test’ or ‘examination’ (any of which the Greek word can signify¹¹) by question and answer designed to reveal the ethical learning or ignorance of the interlocutor. The *elenchos* has its origins in a Greek cultural practice, although Socrates (or Plato) toys with the implications, assumptions and expectations built into that practice for their own philosophical ends.¹²

Even in those dialogues that do not give pride of place to the method of the *elenchos*, such as *Apology*, instances of it often still revealingly appear (*Ap.* 24d1 – 27d2). The mere fact of the *elenchos*, its form one might say, is, however, not to be privileged in place of its content: the topics it deals with, or is directed towards investigating, and the sorts of assumptions it requires for cogency and plausibility. Rather, in the early dialogues, the *elenchos* is almost always broadly directed towards answering ethical questions regarding how one should live (or act) or the best sort of life (or action).¹³ As a result, its focus is upon an understanding of the life of virtue or the individual virtues that are distinctive of such a life.¹⁴ Socrates, in the early dialogues, has often been charged

¹⁰ This is a question that Vlastos addresses in a skillful and illuminating manner in Vlastos, *op. cit.*, pp. 45 – 80. My sketch of Socrates’ philosophical character or persona owes a great deal to Vlastos’ discussion.

¹¹ All references to translations of Greek words and expressions derive from Liddell, Henry George. & Scott, Robert. A Greek-English Lexicon, revised & augmented by Sir Henry Stuart Jones with the assistance of Roderick McKenzie (Oxford: Clarendon Press, 1940).

¹² An excellent discussion of the *elenchos* is available in Vlastos’ “The Socratic *Elenchos*: Method is All,” Socratic Studies, ed. Myles Burnyeat (Cambridge, UK: Cambridge University Press, 1994).

¹³ See, *inter alia*, *Ep.* 4b1 – 2 and 5d1 – 4; *Ap.* 28b6 – 8; *Cr.* 47c8 – 15 and 48b7 – 8; *Ch.* 159c1 – 160d3; and §2.1 below.

¹⁴ *Euthyphro* centers on piety, *Charmides* on temperance, *Laches* on courage, and the remaining dialogues all discuss either wisdom or justice or, sometimes, both.

with some form of ‘intellectualism’¹⁵ principally because of his thought that wisdom or knowledge alone is sufficient for virtue (*Ed.* 281b5 – 6), that is, for living a virtuous life. The evidence for such a charge is available in the varied use Socrates makes of the concept of *technē* – variously translated as ‘art’, ‘craft’, and ‘science’ – and instances of *technai* (e.g., shipbuilding, carpentry, geometry, calculation, etc.) in specific applications of the *elenchos*. Indeed, the idea that investigations of virtue are best understood as investigations of a kind of *technē*, although not explicitly stated by Socrates in the dialogues, seems implicit in his insistence on focusing solely upon the conditions of knowledge (here understood as what is available to a master of a *technē*).

The motivating thought is that an understanding of virtue or virtuous life is best approached as an investigation of the sort of wisdom available to practitioners of *technai*.¹⁶

Of course, the *elenchos* is not abandoned in later dialogues, but its significance and place in philosophical reflection is quite different. Even as early as *Phaedo*, the *elenchos* serves a preparatory function to rather more metaphysical philosophical reflection; and this is connected to another distinctive feature of the Socrates of the early dialogues: his eschewing of, if not outright hostility towards, metaphysical speculation and theory. In the *Phaedo*, for instance, the desire to stake out a speculative metaphysical position, rather than to test an interlocutor, becomes evident beginning at 71d4 and by the end of the dialogue it is quite apparent that all of the *elenchoi* were in the service of tutoring those attending Socrates’ last hours in the doctrines of the immortality and

¹⁵ For an extensive discussion of Socratic intellectualism see Nehamas, Alexander. “Socratic Intellectualism,” *Virtues of Authenticity: Essays on Plato & Socrates* (Princeton: Princeton University Press, 1999) pp. 27 – 58.

¹⁶ For more on this, see §§1.3 and 2.2 below.

intelligence of the soul (as well as an incipient version of the Theory of Forms). Indeed, Socrates is invited by Cebes to *argue for* the immortality of an intelligent soul (69e4 – 70b4), rather than, as is usual in the early dialogues, to investigate or test some specific position.

Earlier, I remarked that it is tempting to see the unity of Socrates captured in the totality of the early dialogues from a philosophical perspective; that is, as a unity of argument, method and doctrine. From the vantage of such a unity, a variety of what we might call intellectual proclivities and the character of a philosophical sensibility might be missed. I am thinking here, for instance, of Socrates' confession of his own carelessness towards the metaphysical views of other philosophers (as in his remarks at *Ap.* 19b2 – d3), or of his derisive and dismissive attitude to very fine linguistic or terminological distinctions (*Ch.* 163d1 – e3), and the (in)famous Socratic irony has a place in this talk of sensibility and proclivities. Of course, one might suppose that one can subsume these traits of character or intellect within discussions of argument, method or doctrine, but I suspect this amounts only to a terminological move: they are traits of a character or persona, perhaps, of what I like to call a *philosophical* character or persona. I think, therefore, that it is methodologically crucial in articulating and rendering compelling Socrates' thought (or in understanding how it *could* be compelling) to resist the urge to simply talk of a unity of argument, method and doctrine even if it settles questions about the relationship between the historical Socrates and the character in Plato's dialogues. Instead, I suggest we take seriously the reality of Socrates as imagined by Plato – the reality, I should say, of the philosophical character or persona he embodies; and here is where my earlier focus on Socrates' 'voice' becomes rather more intelligible and literal, and rather less figurative.

Terry Penner has noted that “[i]t is chiefly failure to look at the Socratic theses as a whole that has resulted in the unduly unsympathetic accounts of Socrates that one finds in the literature...”¹⁷ Penner’s solution is to treat Socrates still from a philosophical perspective but to emphasize the way in which his various doctrines are connected in what amounts to a rigorous theory. But to distance oneself from what I have called the philosophical personality of Socrates – the *ametaphysical* and intellectualist practitioner of the *elenchos* obsessed with questions and concerns about the life of virtue – is to distance oneself from a philosophical sensibility or attitude or outlook and this risks distancing the reader from the character of Socratic philosophical reflection and the significance it has for very practical issues in our lives. It is, in other words, an exegetical error to forget the philosophical personality at the heart of the early dialogues and one I shall avoid. As for the now infamous, now famous ‘problem(s) of Socrates,’ I prefer, instead, to direct against it the words of Emerson.

The genius of humanity is the right point of view of history. The qualities abide; the men who exhibit them have now more, now less, and pass away; the qualities remain on another brow. No experience is more familiar. Once you saw phoenixes: they are gone; the world is not therefore disenchanted. The vessels on which you read the sacred emblems turn out to be common pottery; but the sense of the pictures is sacred...¹⁸

I take it that part of Emerson’s point is that the significance of certain things can transcend their origins and even their actuality: there may have never (really) been

¹⁷ Penner, Terry. “Socrates on Virtue and Motivation” in Lee, Edward N., Mourelatos, Alexander P.D., & Rorty, Richard M. (eds.) *Exegesis & Argument: Studies in Greek Philosophy Presented to Gregory Vlastos* Phronesis, Supplementary Volume 1. (Assen: Van Gorcum, 1973) pg. 133.

¹⁸ Emerson, *op. cit.*, pg. 21.

phoenixes, although you saw them (perhaps, as a child), but the enchantment might remain. Perhaps, no man has all of the qualities of the genius, but that scarcely impugns the reality or significance of genius itself: *it* is owned by no one and, as it were, by *everyone*. In the case of Socrates, this point resonates well with my case for the reality of a philosophical personality. The significance of an intellectualist, ametaphysical, ironic, and populist philosophical sensibility far transcends issues of the reality of such a sensibility or character. The significance of Socrates for us or for our philosophical imagination (our sense of philosophical possibility) is changed not one whit by resolution of the question of Socrates' historical actuality. Perhaps, this should incline us to praise Plato's great imagination. Perhaps only to praise the circumstances that brought Socrates and Plato together; regardless, it demands that we come to an understanding of that personality and sensibility.

1.3 Socrates & *Technē*

I have so far only briefly mentioned the concept of *technē* – variously translated as ‘art,’ ‘craft’ or ‘science’ – of which Socrates avails himself in the process, conclusions and assumptions that inform his applications of the *elenchos*. The Socratic concept of *technē* will, however, be the focus of my investigations and analysis of the early dialogues and it is interesting how well an articulation of that concept serves to knit together the various concerns raised in this introduction. Certainly, it is quite obvious that insofar as Socrates' concept of *technē* shares features with a more modern theory of knowledge or epistemology, it sheds light on the sources and character of Socratic intellectualism; but it is not always recognized that the *technai* are rather more familiar

than are later epistemologies.¹⁹ Knowledge of shipbuilding or carpentry scarcely should be positioned in the metaphysical and rarefied position of Plato's theory of Forms, but even calculation and geometry as Socrates understands them can be marshalled against fairly ordinary or everyday problems. The work *technai* are intended to do for Socrates seems, as Woodruff notes²⁰, in certain respects, rather different from the work contemporary theories of knowledge or metaphysical views are intended to do. Perhaps, it is best to describe *technai* as functioning in Socratic thought in a manner indifferent to contemporary theories of metaphysics and knowledge. Socrates, we might say, is interested in the sort of epistemological and metaphysical security that is captured in mastery of a *technē*, nothing more. Investigating and articulating Socrates' conception of *technē* serves, therefore, to address and investigate a variety of distinctively 'Socratic' doctrines and methods in the early dialogues. But my approach is also informed by a sense of the determinate philosophical personality of Socrates that runs through the early dialogues I consider. It goes without saying, then, that the investigation does double-duty as a demonstration of the continuity of those dialogues.

¹⁹ Cf. "Anyone who brings standard epistemological questions to an early reading of Plato is bound to misunderstand him. That would be too bad, for what he offers is attractive in many ways. It is the least academic of philosophical theories, for by itself it carries no reference to earlier philosophies. The basic distinction that it makes is familiar and practical..." Woodruff, Paul. "Plato's Early Theory of Knowledge," *Essays on the Philosophy of Socrates, op. cit.*, pg. 86.

²⁰ *Ibid.*

Chapter 2: *Sophia, Epistēmē Ēthikōn & Technē*

2.1 Wisdom (*Sophia*) & Knowledge (*Epistēmē*)

In defending his vocation to some 500 of his Athenian peers in the *Apology*, Socrates reveals its source in the words of the Pythian oracle at Delphi.

You know Chaerophon. He was my friend from youth, and the friend of most of you, as he shared your exile and your return. You surely know the kind of man he was, how impulsive in any course of action. He went to Delphi at one time and ventured to ask the oracle...if any man was wiser [*sophōteros*]²¹ than I, and the Pythian replied that no one was wiser [*sophōteron*]. (*Ap.* 21a1 – 7)

The Greek I have transliterated in brackets are the comparative forms of the adjective *sophos*, traditionally translated as ‘wise,’ and the nominal form of this adjective is *sophia* or, again by tradition, ‘wisdom.’ Puzzled by the affirmation of the oracle, Socrates ‘proceeds systematically’ (*Ap.* 21e3), labouring to impugn the judgment of the oracle and vindicate his conviction in his own lack of *sophia*. His labours uncover a dark truth about the eminent and ostensibly wise: ‘those who had any reputation for knowledge’ turned out to be precisely those whose claims to knowledge far outstripped their possession of it (*Ap.* 21e5 – 22a1). Politicians, poets, prophets and seers all fall prey to the relentless and terrible revelations of the *elenchos* (*Ap.* 22a7 – c8).

Finally I went to the craftsmen [*cheirotechnas*], for I was conscious of knowing [*epistamenōi*] practically nothing, and I knew that I would find that they had knowledge [*epistamenous*] of many fine things. In this I was not mistaken; they

²¹ All reference to the Greek of Plato’s dialogues is to the version edited by John Burnet: Plato. Platonis Opera, recognovit brevique adnotatione critica instruxit Ioannes Burnet (Oxonii: e typographeo Clarendoniano, 1979).

knew [*ēpistamēn*] things I did not know, and to that extent they were wiser [*sophōteroi*] than I. But...the good craftsmen seemed to me to have the same fault as the poets: each of them, because of his success at his craft [*technēn*], thought himself very wise [*sophōtatos*] in other most important pursuits, and this error of theirs overshadowed the wisdom [*sophian*] they had... (*Ap.* 22d1 – e2)

The Greek alerts us to the explicit connection, in Socrates' mind, between *wisdom* (here appearing in comparative and superlative adjectival form, and nominal form, respectively) and *knowledge* ('*epistēmē*'), which Socrates picks out by using participial and verbal forms that are marked by either the initial string '*epist*' or the initial string '*ēpist*'. Socrates' remarks presume that where one speaks of wisdom, one might just as well speak of knowledge (*epistēmē*), for if one can carelessly remark that "they knew things I did not know, and to that extent they were wiser than I," one must be conceiving of wisdom (*sophia*) and knowledge (*epistēmē*) as the same thing. The slide between locutions involving talk of '*sophia*' and those involving talk of '*epistēmē*' must have traded on a connection quite natural or anyways available in the era's Attic vernacular, otherwise we might imagine the interlocutors to balk or bristle at the carelessness. Indeed, Socrates' assumptions, remarks, and inferences throughout the early dialogues support the identity of wisdom and knowledge. *Rp.* 348e1 – 350d4 sees Socrates, in an *elenchic* exchange, moving clearly and carelessly between locutions involving forms of the expression '*sophia*' and those involving forms of '*epistēmē*.' At *La.* 194d8 – e8, Socrates attempts to clarify the claim that "courage is some kind of wisdom [*sophian*]" by inquiring: "what is this knowledge [*epistēmē*] and of what?" The direction of inference is reversed at *L.H.* 375e6 – 7, where Socrates infers from the claim that justice is knowledge, that a wiser soul is a more just soul. Collected together, the evidence from

these two dialogues suggests that in the Socratic vernacular talk of ‘wisdom’ might be anywhere and everywhere replaced by talk of ‘knowledge,’ and *vice versa*. This should not suggest, however, that the notion of the identity of wisdom and knowledge is alien to the reflections of some of Socrates’ interlocutors. Protagoras, for instance, talks of wisdom and knowledge in a manner that suggests the two concepts (and expressions) are interchangeable (*Pr.* 352c8 – d2) and this suggests that the identity may have been naturally assumed in Greek thought of the time.

Some care is, however, required in articulating the force and implications of the identity of knowledge and wisdom. Certainly, in modern English, it is rather forced or pretentious to talk of a carpenter as ‘wise in the ways of wood’ and to characterize other craftsmen in a similar manner. This can lead to the thought that either talk of possession of wisdom or being wise is, as it were, all or nothing (one must be either wise or ignorant and one cannot be both); or that we can only talk of ‘wisdom’ in ethical matters. If, however, “you could say the same thing about painters and carpenters, that they understand wise [*sophōn*] things” (*Pr.* 312d1 – 2) and this way of talking ends up being quite natural (at least in the Greek of Socrates’ time), then wisdom is, like knowledge, something available piecemeal *and* in areas other than ethics: one can be wise in carpentry, but foolish in medicine just as one can be knowledgeable about shipbuilding, but ignorant of lyre-playing. If *epistēmē* is individuated by the subject matter (*I.* 531c7 – 9) – that *of which* it is knowledge – then so too is wisdom (*sophia*). There is no danger of calling someone ignorant and wise or knowledgeable and foolish, provided one distinguishes the variety of wisdom or knowledge one is crediting or denying.

The possibility of individuating wisdom and knowledge by subject-matter invites inquiry regarding Socrates’ particular quest for wisdom: what is the wisdom that he

denies so many possess, but that is so terribly important, indeed, among “the most important” (*Ap.* 22e1)? In the *Apology*, Socrates appears to point to various candidates.

(1) “You are wrong, sir, if you think that a man who is any good at all should take into account the risk of life or death; *he should look to this only in his actions, whether what he does is right or wrong [dikaia ē adika], whether he is acting like a good or a bad man.*” (28b5 – 8, italics mine)

(2) ...are you not ashamed of your eagerness to possess as much wealth, reputation and honors as possible while you do not care for nor give thought to wisdom or truth, *or the best possible state of your soul?* (29e1 – 4, italics mine)

The variety is only apparent, however. The key to unifying the apparently disparate conceptions lies in recognizing the connection between the soul and action in Socrates’ thought.

(3) And is life worth living for us with that part of us corrupted that unjust [*adikon*] action harms and just [*dikaion*] action benefits? (*Cr.* 47e6 – 7)

‘That part of us’ is clearly intended to refer to the soul as against the body. Notice also that in both (1) and (3) the same root word is used (*a-dikai-a/a-dikai-on*), namely, *dikaios*, which can be variously translated as ‘right’ or ‘just.’ (1) and (3) taken together imply that resolving questions about whether an action is right or wrong amounts to resolving questions about whether an action harms or benefits one’s soul, and this is, perhaps, not so surprising given the comment in (1): “whether one is acting like a good or a bad man” (clearly, a good man possesses a good soul, that is, one that is unharmed).

The connection between talk of the ‘best possible state of one’s soul’ (in (2)) and talk of the rightness or wrongness of one’s action can be effected by the underlying thought that good or right actions flow from the soul of a good man, and that such actions *benefit* the soul: they are the route to the achievement and maintenance of ‘the best possible state of one’s soul.’ It therefore becomes possible now to show how Socratic inquiry is inquiry into an understanding of “the way we ought to live” (*Rp.* 352d4): knowledge of how we should live *requires* knowledge of which actions are good or just or right, and this *requires* knowledge of the best possible state of the soul. Socrates’ *elenchos*, therefore, is directed to test or put on trial an individual’s claim to possess *epistēmē ēthikōn*, that is, knowledge of ethics: *this* is the wisdom Socrates seeks and seeks to test.

2.2 Knowledge (or Wisdom) & *Technē*

Socrates assumes the identity of wisdom and knowledge is unproblematic for us to accept in part because of the close connection between the notions of wisdom and knowledge for the modern English-speaker. To be sure, the conceptual connection, when captured in English, does not seem as close as Socrates’ Greek perhaps makes it appear, but though talk of the wisdom of the carpenter is forced or pretentious, it does not obviously deform our concepts of either wisdom or knowledge; in any event, when we focus upon *ethical* knowledge, talk of wisdom becomes *just as* close as Socrates imagines. The case is slightly different, however, when we think of the connection between knowledge and craft or art, which is often how the expression ‘*technē*’ is translated. One may be inclined (and I think it is philosophically natural or enticing) to conceive of wisdom and knowledge as, in some important sense, propositional. The

possession of wisdom is then the possession of a body of truths and in this sense the larger the body of truths, the greater the wisdom; this is what is understood when we talk of ‘the wisdom of the ages’ or ‘the wisdom of the schools’. As a body of propositional truths, knowledge will certainly have a certain structure, but this amounts to the organization and relationship between these truths. Wisdom or knowledge in this sense, however, is intrinsically inert and theoretical. One may act upon one’s knowledge, but only provided one is motivated to by certain desires or attitudes; and even if one chooses to so act, one need not follow the dictates of wisdom or knowledge. It is for this reason that interpreters of Socrates’ thought are liable to balk at his notion that knowledge is *sufficient* for virtue, i.e., for virtuous *action*: one’s volitional states (desires, wants, motivations) surely must be conditioned to conform to one’s knowledge or wisdom. On this view, we can certainly accept that knowledge or wisdom is *necessary* for right or virtuous action, but we should not conclude that it is *sufficient*. The motor for this view of knowledge, whether conscious or not, is David Hume’s treatment of reason and the will in A Treatise of Human Nature.²² On this understanding of knowledge, the practical dimension – the dimension constituted by practical abilities, capacities or activities – more or less disappears. We might wish to talk of the wisdom of the carpenter, but our *Humean* conception of that is of a body of ‘truths of carpentry’. Knowledge of carpentry can, therefore, be attributed to individuals who do not even hammer nails: just as, for example, knowledge of biology can ignore practical capacities. Thus, for instance, a brain in a vat can be a biological sage.

²² Book II, Part III (“Of the Will and Direct Passions”) of Hume, David. A Treatise of Human Nature, 2nd ed., eds. L. A. Selby-Bigge & P. H. Nidditch (Oxford: Oxford University Press, 1978).

The above conception of knowledge may seem only a woeful caricature, but something like it seems very much in play in discussions of the rather mixed fortunes of Socratic intellectualism. George Grote, for instance, faults Socrates with “the error of dwelling exclusively on the intellectual conditions of human conduct, and omitting to give proper attention to the emotional and the volitional.”²³ In a similar vein, John Gould paraphrases Aristotle’s objection to Socrates’ methodological assumptions:

Socrates was wrong in supposing that if a man achieved an understanding of what justice involves, he would...become just in behaviour, since the whole problem of choice intervenes between knowledge and action.²⁴

In both objections, the underlying conception is of knowledge as necessary but hardly sufficient. One way of beginning to loosen the grip that Gould’s conception of knowledge has upon us is to reflect on the importance of the practical dimension of knowledge, i.e., knowledge of what and how to do things. Focus upon the practical dimension of knowledge reminds us of the importance of certain capacities, abilities, and dispositions in the exercise of knowledge, and whittles away at the temptation to conceive of knowledge as exclusively a matter of thought or reflection rather than action or activity. Indeed, I shall argue that this practical dimension is rather more significant for Socrates’ concept of *technē* than we are inclined to recognize.²⁵

It is, however, precisely the importance of the practical in the Socratic concept of art or craft (*technē*) that makes the identity of wisdom or knowledge and craft (or art) problematic. Does Socrates see *technē*, *epistēmē*, and *sophia* as identical? Does Socrates presume the existence of a *technē ēthikōn*? The clearest way to apprehend Socrates’

²³ Quoted by Nehamas in “Socratic Intellectualism,” *op. cit.*, pg. 27.

²⁴ Quoted in Santas, Gerasimos. “The Socratic Paradoxes,” *Philosophical Review* 73 (1963) pg. 148.

²⁵ See, especially, Chapter 5 below.

conviction in such an identity and the existence of such a variety of *technē* is to examine the connection between *epistēmē* and *technē* in the Socratic *elenchos*.

(a) [Socrates:] Medicine doesn't seek its own advantage, then, but that of the body?

[Thrasymachus:] Yes.

And horse-breeding doesn't seek its own advantage, but that of horses?

Indeed, *no other craft* [*technē*] seeks its own advantage – for it has no further needs – but the advantage of that of which it is the craft [*technē*]?

Apparently so.

Now, surely, Thrasymachus, the crafts [*technai*] rule over and are stronger than the things of which they are crafts [*technai*]?

Very reluctantly, he conceded this as well.

No kind of knowledge [*epistēmē*] seeks or orders what is advantageous to itself, then, but what is advantageous to the weaker, which is subject to it.

(*Rp.* 342c1 – d1, italics mine)

(b) [Socrates:] Then are these two things, the possession of good things and the use of them, enough to make a man happy, Clinias?

They seem so to me, at any rate.

If, I said, he uses them rightly, or if he does not?

If he uses them rightly.

Well spoken, I said. Now I suppose there is more harm done if someone uses a thing wrongly than if he lets it alone – in the first instance there is evil, but in the second neither evil nor good. Or isn't this what we maintain?

He agreed that it was.

Then what comes next? In working and using wood there is surely nothing else that brings about right use except the knowledge [*epistēmē*] of carpentry, is there?

Certainly not.

And, again, I suppose that in making utensils, it is knowledge [*epistēmē*] that produces the right method.

He agreed.

And also, I said, with regard to using the goods we mentioned first – wealth and health and beauty – was it knowledge [*epistēmē*] that ruled and directed our conduct in relation to the right use of all such things as these, or some other thing?

It was knowledge [*epistēmē*], he said.

Then knowledge [*epistēmē*] seems to provide men...with well-doing, in *every case* of possession [*ktēsei*] or action [*praksei*].

(Ed. 280e1 – b6, italics mine)

(c) [Socrates:] “Well, if knowing is what temperance is, then it clearly must be some sort of science [*epistēmē*] and must be of something, isn’t that so?”

“Yes – of oneself,” [Critias] said.

“Then medicine, too,” I said, “is a science [*epistēmē*] and is of health?”

“Certainly.”

“Now,” I said, “if you should ask me, ‘If medicine is a science [*epistēmē*] of health, what benefit does it confer upon us and what does it produce?’ I would

answer that it conferred no small benefit. Because health is a fine result for us, if you agree that this is what it produces.”

“I agree.”

“And if you should ask me about housebuilding, which is a science [*epistēmē*] of building houses, and ask what I say that it produces, I would say that it produces houses, and so on... So you ought to give an answer on behalf of temperance...”

“But, Socrates,” he said, “you are not conducting the investigation in the right way. This science [*epistēmē*] does not have the same nature as the rest, any more than they have the same nature as each other, but you are carrying on the investigation as though they were all the same. For instance,” he said, “in the arts [*technēs*] of calculation and geometry, tell me what is the product corresponding to the house in the case of housebuilding...”

(Ch. 165c5 – e8)

I have chosen to quote these few paradigmatic passages at length in order to bring out how Socrates’ *elenchos* shows his conviction in the deep connection between *technē* and *epistēmē*. What is important in these passages is the general structure of argument – the movement and the character of the movement between the concepts of *technē* and *epistēmē* – rather than the specifics of the arguments.

At a rather abstract level, (a) – (c) show Socrates’ dialectical or *elenchic* strategy of illuminating the slightly more obscure, because more general, concept of knowledge by examining universal features of *technai*. The strategy appears in every Socratic dialogue

and, indeed, is Socrates' principal route to refutation.²⁶ The idea is quite familiar in modern philosophical reflection: one articulates and illuminates a *genus* by examining features possessed by its *species*, which instantiate that *genus*. Ideally, the *species* will be rather more familiar and therefore their character more transparent, in the case of *technai* this transparency is a function of their familiarity and availability. After all, instances of *technai* are familiar to laymen and sophisticated theorists alike because they figure in their ordinary or everyday lives. Although Socrates only makes use of the expression 'technē' a handful of times in (a) – (c), the examples from which he argues are examples of *technai*, and the strategy is, it seems, infectious: in (c) Critias rejects one of Socrates' claims by adverting to examples of *technai* that do not bear some feature upon which Socrates depends in his argument.

In the interests of exegetical parsimony, it is, perhaps, inviting to see (a) – (c) as arguing from features of specific *technai* to the features of some unknown, but specific, *technē*. Such an understanding of the flow of those arguments is not unnatural, but it is, nonetheless, I think, at odds with Socrates' tendency to make universal statements on the basis of certain instances and then make use of those statements in discussing some hitherto unknown *technē*. Indeed, in (a) and (b) we see such a move from particular to universal in the italicized portions of the passages. Socrates concludes in (a) that 'no other craft' displays certain features and in (b) that 'every case' of knowledge or its exercise displays some feature. Surely, such universal features or statements would not be possible *without* the assumption of a general concept of *technē* to mediate the move from a subset of particular *technai* to *all* of them.

²⁶ For more examples, see, *inter alia*, *Cr.* 47a7 – 48a2, *Ep.* 13a1 – c7, *Ap.* 20a6 – c3, *La.* 184e1 – 186a2.

It is, to be sure, an artefact of common philosophical sense to illuminate an obscure concept by means of a more transparent one, but the strategy has a special significance in ethical discussion. As Socrates suggests in *Euthyphro*:

SOCRATES: What subject of difference would make us angry and hostile to each other if we were unable to come to a decision? ...examine as I tell you whether these subjects are the just and the unjust, the beautiful and the ugly, the good and the bad. Are these not subjects of difference about which, when we are unable to come to a satisfactory decision, you and I and other men become hostile to each other whenever we do? (7c10 – d5)

‘Subjects of difference’ is an elegant expression for the objects of ethical disagreement, where the principal cost and the defining mark of the investigation can be violent disagreement. The concept of a *technē ēthikōn* (an art or craft of ethics) is appealing, therefore, for the promise of resolving disagreement by the application of knowledge and understanding. Of course, (a) – (c) only establish the close coincidence or mutual intelligibility of *epistēmē* and *technē*, not their identity, and this naturally invites inquiry as to whether talk of *epistēmē* and talk of *technē* are interchangeable.

Although we need not be disposed to treat *epistēmē* and *technē* as identical, Socrates is inclined to do just that. In the *Charmides*, Socrates moves from talk of the ‘science’ (*epistēmē*) of housebuilding to talk of ‘other arts’ (*tōn allōn technōn*) in the same sentence (165d5 – 7). In the same dialogue there is evidence that identifying the concepts of *epistēmē* and *technē*, if not explicitly, then implicitly by careless slides between the two expressions, is not a Socratic idiosyncrasy: Critias refutes Socrates’ claims about *epistēmē* by adverting (165e6 – 7) to ‘the arts of calculation and geometry’ (*tēs logistikēs technēs ē geometrikēs*). In the *Protagoras*, Socrates remarks that “since it is

measurement, it must definitely be an art, and knowledge [*technē kai epistēmē*]” (357b6 – 7); similarly, in the *Ion*, Socrates indicts Ion for being ill-equipped to talk “on the basis of knowledge or mastery [*technēi kai epistēmēi*]” (532c6 – 7).²⁷ The identity of *technē* and *epistēmē* can be cast, therefore, in terms that make it seem considerably less curious. Certainly, the idea of a *technē* that embodies *epistēmē* with respect to some subject-matter is quite natural and this inclines us to regard talk of *epistēmē* as replaceable by talk of a *technē*, the mastery of which equips an individual with the relevant *epistēmē*. What motivated a sense of the awkwardness of casting the relationship between *technē* and *epistēmē* in this form was the peculiarity of using the notion of knowledge to cover practical capacities, abilities and skills.

What has been argued so far may still seem to fall short of proving Socrates’ conviction in the identity of *epistēmē* and *technē*, but I should like to venture two further thoughts that might provide sufficient motivation to conclude that this identity is what Socrates has in mind. First, it goes, perhaps, without saying, that it is the easiest and most parsimonious way to make sense of the textual evidence and to explain Socrates’ remarks and arguments, and, although Occam’s Razor as a principle of textual exegesis may seem to cut rather thin, it fits well with the sort of theoretical or philosophical simplicity²⁸ and purity of Socrates (recall Heidegger’s remark) to avoid multiplying kinds of cognitive states beyond necessity. Indeed, this parsimony is connected to another feature of Socrates’ philosophical personality, namely, his distrust of terminological distinctions. In both *Charmides* (163d1 – e3) and *Protagoras* (340b1 – 5 and 358a5 – b3), Socrates reveals his rather derisive and dismissive attitude to the sorts of fine-grained

²⁷ A further and revealing example of the ‘careless slide’ between *technē* and *epistēmē* is at *Gr.* 448b3.

²⁸ Of course, ‘simplicity’ here need not mean ‘simple-mindedness’ nor need it suggest that the work it takes to get to Socrates’ views is not complex and difficult indeed.

terminological distinctions so evocative of the sophist's art: so long as one fixes the application of one's words, one may talk as one likes (163d5 – 6). The latter thought suggests, then, that we should not be falsifying Socrates' philosophical views in attributing to him a conviction in the identity of *epistēmē* and *technē*, indeed, his application of both concepts appears to suggest precisely that he views their applications as identical.

2.3 The *Technē*-Analogy

The Socratic aspiration to discover a *technē ēthikōn* that would embody *epistēmē ēthikōn* and yield, at last, the *sophia*, which would terminate the Socratic quest and vocation, appears to inform and structure many of the *elenchic* exchanges that characterize Socratic investigation. This 'structuring' is often described as a variety of analogical reasoning in which arguments "from the character of specialized crafts to conclusions about the character of virtues" become signal.²⁹ I think the considerations of this chapter suggest that this is, at best, a rather misleading way of putting the matter. Socrates' central idea is that if knowledge of ethics is to be knowledge *at all*, then it must share certain features with those rather ordinary bodies of knowledge captured in crafts, in virtue of which features it is knowledge: ethical knowledge is, then, a *species* of the *genus* 'knowledge.' The arguments, such as (a) – (c) above, have not merely an analogical relevance, as it were, but are crucial to our conception of ethical knowledge as knowledge. Talk of 'analogy,' therefore, is true as far as it goes, but is explainable by reference to the underlying thought that ethical knowledge is a variety of knowledge, and so talk of 'analogy' should be taken as the starting-point rather than the terminus of an

²⁹ Irwin, Terence. Plato's Moral Theory (Oxford: Clarendon Press, 1977) pg. 71.

investigation into Socrates' concept of *technē*. Socrates is not alone in presuming that ethical matters involve objectivity and normative considerations (getting things right as opposed to getting them wrong), but part of what is so original and influential about his ethical reflection is the way in which he develops the implications of those presumptions. Tracing the content and role of the notion of *technē* in Socrates' reflections is one way of articulating and clarifying the character of that originality and influence.

Chapter 3: The Fragmentation of *Technē*?

3.1 Aristotle on *Technē* I

Although Aristotle is more than a generation removed from Socrates, he is an invaluable source on Socrates' thought both because of his great interest in his philosophical precursors (including Socrates) and because of his insistence on doing full justice to the ordinary meaning of expressions (or the ordinary range of application of concepts). Aristotle is also a sophisticated and technical philosopher quite keen to assert a variety of distinctions, claims and relations that Socrates shies away from. At the same time, precisely because of his distance from Socrates (both philosophical and historical), it is possible to contrast his conception of Socratic reflection and concepts with the textual evidence of Plato. At least, that is the strategy I will adopt in the following.

Using the expression 'craft' in order to translate *technē*, as I chose to in the previous chapter, is a way of signalling a quite particular feature of *technai*³⁰ as well as simply inviting apprehension of its practical dimension. Many *technai* can be identified and individuated in terms of what they produce: medicine produces health, carpentry produces structures of wood, shipbuilding produces ships. In some of these cases, the relevant product is physically distinct from the producer or craftsmen, but this need not always be the case: music is productive, though its product is not obviously 'physically'

³⁰ This point is made quite clear in Roochnik, David. "Socrates' Use of the Techne-Analogy," Essays on the Philosophy of Socrates, *op. cit.*, pg. 186.

distinct from its producer.³¹ The productive character of *technē* may even be quite naturally connoted by the Greek expression. Aristotle notes that

...there is no craft [*technē*]³² that is not a state involving reason concerned with production [*meta logou poiētikē*], and no such state that is not a craft. Hence a craft is the same as a state involving true reason concerned with production [*meta logou alēthous poiētikē*]. (Nicomachean Ethics Bk. VI, Chap. 3 §3)³³

Furthermore, Aristotle is quite consistent in distinguishing, terminologically and conceptually, knowledge (or ‘science’), that is, *epistēmē*, from *technē*. The division is clearly in the background of Aristotle’s discussion of prudence (*phronēsis*) in the *Nicomachean Ethics*.

[I]f science [*epistēmē*] involves demonstration, but there is no demonstration of anything whose principles admit of being otherwise (since every such thing itself admits of being otherwise); and if we cannot deliberate about things that are by necessity; it follows that prudence [*phronēsis*] is not science nor yet craft knowledge [*technē*]. It is not science, because what is achievable in action admits of being otherwise; and it is not craft knowledge, because action and production belong to different kinds. (Bk. VI, Chap. 5 §3)

Whatever else *phronēsis* is, it is certainly a virtue³⁴, and its exercise characteristic of a virtuous life: Aristotle, unlike Socrates, has no faith in the ideal of a *technē ēthikōn*. On

³¹ This example of a non-artefactual product is due to Irwin, *Plato’s Moral Theory*, *op. cit.*, pg 73, and the opening of this chapter owes a great deal to his and David Roochnik’s (*ibid.*) discussion of *technai* and products.

³² All reference to the Greek of Aristotle’s works is to Aristotle. *Aristotelis Opera*, recognovit brevique adnotatione critic instruxit Immanuel Bekker (Oxonii: e typographeo academico, 1837).

³³ Aristotle. *Nicomachean Ethics*, 2nd ed., trans. w/ notes, glossary, & intro by Terence Irwin (Indianapolis/Cambridge: Hackett Publishing, 1999).

³⁴ *Ibid.* Bk. VI, Chap. 5 §7.

the current understanding of *technē*, productivity becomes quite essential, but Aristotle notes (surely correctly) that the virtues – one of the primary objects of theorizing in ethics – are related essentially to action insofar as the possession of a virtue can be difficult to understand in the face of a consistent failure to exercise it. Since, virtue is connected with action, not production, and action and production ‘belong to different kinds,’ whatever the latter precisely means, it is clearly intended to deny that virtue should be understood as ‘craft knowledge.’

Aristotle, also unlike Socrates, is rather scrupulous in terminological consistency: there is no careless sliding between terms, unless there is a prior explanation or reason for doing so. But Aristotle is, as noted earlier, also quite consciously sensitive to the sense of expressions in ordinary or anyways wider contexts: the canvassing of various candidates for the significance of terms is very much a part of his method. Thus, for instance, Aristotle begins his discussion of prudence (*phronēsis*) in the *Nicomachean Ethics* by counselling that “[t]o grasp what prudence is, we should first study the sort of people we call prudent [*tinas legomen tous phronimous*].”³⁵ It is, therefore, *prima facie* plausible to accept Aristotle’s definition or understanding of *technē* as identical to Socrates.’ After all, if Aristotle is attentive to ordinary meanings and sophisticated enough *not* to miss the force of Socratic reflections, why should we not simply enter his definition of *technē* for Socrates’ own concept?

3.2 Aristotle on *Technē* II: Irwin on *Technē*

Some contemporary commentators, such as Terence Irwin, have been motivated to take quite seriously indeed Aristotle’s claim that *technē* is productive knowledge.

³⁵ *Ibid.* Bk. VI, Chap. 5 §1.

A craftsman can satisfy Socrates' demand for an account of what he does; for he can explain each step in production by its contribution to the product. If the product is an artifact, each step will be justified by its contribution to an object separate from any exercise of the craft. Some crafts, however, produce no artifact; an expert flute-player or chess-player produces nothing but good flute-playing or good play in chess. But he still produces a product which can be identified without reference to his particular movements. When we can recognize a tuneful sound in music or a win in chess, we can decide if certain movements are good flute-playing and good chess-player; a tuneful sound is not a good product *because* it is the result of good production, but the production is good because of the product.³⁶

Irwin's final point in this passage, and the one I should like to focus upon, is obscure but seems to be to the effect that whatever is produced serves in some way as the final arbiter in the evaluation of the process that produced it. Taken too literally or simple-mindedly this seems plainly false insofar as it suggests that we are barred from evaluating a 'product' by means of the activity that produced it: this would be to get things the wrong way around. But, one might describe a chess-player's activity or technique as plodding, or crude, or imaginative, or impeccable all the while accepting that he has won (and, therefore, ostensibly, produced the same thing) in each case one is describing. One might, also, describe the activity of a player as superior to that of another who has, nonetheless, defeated the first player. Indeed, a loss by one player may evince a far greater technique or mastery than a win by another: what measures the achievement is the activity – the character of the game that was played. On Irwin's account the evaluation of chess seems

³⁶ Irwin, Plato's Moral Theory, *op. cit.*, pp. 73 – 74. Irwin discusses this conception of *technē* in his more recent Plato's Ethics, *op. cit.*, pp. 67 – 75. Irwin is also clearly aware of his debt to Aristotle, see Plato's Moral Theory, *op. cit.*, pg. 76 and Plato's Ethics, *op. cit.*, pp 71 – 72.

to become a mere numbers game: perhaps, whoever has the highest rating is the greatest chess player. Gary Kasparov has a higher rating than Bobby Fischer, but it is hardly a settled question who the better player is. Of course, Irwin might reply that understanding the activity in any of the relevant respects is possible only because of each activity's connection to winning in chess. But this seems only to mean that there is such a thing as 'winning' in chess and that, in some sense, this is the 'point' of the game.

Irwin's own example of music is revealing with respect to pointing out the difficulties of his view. Irwin remarks that "when we can recognize a tuneful sound in music..., we can decide if certain movements are good flute-playing." 'Tunefulness' is a troublesome property: some of the greatest composers of the 20th century (e.g., Webern, Stravinsky, Schönberg) consciously strove to deform and, in some cases, repudiate entirely 'tunefulness.' A quick listen to a Schönberg piano suite will leave one puzzled as to the high-regard in which he is held; indeed, astonishment would be expected if one's touchstone were Irwin's account.

It is true, therefore, that what organizes activities called forth by *some* varieties of *technē* is, of course, at *some level of reflection*, whatever is produced by that activity, but individual activities might realize this end differently: either by virtue of using different means to realize the same product, or by realizing different products. Furthermore, there is no way to gauge or characterize or appreciate the achievement of the relevant player except by reference to his *technē*. Supposing, then, as Irwin does, that one might 'separate off any exercise of the *technē*' or ignore 'reference to particular movements' by virtue of focusing on the product seems to fly in the face of the realization that evaluation of the activity or exercise resulting in a product may be demanded as part of the evaluation of the product.

The problems facing Irwin's account of *technē* in the early dialogues – and, indeed, more generally, using points made by Aristotle in the service of an understanding of Socratic thought – become quite dire when we consider *technai*³⁷ such as geometry (*geōmetria*), calculation (*logistikē*), and arithmetic or number theory (*arithmētikē*).³⁸ The principal problem is that the objects of theoretical *technai* are available principally through activities like demonstration (or proof) and calculation. To be sure, in the case of small numbers, the results of a method of calculation can be verified more or less independently (by counting), this becomes impossible as soon as the numbers involved become a certain size: the most effective method of verifying the result of a calculation involving such number is to *check over* the *calculation*, that is, the method involved. How, for instance, is one to verify someone's calculation of $(999\,999\,999)^2$? Counting is, it should be noted, clearly not an option (although it is perhaps not quite *impossible*). One's recourse must be to the method she used in calculation. In the case of *geōmetria*, the problem becomes even more difficult. How does one verify that all triangles have interior angles summing to 180° independently of evaluating the method of proof? It is difficult even to make sense of such a question.

3.3 Roochnik *Contra* Irwin

David Roochnik has perceptively criticized Irwin's conception of *technē* by pointing out how poorly the theoretical disciplines fit into Irwin's picture and because his

³⁷ Roochnik credits the notion of 'theoretical knowledge' to Aristotle, see Roochnik, *op. cit.*, pg. 188.

³⁸ For an introduction to the differences between these arts, see Heath, Thomas. A History of Greek Mathematics (Oxford: Clarendon Press, 1921) Vol. I, pp. 10 – 18.

objections differ from those outlined above, it is illuminating to consider their force and character.³⁹

Roochnik notes that there is good evidence in the early dialogues that Socrates considers the ‘theoretical’ disciplines, such as, *inter alia*, geometry, number theory, and calculation, to be instances or varieties of *technē*. (Indeed, Socrates implies just this quite clearly at *Gorgias* 449c10 – 450e1 and it is strongly suggested by the exchange at *Lesser Hippias* 366a1 – 368a9.) Theoretical disciplines, quite unlike the practical disciplines that inform and exemplify Irwin’s conception of *technē* as productive, are not contingent upon the activities of the master of a *technē*, have no obvious product, and the objects they concern are not created by the activities of the master of a *technē* – they are, instead, invariable and eternal objects; the result of this last feature is that, to echo Roochnik, the worth of such *technai* derive entirely from themselves in the sense that the value of, for example, proving theorems in number theory is not to be explained by some fact independent of the theorem or discipline (for example, that it makes one happy, or that it can be applied to the process of building of ships).⁴⁰ Theoretical *technai*, as their name implies, are not to be assimilated to the practical ‘productive’ *technai* that inform and exemplify Irwin’s account: what is the upshot of this discovery?

If the [*technē*-analogy] is not meant to be a conceptual outline of moral knowledge, what is its function? It has, I suggest, two, both of which are dialectical in nature: exhortation and refutation. By describing the function of the

³⁹ The following summarizes points made in Roochnik, *op. cit.*, pp. 186 – 190.

⁴⁰ *Ibid.*, pg. 187.

analogy as dialectical, I mean that it can only be understood within the context of the dialogical argument in which it is used.⁴¹

Roochnik concludes, perhaps, for the philosopher, rather grimly, that the fragmented character of *technai* bespeaks fragmentation, and therefore destruction, of a unified concept of *technē*: there is simply no such illuminating or helpful single concept.

Roochnik mentions ‘moral knowledge’ explicitly in the passage, but his conception of the function of the ‘*technē-analogy*’ shows that he does not think that there is a robust concept of *technē* as knowledge.

3.4 A Different View of *Technē*

I have charted two different views of Socrates’ conception of *technē* in this chapter and both views seem to me to rely upon a fragmentation of *technē* viewed as either a unified concept, which each and every *technē* instantiates, or a unified collection of disciplines, any one of which can be taken as paradigmatic of the whole. Irwin can afford to grant Socrates a unified and single concept of *technē* only at the cost of treating the evidence selectively: that is, at the cost of fragmenting the collection of disciplines that together inform Socrates’ concept of *technē*. Of course, Irwin may have plenty of justification for this selection of evidence, but it is *prima facie* unsatisfying, especially since Socrates seems so insensitive to such selectivity.⁴² Roochnik regards the evidence completely and concludes that there is no single and unified concept of *technē*, instead there is a multiplicity of roles the word and *technai* can play in the dialogues: effectively, Roochnik chooses to fragment the concept, which becomes, in effect, destruction of the concept altogether.

⁴¹ *Ibid.*, pg. 190.

⁴² See, for instance, his reply to Critias’ objection at *Ch.* 166a4 – 7.

I should like to oppose both of these views and suggest that they hinge on a similar assumption. Neither Irwin nor Roochnik suppose that there might be something anachronistic about the divisions (theoretical vs. practical; productive vs. non-productive) they choose to avail themselves of in their discussions and arguments; neither imagines that what Socrates has in mind might be both more humble and more ambitious than what they imagine. Examining closely and carefully Socrates' own articulation of *technē* and putting aside the temptation to fit the materials of that articulation into more modern categories will, I hope, forestall what I have been labelling and decrying as the 'fragmentation of *technē*.'

Chapter 4: Unmasking *Technē* in the *Gorgias*: '*Aitia*', Explanation, & Structure

4.1 Defining *Technē* & Misunderstanding *Aitia*

The most complete and, perhaps, the most illuminating portrait of Socrates' conception of *technē* is provided in the *Gorgias* and this fact makes the *Gorgias* by far the richest ground for an unmasking of Socrates' conception of *technē*. Three moments in the *Gorgias* capture Socrates articulating his notion of *technē*, but it is fitting to collect the three moments into two thematic groups based upon whether the remarks are geared towards explaining the content or the form of *technai*.

- (1) (a) ...it isn't a craft [*technē*], but a knack [*empeiria*], because it has no account [*logon*] of the nature [*phusin*] of whatever things it applies, to⁴³ which it applies them, so that it's unable to state the *aitian* of each thing⁴⁴.

(465a3 – 5)

- (b) ...the one, medicine [*iatrikē*], has investigated both the nature [*phusin*] of the object it serves [*therapeuei*] and the *aitia* of the things it does, and is able to give an account [*logon*] of each of these. (501a1 – 3)

- (2) Well, then, won't the good man, the man who speaks with regard to

⁴³ The Greek is here ambiguous: '*ōi prospherei*' is translated as 'to which it applies' by R. E. Allen and 'by which it applies' by Donald Zeyl (in the version collected in Cooper, *op. cit.*): whether it is read as a dative of means or an indirect object (which is my understanding, i.e. 'to which it applies') is dependant upon one's interpretation of the passage. It is far from clear to me that what I have to say subsequently does not apply *regardless* of the precise translation. All references to Allen are to Plato. *The Dialogues of Plato*, trans. w/ analysis by R. E. Allen (New Haven: Yale University Press, 1984).

⁴⁴ Again, there is an ambiguity here: '*tēn aitian hekastou*' the '*hekastou*' may refer to 'each' of two things, i.e., 'whatever to which it applies' and 'whatever it applies,' or it may simply mean 'each thing', without any prior specification of what thing it is. (This ambiguity will not, I believe, harm or deform the subsequent discussion.)

what's best, say whatever he says *not randomly but with a view to something*, just like the other craftsmen [*dēmiourgoi*], each of whom *keeps his own product [ergon] in view and so does not select and apply randomly what he applies, but so that he may give his product some shape?* Take a look at...any of the other craftsmen you like, and see how each one *places what he does into a certain organization, and compels one thing to be suited for another and to fit it until all⁴⁵ is put together in an organized and orderly way.*

(503d4 – 504a3, italics mine)

These two sets of remarks are conceptually linked, as I will try to make obvious in the following, but it is, perhaps, most natural for an elucidation and explication of them to begin with (1).

Conspicuously, I have chosen *not* to include a complete English translation of the passages (a) and (b), in particular, I have chosen to retain the expressions ‘*aitia*’ and ‘*aitian*’ (respectively, the nominative and accusative forms of ‘*aitia*’). There is good reason for this: there is considerable controversy over precisely how to translate that expression and its cognates. The most natural English translations are ‘cause’ and ‘explanation.’ Unfortunately, it is a matter of some dispute just when the modern concept of ‘cause’ came into normal usage; this question becomes even thornier when we consider the *philosophical* usage of cause, but since there is a very influential treatment of the concept of cause in philosophical usage, it is easiest to make the relevant difficulty plain using that concept.

⁴⁵ ‘all’ (from Allen’s translation) replaces ‘the entire object’ from Zeyl’s translation, *cf. fn.* 38.

The modern concept of cause derives from Hume's account in A Treatise of Human Nature.⁴⁶ The kernel of Hume's analysis is that 'cause' is a relation between two events such that, typically, one event is temporally prior to the other and such that the events instantiate some regularity (often labelled a 'causal law') that predicts the production of the temporally later event given the presence of the temporally prior one, which is the cause. In Hume's analysis, the cause is necessary and sufficient for the effect and this permits the development of causal laws allowing the prediction of the existence of certain events.⁴⁷ The generalization to the case of scientific, especially physical, theories is quite natural: a theory can be tested by determining whether the causal regularities it presents enable one to predict phenomena with some degree of accuracy.

The crucial point about the modern conception of 'cause' is that the causal relation must be an instance of causal laws or anyways explainable by recourse to concepts that might figure in such laws.⁴⁸ How, for instance, do we distinguish the case of the billiard balls from a case of merely felicitous coincidence? By seeing that the 'felicitous coincidence' is not explainable in terms of or as an instance of some causal law, for example, Newton's first law of motion (the law of inertia). Whatever notion of 'cause' the Ancients had, without this focus on causal laws, they simply *did not* have the modern concept of 'cause.' Of course, I noted that there is 'controversy' over whether or not the Ancients – Aristotle in particular – had a concept of 'cause' at least bearing a family resemblance to the modern one⁴⁹, but it is important to see what the objection to

⁴⁶ Hume, *op. cit.*

⁴⁷ See, Hume, *op. cit.*, pp. 73 – 84. For a helpful discussion see the Introduction to Causation, eds. Ernest Sosa and Michael Tooley (Oxford: Oxford University Press, 1993) esp. pp. 1 – 3.

⁴⁸ For a good discussion, see Davidson, Donald. "Mental Events," Essays on Actions and Events (Oxford: Clarendon Press, 2001) esp. § II, and, for a wider discussion, Davidson's "Causal Relations," *op. cit.*, pp. 149 – 162.

⁴⁹ Namely, his notion of 'efficient' or 'moving' cause, see §4.2 below.

translating *aitia* as ‘cause’ *is*, at its strongest, if only to appreciate the way in which Socrates’ analysis of *technē* manages to side-step it.

4.2 Understanding *Aitia*

The most complete and explicit discussion of *aitia* we appear to have is, unsurprisingly, in Aristotle, specifically, in the *Physics* (Bk. II, Chap. 3) and the *Metaphysics* (Bk. I, Chap. 3). Aristotle distinguishes four causes: material cause (what results in an iron statue being heavy), formal cause (what effects a valid argument in mathematics), final cause (a goal or end), and efficient cause (what is, more or less, our concept of cause). The specifics of Aristotle’s account are less important than the ingenuity of one of his expositors, of which I will avail myself in the following.

Gregory Vlastos takes seriously the idea that “Aristotle’s so-called four “causes” are his four ‘*because*.’” In other words, Vlastos suggests that the four causes are, in fact, four sorts of explanation.⁵⁰ What is particularly ingenious is how Vlastos makes good on his view by explaining Aristotle’s various notions of cause in terms of answers to question. Thus, for instance, the material *aitia* figures in answers to questions like ‘Why is this statue so heavy?’ ‘*Because* it is made of bronze.’⁵¹ I should like to adapt Vlastos’ idea to understanding the use of the expression ‘*aitia*’ in (1) (a) and (b) above. To this end, I have constructed Table 1 below.⁵²

⁵⁰ Vlastos, Gregory. “Reasons and Causes in the *Phaedo*,” Platonic Studies (Princeton: Princeton University Press, 1981) pg. 79.

⁵¹ *Ibid.*, pg. 78.

⁵² Both Table 1 and Table 2 are, one might say, family relations of the tables provided by Candace Vogler in “Anscombe on Practical Inference,” Varieties of Practical Reasoning ed. Elijah Millgram (Cambridge, MA: MIT Press, 2001).

Table 1: The Relationship Between *Aitia*, Action, & End in *Technai*

<i>Technē</i>	‘the thing done’	<i>Aitia</i>	End/Goal/Aim: ‘the object it serves’
<i>Logistikē</i> ⁵³ (calculation)	Why is she writing those numbers there? (Why does she need to sum them?)	In order to sum them. (In order to calculate the product.)	correct calculation (techniques/methods of correct calculation)
<i>geōmetriā</i> ⁵⁴ (geometry)	Why is she drawing a line there? (Why does she need to make a line parallel with the base of the triangle?)	In order to make a line parallel with the base of the triangle. (In order to calculate the sum of the interior angles of the triangle.)	discoveries about geometrical figures (geometrical truths)
<i>iatrikē</i> ⁵⁵ (medicine)	Why is he giving a mixture of honey & vinegar(= Oxymel) to the patient? (Why does he need to expel the sputum in the patient’s lungs?)	In order to expel the sputum in the patient’s lungs. (In order to ease the patient’s respiration.)	human health
<i>tektōnikē</i> (carpentry)	Why is he cutting the wood that way? (Why is he making a splice joint?)	In order to make a splice joint. (Because there isn’t enough wood for any other kind of joint.)	wooden structures

The table requires some explanation. I have tried to provide examples of the sorts of ‘things done’ by craftsmen (in the second column) in each of the various crafts (the first column) and the *aitiai*, i.e., the ‘causes’ or ‘explanations’ of those things (in the third column). I have also included the end or goal the particular *technē* serves. The table is designed to explicate and articulate the thoughts cryptically expressed by Socrates in (1) (a) and (b), but also to provide a window into the structure of intentional or deliberative

⁵³ This example is derived from the discussion in Heath, *op. cit.*, pp. 57 – 58.

⁵⁴ Heath discusses an example similar to this one at pp. 143 – 144.

⁵⁵ Reference to and discussion of the name and role of Oxymel is due to Phillips, E. D. Greek Medicine (London: Thames & Hudson, 1973) pg. 83.

action in the context of the various *technai*. Each question asked by a hypothetical trainee or observer in the second column is answered by the statement to its right, and the question below that follows naturally from the response given to the first question: but the answers show the way in which the action is structured by certain aims or goals. On my understanding, the best way to make sense of Socrates' talk of '*aitia*' is as talk of 'explanation' or 'reason': the demand for an *aitia* is the demand for an explanation or reason for something done or effected.

It is important to note that the second column of the table concerns action, in particular, *intentional* actions: actions involving the agent's awareness of and directedness towards certain ends or goals, which are precisely those things described in the third column. *X* tabulates those numbers in that form *in order to* sum them, which in turn is done *in order to* calculate a certain product; and all of this is done, we would say, *in order to* calculate the product *correctly*. The end described in the fourth column may serve either to explain what end some action is a *means to* (*X* did that *so that* he might become healthy) or to explain how some action is constitutive of that end (*X* proved that *in order to* discover a geometrical truth). Typically, however, it is not required of the craftsmen to intend or attempt to achieve anything beyond what is described in the fourth column: that column captures the end of the *technē* itself. Thus, for instance, we do not demand that a physician explain *why* he is restoring someone's health *insofar as he is a physician*. Such a question is not on the same footing as, for example, asking why one solution as opposed to another is being administered since this question can be answered

by someone with suitable expertise in medicine. It is not clear what the former question demands (perhaps, expertise in the *technē* of ethics?).⁵⁶

I have not attempted to fit the notion of *aitia* at play in Table 1 into the Aristotelian mould, but it should be obvious that the most natural understanding of ‘*aitia*’ is as final cause: the *aitiai* do, indeed, explain the actions undertaken, specifically, by showing the point or aim or end of the action in question. I think the difference between formal and final causes can, from such a perspective, be ignored; but, surprisingly, the notion of ‘efficient cause’ also is deformed. In the case of carpentry (last row of the table), the craftsmen’s decision to make a splice joint is explained by the availability of wood: one way of understanding this is to say that his creating a splice joint is caused by the insufficient amount of wood. I think, however, that this stretches our ordinary (modern) concept of cause too far: the availability of wood *constrains* the range of possible joints he might make, but the final *aitia* of his decision to make a splice joint is (for example) in order to make a box for his daughter and it is only in light of that objective or goal that the availability of wood has any causal power or influence at all: the availability of wood constrains the range of possibilities for action in the service of realizing the end of making the box. Similar remarks can be directed towards explanations in medicine. Of course, in one sense, the cause of the physician’s decision to give Oxymel to the patient is the patient’s difficulty breathing due to the presence of sputum in his lungs: but this exerts influence only because of the overarching aim of the physician to restore the health of the patient (after all, the patient’s poor respiration should not cause a murderer to *do* anything at all).

⁵⁶ The ideas in this paragraph are further developed in §4.4 and Chapter 5 below.

In fact, it is quite unnecessary, although helpful, to defer to Aristotle's sophisticated discussion of causes in order to support and to articulate the teleological character of Socrates' conception of craft. Indeed, we do not even need to advert to the well-known fact that Greek thought in Socrates' time showed itself to be quite partial to teleological explanations.⁵⁷ In a number of early dialogues, Socrates makes quite clear his intellectual proclivity for this sort of structure and his sense that it applies far more widely than to the province of human action alone. Thus, for instance, in *Lysis* 219a1 – 220a5, Socrates argues discusses 'friends' (i.e., benefits or things of value) in terms of what they achieve: medicine "is a friend for the sake of health" (219c2). In *Republic* I, Socrates goes so far as to talk of the function (*ergon*) of heat (to heat things), of dryness (to dry things), etc. – the thought seems to be that even such items as heat and dryness have a purpose or function and therefore an aim (335d3 – 8). We need not puzzle ourselves terribly about the nature and influence of teleological explanation in Socrates' time, since it is enough to show how prevalent it is in Socrates' thought for the purpose of supporting our understanding of Socrates' conception of *technē*.

It has, perhaps, been noticed that I have been speaking of the actions or activities of a craftsman, but (1) (a) and (b) talk only of *technē* and make no mention of an expert or craftsman. Is this curious personification of *technē* important? I suspect not. It reveals rather the figurative gifts of Plato (the author) or Socrates (the speaker). It is not unnatural to talk of the sorts of things, for example, medicine *achieves*, such as health of the body, or even to talk of the sorts of things carpentry does. The point, I take it, is to distinguish the activities of a craftsman *qua* craftsman, as it were, from his activities as an ordinary

⁵⁷ See Chapters II and III of Hankinson, R. J. *Cause and Explanation in Ancient Greek Thought* (Oxford: Clarendon Press, 1998).

man (or as an expert in some other field). A physician who successfully embezzles funds from a hospital is not to be commended as a physician *on this evidence*, for great and easily acquired wealth is *not* something medicine achieves *qua* medicine nor is an account of embezzlement to be reckoned the proper province of medicine: it surely possesses no such account.

4.3 Understanding Nature (*Phusis*)

I have spoken a good deal about the importance of *aitia* in Socrates' conception of *technē*, but Socrates also mentions in (1) (a) and (b) two other important notions: the nature (*phusis*) 'of the things *technē* applies' and 'the object it serves,' and the possession of an account or '*logos*.' In the case of theoretical *technē*, the connection between the *phusis* of its object and of the things it applies, and the sort of deliberative action exemplified in Table 1 is rather close. If we take the 'things it applies' to describe actions carried out in the context of, for example, geometrical proofs, then it is quite apparent that one cannot prove anything at all without having some idea of what the nature of the discovery of geometric truths is. Indeed, to know what discovering a geometrical truth amounts to *just is* to know what is involved in a geometrical proof. Even in cases where the 'things it does' are not constitutive of the relative end (as proving is constitutive of discovery in geometry) such as in medicine (health is achieved or effected by actions that are not constitutive of it), one can scarcely suppose that one might be able to cure a patient or restore his health without having any knowledge of the nature of health.

It may be imagined that Socrates' conception of *technē* is rather thin and it leaves little room for talk about what a contemporary thinker would regard as the fields of various disciplines. Thus, for instance, medicine is concerned with the human body;

geometry with geometrical figures and space; number theory with numbers and their relations, etc. Where is mention of these ‘objects’? In fact, Socrates’ conception provides for that. It is not possible, for instance, to calculate a sum or prove a geometric truth ‘correctly’ – read: at all; to calculate or demonstrate *incorrectly* is not to calculate or demonstrate *at all* – unless one is able to manipulate geometric objects and numbers. Calculation simply is the manipulation of numerical quantities, in order to generate further numerical quantities; and geometric demonstration demands the invocation of geometric figures in proof. It is possible (and, perhaps, plausible) that part of understanding ‘the nature’ of geometric objects or numbers (or numerical quantities) is precisely understanding how to calculate and demonstrate by means of them: this understanding constitutes a familiarity with the functional multiplicity of those items. To the extent, then, that mastery of *logistikē* or *geōmetria* equips one with the ability to calculate or demonstrate, it equips one with an understanding of those objects. Similarly, although talk of ‘the things a *technē* applies’ is geared particularly towards medicine and other productive arts, it is possible to understand mastery of the methods, techniques and activities carried out in the context of exercising knowledge of the relevant *technē* in, for example, demonstrations and calculations as evincing understanding of the nature of what it applies.

4.4 Understanding *Logos*

I have been talking of ‘understanding the *phusis*’ and this makes the connection between a *logos* and the natures in question immediate. To understand the *phusis* of the techniques, activities, methods, and objects of proof and calculation *just is* to possess an account, for it permits you to explain one’s activities and actions in terms of the rational

realization of some goal or objective internal to the *technē* in question (for example, to figure out a certain multiplication or a property of a geometric object).

Socrates' conception of *aitia* is of a goal or aim that explains or gives reason for some activity or action in the context of a *technē*. Socrates' conception of *logos* is an explanatory structure of considerable richness and sophistication that conditions the relations between the *aitiai*. A student of, for example, *logistikē* may be able to explain the point of the first few steps in his calculation but if he cannot continue the calculation – that is, he cannot determine what actions to undertake or the *aitiai* of such actions – then he is not in possession of an account or *logos*. Of course, some masters of *logistikē* may be superior to others. It is important not to assimilate the particular competence evinced by some individual in some *technē* to the *technē* itself: individuals may be more or less mistaken or ignorant, but *technai* are precisely what measure that ignorance and error; they cannot be so vulnerable.⁵⁸

In the case of more productive *technai* like medicine or carpentry, the relationship between *phusis*, *aitia* and *logos*, is, perhaps, more naturally explicable. It is quite natural to talk about the therapies and medicines applied to a patient and his body as the 'things which the *technē* applies' and it is possible to apply the appropriate therapy or medicine only provided one understands 'the *phusis* of bodily health' and one can provide a *logos* consisting of *aitiai* for specific activities or actions. Indeed, it is precisely the ability to provide such *aitiai* (dependant on such a *logos*) that explains the effect and importance of individual therapies and medicines.

The case of medicine and carpentry shows, quite clearly, the deep conceptual link between Socrates' remarks in (1) and (2). (2) is concerned principally to articulate the

⁵⁸ For Socrates' remarks to just this effect, see *Rp.* 342a1 – c1.

rational structure – the *logos* we might now say – of *technai* and to figuratively depict the formal cast of a *technikos*' reasoning and activity. (The example in (2) is clearly of a carpenter's production, but should be applied more widely.) It is fruitful and illuminating to put this point about reasoning and activity in terms of the activities exemplified in Table 1. Columns two (with the heading 'the thing done') and three (with the heading *aitia*) show the sorts of activities together with the reason or *aitia* for those activities carried out in the context of a *technē*. Most revealing is the connection between the first questions, the responses, and the answers: these articulate not only the various actions or activities conducted but the rational connection between them, that is, the way in which some activity – for example, giving Oxymel or shaping a joint or drawing a line – is guided by other goals or aims. Such question and answering can or is capable of being carried out to, as it were, the *end* of inquiry and it is illuminating to consider what that end looks roughly like. In the case of medicine, the barrage of questions will terminate with a question like, "Why does he want to effect such-and-such a balance of (for example) humours in the patient's body?" The response is, of course, that *that* is what a healthy body amounts to: and this reveals an understanding of the *phusis* or nature of the human body because it reveals an understanding of its proper functioning. The final aim or objective that structures the activities and actions of the physician is precisely the realization of a healthy body. In the case of carpentry the 'final' answer might end up being something like '*that* is what a good box *amounts to*.' In the case of calculation or geometry, determining the final question (or its answer) seems more difficult, but in reality it is the same sort of thing. 'Why does he want to determine to the sum of the angles of a triangle?' And the answer must be 'because it is a theorem or truth of geometry.' This may seem unsatisfying, but only if one imagines that the final

justification for the activity must be provided outside of the *technē* in question. Socrates, in (2) above, talks about how

each [craftsmen] places what he does into a certain organization, and compels one thing to be suited for another and to fit it until the entire object is put together in an organized and orderly way. (*Gr.* 503e6 – 504a3)

It is clear that Socrates is describing activities and actions carried out in the context of *technai*, be they theoretical or practical, and tracing the ordered and rational character of those actions as well as their service to a wider or more abstract end.

4.5 Summing Up

The order of explication and explanation in this chapter may seem intolerably obscure. My aim, however, is relatively simple. I have tried to limn the form and content of *technai* by showing how Socrates' conception of *technē* is unified and, yet, applicable to such apparently different *technai* as carpentry and calculation. Socrates' conception of *technē* is of a body of knowledge, which is systematic and has a *logos* that equips the *technikos* with the capacity to engage in activities and undertake particular actions in the service of certain ends or goals (*aitiai*) that are instrumental to or ingredients in the service of other ends or goals and to continue up this rational hierarchy of goals or sub-goals in order to effect the final end or goal of activity or action in the context of the *technē*. This goal will be internal to the *technē* in the sense that further understanding of the motivation for the fulfillment of that goal is unavailable except external to that *technē* (hence, the geometer *qua* geometer *cannot* answer why a geometric theorem is being proven unless that theorem is vital to the proof of another). The capacity to structure one's activities and effect the sorts of goals internal to a *technē* demands an understanding

of the nature (*phusis*) of the methods, proofs, techniques, and objects ranged over in the *technē*: a doctor can no more cure a patient's cough if he does not understand what a cough is or what it results from than a geometer can demonstrate that a triangle has internal angles summing to 180° without understanding what an angle, line or triangle is.

Chapter 5: Theory vs. Practice in *Technē* & *Technai*

5.1 Theory, Practice & the Fragmentation of *Technē*

In Chapter 3, I faulted Roochnik and Irwin with an anachronistic understanding of the division between theory and practice that leads to, what I there called, the fragmentation of *technai*. What precisely is the anachronism of which they are guilty? The short answer is: the thought that the distinction between theory and practice had the same significance or force for Socrates as it has for us. Nowadays, university faculties are divided into applied and theoretical disciplines, and ‘theory’ connotes everything that is not directed towards practical, perhaps, even *tangible*, concerns. Mathematics and geometry can be pure – in which case, the sole capacity essential is the ability to construct proofs – or they can be applied, in which case if there are proofs they are conditioned by practical concerns and are only of instrumental value to the construction or production of something. In the Athens of Socrates’ time, the division, I suspect, would not have been so natural and, anyways, I shall argue that for Socrates it is quite impossible to peel off or remove the practical dimension from the theoretical dimension when talking of *technē*. Only by appreciating the strong connection between what we call the ‘theoretical’ dimension of *technai* and what we call the ‘practical’ dimension of *technai* can we hope to identify and understand a unified concept of *technē*, that is, a concept that neither assimilates all *technai* to productive ‘crafts’ (ignoring the multiplicity of *technai*) nor denies the unity of *technai* (and the concept thereof) altogether. In other words, what is required is an understanding of Socrates’ concept of *technē* that entitles us to see both

highly theoretical pursuits and highly practical pursuits as instances of one and the same concept.

5.2 The Theory in Practice & the Practice in Theory

I have made continual mention of a distinction between ‘practical’ knowledge or pursuits and ‘theoretical’ ones and have relied upon a more or less intuitive sense of the force of the distinction in order to propel forth my argument. It is, however, a relatively minor affair to provide a more rigorous formulation of the distinction, though subsequent reflections will, I hope, blur the boundary between the two sorts of knowledge.⁵⁹

Theoretical knowledge (or ‘knowledge-that’) is knowledge of how matters stand and encompasses the constitution, function, and character of things be they objects, processes, events, or whatever. Theoretical knowledge is passive insofar as the acquisition of it does not result in the adoption of capacities or dispositions exercised in practical contexts. Theoretical knowledge is most characteristically seen as propositional knowledge: knowledge, that is, of an organized body of *truths*.

Practical knowledge (or ‘knowledge-how’) is knowledge of how to do certain practical things and its acquisition involves the adoption of dispositions or capacities exercised in practical contexts. Practical knowledge is most characteristically seen as familiarity with practices, activities, and techniques.

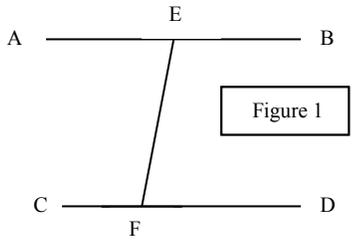
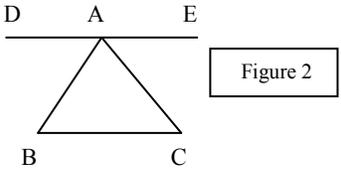
⁵⁹ The idea of two kinds of knowledge – as well as two kinds of *reasoning* – is well worn in contemporary analytic philosophy. See, for instance, the second chapter of Ryle, Gilbert. The Concept of Mind (New York: Barnes & Noble, 1959). For the contrast between theoretical and practical *reasoning* see Millgram, Elijah. “Practical Reasoning: The Current State of Play,” Varieties of Practical Reasoning, ed. E. Millgram (Cambridge, MA: MIT Press, 2001)

I have purposely described these two varieties of knowledge in mutually exclusive terms in order to highlight the central or crucial difference between them, but, of course, in ordinary contexts involving the exercise of knowledge they are deeply connected. This connection is brought out well in some descriptions of the exercise of practical reason. Thus, for instance, one author notes that “[o]ne acts *in pursuit of an end* on grounds of what is believed”⁶⁰; and another, in a similar spirit, remarks that “action is done *with a view to an end and on account of my insight* that it helps to bring this end about.”⁶¹ Whether one chooses to discuss ‘insight’ or ‘belief’ it is clear that what these authors have in mind are objects of theoretical knowledge or understanding, and the thought is that, somehow, knowledge of truths informs one ‘pursuit’ or ‘view’ of ends by virtue of equipping the knower with an understanding of how those pursuits or ends might be realized. Although practical knowledge will certainly figure in one’s actions, its application, one might say, is underwritten by theoretical knowledge. This point can be made clearer if we examine a case of practical reasoning and the sort of theoretical knowledge that informs it as displayed in Table 2.

⁶⁰ Vogler, Candace. “Anscombe on Practical Inference,” *Varieties of Practical Reasoning*, *op. cit.*, pg. 461.

⁶¹ Müller, Anselm W. “How Theoretical is Practical Reason?” *Intention and Intentionality: Essays in Honour of G. E. M. Anscombe*, ed. Cora Diamond & Jenny Teichman (Ithaca, NY: Cornell University Press, 1979) pg. 97.

Table 2: Contrasting Theoretical Knowledge & Intentional Action

<i>Theoretical Knowledge</i>	<i>Action</i>
<p>1. For any two parallel lines AB and CD, a line EF tangent to both forms the following equal angles: $AEF = DFE$ and $CFE = BEF$ (vide Fig. 1).</p>  <p>2. The arc of a semi-circle = 180° (half the arc of a circle).</p>	 <ol style="list-style-type: none"> X draws a line DAE tangent to the vertex A of a triangle ABC and parallel to the side BC opposite vertex A (vide Fig. 2). X notes that angles DAB & ABC are equal; and angles EAC and ACB are equal. X notes that due to 2.: $ABC + ACB = DAB + EAC$. X adds BAC to both sides of the equation in 3.: $BAC + (ABC + ACB) = (DAB + EAC) + BAC$. X concludes from 4. that \therefore the sum of the interior angles of the triangle = $DAB + EAC + BAC$ = the sum of two right angles (i.e., 180°). X concludes that \therefore the sum of the interior angles of any triangle $ABC = 180^\circ$.

Perhaps the most significant feature of Table 2 is the relative poverty of information in the column entitled ‘Theoretical Knowledge.’ The truths or theoretical knowledge that underwrites the actions in the second column are few and, although it may be possible to enlarge this set of truths, some reflection will make it clear that the theoretical knowledge *underdetermines* its application in practical contexts (such as is captured in the second column). This underdetermination is not merely or only a result of there being no one-to-one correspondence of truths with actions, rather, it is the upshot of the fact that what constitutes the activity of proving is not exhausted by any, even rich and ordered, body of truths. Of course, we could simply view the proof in the second column as an instance of

some general (although, not too general) proof-schema and suggest that the schema too is included in the ‘Theoretical knowledge,’ but this determination is necessarily *post facto*, that is, after the production of the proof itself: in striving to prove something (say, that all triangles have interior angles summing to 180°), it is not determined beforehand which proof-schema will be relevant – this is the upshot of the application of a practical capacity constitutive of the whole process of proving.

What sorts of things are included in the ‘activity of proving’ but not in the body of truths (perhaps, not even potentially included therein)? A competent geometer must be disposed to or capable of distinguishing the truths and properties that he can assume (and therefore avail himself of) at each step of the proof; similarly, he must be able to distinguish the implications of each step of his proof: that is, *what* he has established and how it bears upon subsequent steps of his proof. Distinguishing implications and assumptions is, however, insufficient. In order for a proof to be constructed at all, it is only the assumptions or implications *relevant* to the proof that are to be included and discussed. In Table 2, I have chosen to describe the ‘actions’ of the hypothetical geometer instead of representing his reasoning, as I did in Table 1, in terms of actions linked by the expression ‘in order to.’ But the difference is middling: in Table 2 we can easily think of the hypothetical reasoner engaging in the actions described in 1. *in order to* demonstrate 2. and the latter demonstrated *in order to* demonstrate 3., and so on. When I talk of ‘relevance,’ it is precisely what is captured in this ‘ordering’ of actions: *x* is done *in order to y* is a pronouncement of the relevance of *x* to *y*.⁶² A geometer, in proving something, must be able to make use of truths and discover new ones in order to move from

⁶² “...this man must settle everything in a right order. *His* knowledge of what is done is practical knowledge.” Anscombe, G. E. M. *Intention* (Cambridge, UK: Blackwell, 1963) §45.

assumptions to a conclusion. This rather bland description of the process of proof papers over the involvement of a wide range of capacities or abilities integral to the activity of proving; but the process can be put even more blandly by remarking that a capable geometer is able to apply his theoretical knowledge in specific practical occasions of proof.⁶³

I have focused upon the practical dimension of a discipline that is, to us, highly theoretical, namely, mathematics (more specifically, geometry); but the lessons drawn do, I think, bear upon all of the other *technai* and by emphasizing the importance of the practical dimension in a highly theoretical discipline, it is clearer how important practices are in more practical disciplines.

What cannot be captured entirely or transparently in talk of knowledge of truths, I have labelled practical knowledge or the practical dimension of knowledge. Some may balk at the thought that such myriad abilities, capacities or dispositions are to be reckoned knowledge at all. Perhaps the thought is that the capacities I have discussed are merely natural like the disposition of glass to break, or the capacity of a hand to grip, or the ability to walk: in each case, it is not possible to charge the object in question with error or mistake if it does not operate as expected. A hand that does not grip, a child that does not walk, or a glass that does not break, is not to be reckoned mistaken in failing to do any of those things. Such dispositions, capacities, or abilities are not subject to norms or normative considerations. Of course, this is precisely where such ‘natural’ capacities, abilities and dispositions differ from the capacities, abilities and dispositions we are

⁶³ Wittgenstein is a philosopher who has expended a great deal of energy emphasizing the importance of practical abilities and capacities to cognitive matters, see §§198 – 199 and *passim* of Philosophical Investigations trans. G. E. M. Anscombe (Cambridge, UK: Blackwell, 1958). My reflections on the matter of the practical dimension of knowledge owe a great deal to his reflections.

considering: in the context of the activity of proving it makes perfect sense to talk about errors, mistakes, and the like. It is precisely the possibility of ‘getting things right’ as opposed to ‘getting things wrong’ that licenses talk of knowledge.

It is important not to misconceive the force of my emphasis on the practical dimension of knowledge. I have not been suggesting that the practical capacities, abilities and dispositions discussed are, as it were, paradigmatic of Socrates’ conception of *technē* and that the theoretical dimension is parasitic upon the practical dimension. Neither the theoretical dimension (the organized body of truths) nor the practical dimension (the collections of capacities, abilities and dispositions) can be privileged at the expense of the other because, in fact, they are mutually dependant and connected. Without the practical dimension, it is impossible to see how the body of truths of geometry can, in fact, bear upon specific problems and proofs; but without the theoretical dimension, it is impossible to articulate the commonalities between various occasions of proof: that is, what is shared across instances of proving.⁶⁴

5.3 Generality & Particularity

A revealing, if slightly misleading, way of characterizing the contrast between the theoretical and practical dimensions of *technē* is as a contrast between generality and particularity. The body of truths constituting the theoretical component of the *technē* is general insofar as they apply to, or can be applied to by virtue of exercises of the practical dimension, particular items. The terms of the latter contrast are slightly misleading because they suggest a contrast between, for example, universals and particulars, or concepts and their instances, which contrasts do not exhaust, although they do figure, in

⁶⁴ Cf. Anscombe’s discussion of ‘practical knowledge’ in §48 of *Intention*, *op. cit.*

the contrast I wish to make. The contrast I imagine is the larger one between any truths or body of truths and the variety of practical contexts in which they can figure. It is precisely this sort of contrast that I take Socrates to be highlighting in his indictment of Ion's claim to possess a *technē*.

SOCRATES: ...It's clear to everyone that you're unable to speak about Homer with art and knowledge [*technēi kai epistēmēi*]. For if you could, you'd be able to speak about all the other poets too. The art of poetry is surely one whole [*to holon*], is it not?

ION: Yes.

SOCRATES: Well, when anyone grasps any other art as a whole [*allēn technēn hēntinoun holēn*], the same kind of inquiry will exist concerning every art [*ho autos tropos tēs skepseōs estai harpasōn tōn technōn*]. Do you need to hear what I mean by this, Ion?

ION: Yes, please, Socrates...

SOCRATES: ...Anybody can tell what I meant in saying it's the same inquiry when one understands an art as a whole. Let's understand it by this: there's an art of painting as a whole?

ION: Yes.

SOCRATES: And there are and have been many painters, good and worthless?

ION: Of course.

SOCRATES: Then did you ever see anybody skilled in declaring what kinds of things Polygnotus, son of Aglaophon, paint well and what he doesn't, who couldn't do this with other painters? And who goes to sleep and is at a loss and has nothing to contribute when someone shows the works of other painters...?

(I. 532c6 – 533a3)⁶⁵

Ion has confessed to Socrates that, although he can speak quite wonderfully and perceptively on the poetry of Homer, he is quite at a loss with respect to extolling the virtues of other poets (I. 531a1 – 532b1), to which Socrates retorts as above, concluding that Ion is not in possession of a *technē*. Socrates emphasizes that the *technē* of painting is, in some respect, *whole* or *complete*. The specific point appears to be that a *technē* enables its possessor to evaluate any object or property that falls under the scope of application of some *technē* or upon which that *technē* bears. More generally, however, we can suppose the force of Socrates' comments to be that whether we are discussing calculation, geometric proof, ships, or paintings, any instance of these things will be most adequately judged by the possessor of a *technē* bearing upon that specific thing: it is in virtue of his knowledge of calculation (or *logistikē*) that some *technikos* can adequately judge some particular instance of calculation. *Technai*, we might say, are *intrinsically general* and this fact is captured in the sort of theoretical knowledge exemplified in Table 2. Of course, discussing this 'intrinsic generality' alone amounts to emphasizing *technē* only, as it were, one-sidedly; in light of previous reflections, the generality of *technē* is made possible by the practical capacities, abilities, and dispositions trained into a *technikos*.

⁶⁵ R. E. Allen's translation.

5.4 Conclusion

In this chapter, I have attempted to articulate the close connection between two dimensions of the concept of *technē* that constitute a unified whole in Socrates' outlook, despite their conspicuous disharmony to modern eyes. It may, in the end, be impossible to knit back together the practical and theoretical in such a way that would permit us to group together unproblematically highly theoretical and highly practical *technai* as instances of a single unified concept. We may find the only *compelling* account – one that bears upon our concerns and questions – to be Irwin's or Roochnik's, but, at the very least, recognizing the naturalness of this grouping, indeed, the naturalness of the connection between the practical and the theoretical, to Socrates' eyes is an important step towards recovering that outlook and the philosophical teaching that is so deeply informed by it and so deeply perverse to us.

In §2.2 above, I introduced the Socratic thesis of the sufficiency of knowledge for virtue and discussed the incredulity of modern interpreters when faced with this thesis. Surely, the thought goes, *no* truth or item of knowledge one possess *forces* one to act in a certain way, in particular, in accordance with that truth or item of knowledge. How, then, could knowledge *ever* be sufficient for virtue understood as partly constituted by the exercising of virtuous acts? I have tried in this work to show how Socrates' own conception of knowledge – knowledge as *technē* – is seriously at odds with the conception of knowledge solely as a body of truths so prevalent in contemporary analytic philosophy. I do not think I have succeeded in dispelling all of the difficulties associated with Socrates' sufficiency thesis. Instead, I have tried to bring out the practical dimension in Socrates' picture of knowledge and wisdom in an effort to loosen the grip the

contemporary picture has upon us and to show the power and attraction of Socrates' own picture of knowledge. At the very least, enriching the philosophical landscape by presenting certain philosophical perspectives in a manner that permits them to be live possibilities rather than routes toward error enables us to appreciate the contingency and character of our own perspective.

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