ENERGETIA
SPRING 1998

道

Cover: The character for the word *tao*, "way," "course," in the sense of a way one travels on–a road, path or watercourse. Tao is a key term in traditionalChinese intellectual discourse, where its meanings range from a normative way of conduct to the dynamic principle that underlies the movements of nature. The character was written by Ch'en Po-chin.
–note by CordellYee

Ενεργεια: The activity in which anything is fully itself

ή...νοῦ ενέργεια ζωή... (Aristotle's Metaphysics, 1072b)

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K. 157

✸

Christopher Colby

"The Kaminskis were musicians in Poland," my mother explained to me one day. "They came here after the war. They're refugees, you know, and their son will go to school with you this fall." They had been among those freed from a concentration camp at the end of the war. I was six or seven years old then and about to begin school. They lived several blocks away from us, but in the small community that we lived in outsiders made ripples like stones cast into a pond. Even though he was older than me, Christopher, their son, and I had become great friends. He played the piano, and could say his prayers in Latin. On his forearm a black and blue number was tattooed: it was an enormous curiosity to me, but he always kept it covered.

In the way that children often do, we had somehow discovered each other; I don't remember how. He lived down a rutted dirt alley, across a sumac-studded and grassy field. "Watch out for the ditch with barbed wire," he used to say, or, "Remember the fallen log where Grey Boots the cat lives? She's had her kittens." On a corner was his tan-colored stuccoed house. In one of the trees nearby we built a tree fort. We were quiet children, always careful of the witch living next door, in a house with a basement where she threw little children and wicked boys.

Christopher practiced his piano lessons nearly everyday, and while his mother tutored him, I had to leave. So I wandered home alone or waited in our favorite treetop for him to finish. Often, while we played together in his room or elsewhere around his house, I could hear his mother playing her viola and his father playing the cello. I was entranced. They were like two mourning doves warbling their tunes: they chased each other, they played together, and sometimes they danced alone. When I was older, I learned the musical term *fugue* came from an old Italian word, *fugere* "to chase or dance". The music they made was full of life: sweet and calm. It filled me with joy, full of the here and now. I didn't know what the music was they played or who the composers were, but the quiet peacefulness of them playing together cast a gentle, magical spell over me. Three years later, my parents moved our family away to another city and I never saw the Kaminskis again.

I never listened to 'classical' music after that until sometime in high school. Then, in a classroom full of bored students like me, I listened to worn and scratchy records. "This is music," we were told. Later still, in college, I sat in a darkened lecture hall with two hundred others trying desperately to keep awake. From a side door the professor entered the classroom on a stage where a lectern was centered. Next to it was a table upon which he placed his suitcase, and he opened it as if he were opening a jar of formaldehyde. In it he kept his lecture notes: dead, sterile things, drained of life. On and on he droned in his dry, lifeless voice: mummified notes read year after year to each suffering generation. All from the same jar of preserved, dead feelings. "This isn't music," I thought, "this is mortuary science." Soon, I dropped out of school, disillusioned, and fell into the wild chaos that was rock music and the anti-war movement tearing apart 1960's America.

Music of the '60s was loud, sometimes gentle, mostly angry and always heard best while taking drugs. I was not like the wanna-be politicians yet to come, who, for their future careers, and a gullible public, did *not* inhale: I did. Afterwhile, the warm summer glow of drug-induced blue skies and Woodstock faded into the cold, gloomy, and lonely grey of solitary Minnesota winter nights. I was unemployed, uneducated, and burned out after years of protest marches, rock concerts and all the youthful silliness that comes with drug abuse. The highs and lows came closer and closer until I was always high.

On one of my endless wanderings, lost like a refugee, exiled even from myself, I came across a record store in an area known as "the Left Bank" of Minneapolis near the Mississippi river. It was notorious for rebelling students, smoke-laced coffee houses, and a thriving trade in drug trafficking. There on a shelf I found K.157. The music didn't have a name, just a number, tattooed as if on the forearm of some forgotten boy. K.157. It was a string quartet in C major by Mozart, written very early in his life while he was in Italy, and the recording was an old DGG record in a yellow dust jacket with dark blue lettering. On the back, it said K.157 was particularly loved by Albert Schweitzer, who played it on his violin. "Albert Schweitzer?" I wondered. The jungle doctor who helped the poor in Africa, and who, of necessity, sewed torn human flesh together with the snapped-off heads of soldier ants. I bought the record.

I find it difficult to describe now what I heard, lest I in turn become another embalmer. I can try to describe my feelings about K.157. I don't think it is Mozart's best. It was written while he was a teenager, and other fugues he wrote later were much more complicated: rich tapestries of woven counterpoint. It is uncharacteristically sad–Mozart is not usually a sad man. But K.157 contains one of the most poignant and exquisite second movements I have ever heard. My feeling is that Mozart wrote it while he was in some great pain. Perhaps he mourned the loss of his own childhood, when music-making was no longer simply fun, but had become work. The Andante evokes feelings of great sadness, lost innocence, and pathos without the mind-numbing stillness that comes with melancholia or depression. No wonder Schweitzer played this at the end of a day without anesthesia, perhaps too full with the misery of childbirthing and of the pain of the dying. This nameless, numbered, second movement written two hundred years ago, sang to me in my jungle as it must have sung to Schweitzer in his.

I remembered the Kaminskis. My childhood memories of them flocked back to me like mourning doves at sundown. I remembered hearing the story about musicians playing string quartets by Mozart at a concentration camp in Germany during WWII. Perhaps the Kaminskis played while naked women and children flocked past them on the way to their suffocating showers. Those who listened heard a moment of beauty before their screaming final solution: lives flamed into smoke, anonymous ashes turned into sludge and dumped into a nearby swamp. How can we, in our own personal concentration camps that are our work-a-day lives, understand such madness?

"Arbeit mach das leben suss"-"work makes life sweet," was written above the entrance of one such notorious death camp. No, not work, but *music* makes life sweet. Between the little deaths we all suffer during the counterpoint of our lives, music offers moments of beauty and rest, and provides a link to the immortal. It cheats death. K.157 sounds the same to me as it did to someone else while black smoke filled the sky in another land. Whenever the Kaminskis played their music, whoever listened shared in the wonders of the eternal and the immortal, in the great terrors of the here and now, in the forever gone and yet to come, with all its sadness and happiness.

In the same way as music, time moves forward. I first heard K.157 a quarter century ago when I was 22 years old, almost as young as Mozart was when he wrote it two centuries before. I gave up drugs then. Like Schweitzer, music was what I really needed. My eight-year-old daughter came home today from school. In her hand, a violin in its case swung carelessly as she chased two mourning doves by the side of the road. Now her fugue begins.

Driving in Venezuela

✷

Alexandra Boozer

I.

Trying to Return to the Port Hotel with R.
The moon roof opened by crank,
the leather had a female smell;
I was speaking to him through the sound of birds
confused–
it was night and they were flying.
I was a bright orange plume, marking
the night, tangerine beads and slight sunburn,
a bright flash like the sudden passing of
a familiar ghost, or a pet bird speaking, lost
in the wild heat.

We left the gaudy club an hour before, full
on hydroponic tomatoes, wine-marinated
fruits, pale green drinks. I have been
kissed all night on the neck,
though not by R. ; rare bright seeds have
been tossed at me while dancing;
I listened to Blue Serenade sung by a whore
and wept,
he didn't notice.
I imagined the salt on my thighs
cooling his free hand as we drove.
We were lost on a forest road
driving parallel to a river we knew by smell.
Those were water birds flying above.

I was surrounded by sexless sounds
and painful heat. I knew he would find
the way soon to that bleached hotel.
I was beginning to fear
the separate bed, the cold air-conditioner smell
on the sheets, the lone hands.

And if we travelled allnight, ran out of fuel,
wrecked the car...
I imagined that we were already dying,
that he was forced to venture into the heat with me,
to hide in the woods and sleep,
to never be found.
Complete solitude, and
the honesty that comes from hunger,
the connection between fear and gender.

II.

Inquiry into the Last Hours
Low morning,
we stumbled from the useless car,
truly hurt and alone,
we lay down to rest for days.

Our clothes were torn but we
were not ashamed;
my wound was bound in his own
Oxford cloth. His blood glimmered
like nothing I have ever seen, he was beautiful
and terrifying, speaking while asleep.
I was the ignorant nurse, hungry and stunned.
We were surrounded by remedies locked in hardwoods,
the bitter milk of plants.
I dreramed the nurse's dream:
a wounded doe eats a native plant,
sleeps to wake up healed.

I find the plant, we both eat it,
we sleep together on the mat of vines.
I plead with our bodies for the blood to end.
But perhaps it is the right medicine:
if you find this record, you will want
to know what our dreams were,
what lit our fourth night.

R. told me years ago that he rarely dreamed.
I stayed awake to listen to him talking;
he muttered a long time about some
Bangkok beauty stabbing his wrists.
His wrists in the moonlight seemed alright.
I bound them tighter.

His watch read two a.m.
I fell asleep.

At four he made choking noises
and woke me.
"Whose hands are choking you?", I
asked him; "Darling", he said and held my hips.
He told me would weep for sex, for regret of
leaving me cold so long.

I was terribly hungry, surrounded
by the sounds of unseen water predators
feeding at night. I envisioned killing
that huge beast with my hands. I licked the
salt on R.'s elbows.

Land of dark oil underwater,
the crushed carbon, brilliant hidden
diamond of the bloody gods,
sustain us.

And I ate the last supper with
my blood husband, seeds and fruit,
narrating the myth of twenty years
and war and bones, the final armistice.
I baptized him in that slimy water
and my own spit.
I sleep next to his life.

Similes, Fables, and Parables

✷

Anne McShane

Similes, fables and parables serve different purposes. In looking at the three, I would like to examine what those purposes are, and how they are accomplished.

First, the simile. The simile is used for purposes of description.

> As a huge oak goes down at a stroke from Father Zeus, ripped by the roots and a grim reek of sulphur bursts forth from the trunk and a passerby too close, looking on, loses courage–the bolt of mighty Zeus is hell on earth–so in a flash, for all his fighting power, Hector plunged in the dust, his spear dropped from his fist, shield and helmet crushing in on him, bronze gear clashing round him (li 489-496, book 14)[1].

The simile sets up a proportion: as Oak to Zeus' thunderbolt, so Hector to Ajax' hurled rock. The simile is not just an exaggeration–I ate a billion hamburgers today–but a description of a relationship. The simile gives life to the sentence, makes it three dimensional. If one can imagine how such an oak would, at first, creaking, slowly topple, and then falling with increasing crashing speed at the chops of an ax, then so much more vivid is such a tree ripped out by the roots, inspiring terror into an onlooker. And such is Hector. But then, one must consider the rest of the simile; as terrifying as the tree is, that one instigating its descent must be inconceivably powerful. And such is Ajax. Clearly, the image itself of Hector falling under Ajax' rock would be less powerful without the accompanying image of the oak falling to Zeus' thunderbolt.

Second, the fable. The fable is used to teach a lesson.

> THE BALD MAN AND THE FLY
>
> Of a little evil may well come a greater. Whereof Aesop reciteth such a fable of a Fly which pricked a Man upon his bald head. And when he would have smote her she flew away. And thus he smote himself, whereof the Fly began to laugh. And the Bald Man said to her, "Ha, an evil beast! Thou demandest well thy death if I smote myself, whereof thou laughest and mockest me. But if I had hit thee thou haddest been thereof slain." And therefore men say commonly that of the evil of others men ought not to laugh nor scorn. But the injurious mocketh and scorneth the world, and getteth many enemies. For the which cause ofttimes it happeneth that of a few words cometh a great noise and danger.[2]

The fable teaches in a very straightforward manner. A story is told; usually involving animals, with a moral. In this example, the moral is put at both the beginning and the end of the fable. It's rather difficult to miss. Animals are used for several reasons: first, to put some distance between the listener (presumably a human) and the character. Second, so that certain characteristics can be targeted; the wiliness of a fox, the stupidity of a bird, or the irritating qualities that only a fly could have. Third, and this may be related to the first reason, stories can be both simpler and a little more extreme. That is to say, had a person pinched the Bald Man on the head, and the Bald Man was moved to shoot the person, but somehow missed and ended up shooting his kid or something, the story would seem both ridiculous and bloodthirsty. Killing flies is something almost everyone does, and is not be regarded as unusual. Having animals rather than people allows for little complication in the story; motivations are always simple, often based on pride, hunger, or, as in this case, irritation/pain, and glee at someone else's pain or irritation. The animals in the fable always represent people, and their actions are to be taken as simple and distinct cases, which can be applied to particular situations in the listener's life.

And, lastly, the parable. The parable is also meant to teach a lesson.

> Then he said, "A certain man had two sons. And the younger of them said to the father, 'Father, give to me the share of the household that falls to me. The other divided between the living. And after not many days, having collected everything, the younger son went away from home to a distant place and there scattered his goods, living profligately. Having spent everything, strong hunger came to be throughout that place, he began to be in want. So he went and hired himself out to one of the citizens of that place and he sent him into his fields to tend pigs. Having come to himself, he said, 'How many of my father's hired men have more than enough bread? I am undone in hunger. Having risen, I will go to my father and I will say to him, Father, I sinned against heaven and against you, no more am I worthy to be called your son. Make me as one of your hired men.' And having risen, he went to his father himself. While he was still at a distance, his father saw him and felt mercy, and running, fell upon his neck and kissed him. The son said to him, 'Father, I sinned against heaven and against you, no more am I worthy to be called your son. The father said to his slaves, 'Quick, bring out the first robe, put it on him, and give him a ring upon his hand and sandals upon his feet, and bring the fatted calf, sacrifice it and eating, let us be merry, that this son of mine was dead and returned to life, was lost and is found. And he began to celebrate. His elder son was in the field. And thus going, he neared the house, he heard sounds and dancing, calling to one of the children, he asked 'What could this be?' He said to him that the brother came, and your father sacrificed the fatted calf, that, being healthy, he had recovered. He became angry, and did not wish to go in. His father having come out, called him. Answering, he said to his father, 'Lo, so many years I work for you and you never gave me a kid in order that with my friends, I might be happy. When your son, this one devouring your life with prostitutes, came, you sacrificed with him the fatted calf.' He said to him, 'Child, you are always with me, and all things mine are yours. There was need to be merry and to rejoice that your brother, this one was dead and lived, was lost and is found."[3]

The parable teaches differently than does the fable. A story is told, but the moral is left in story form, rather than brought outside of the context of the story, as in the fable. This creates ambiguity regarding the moral, making different interpretations possible. Also, animals are not used, thus bringing the listener much closer to the story's characters, is, at the same time, making the story more complicated; motivations and feelings such as forgiveness, love and resentment are introduced, as well as multiple motivations within characters.

The characters in the parable do not immediately present themselves as good or bad; is the parable above so much a story about the younger son, than a story about the older son? It presents levels of good behavior, brings in attitudes, as opposed to simply actions. There is something in the parable that is not intuitive. The father's actions, to the black and white eye, do seem unfair, and the elder son's reactions justified. But the parable is, quite clearly, not suggesting this, but, rather, the opposite. On a gut level, I cannot escape sympathy for the elder son, though intellectually, the father's reprimand makes sense. I suspect this is a problem the fables do not often pose.

1. Fagles, Robert. Homer The Iliad, 1990. New York: Penguin Books.
2. Caxton. Aesop's Fables, 1951. London: J.M. Dent and Sons, Ltd.
3. Class translation.

Class Day Speech 1997

✸

Chaninah Maschler

Thank you for the honor of inviting me to speak to you on this, your special day.

In the course of the one fifth to one sixth of your life that you have spent at St. John's you have learned a few pregnant facts:

For example–

that the avenging slaughter at Odysseus' house, well on the way to civil war, stopped, not of itself, but by a mentor's persuasive command;

that the periodic table of chemical elements (which you bought at the bookstore for less than one dollar) is not a copy of an Ur-chart in some Ur-textbook of chemistry, but derives from innumerable experiments inspired by and in turn inspiring speculative hopes for chemical theory;

that the behavior of gasses is less difficult to account for than is the behavior of solids, though gasses seem to be so much more mysterious, mind-like in their impulse to spread;

that it was not by looking more intently at the planets that Kepler came to pronounce their paths elliptical rather than circular;

that there are languages in which you cannot say "it" (for instance, French);

that Greek idiom seems to suppose that once you have seen something, you know it, though your own experience is probably at variance with this supposition (The student who's bothered by this discrepancy is the one who gets the hang of the Greek perfect, which usually is a "perfect of result," such as is illustrated by *ou bouleuesthai eti oora, alla bebouleusthai* "it is no longer time to be deliberating but to have finished deliberating," that is to make a decision, as in *Crito* 46a);

that the American tradition of constitutional law, in keeping a record & thus preserving the memory of the Supreme Court's *dissenting* minority opinions, holds resources for self-correction (thus, in the case of Dredd-Scott Vs Sandford, Judge George Ticknor Curtis held that Congress does have the right to control the spread of slavery into the territories, and the words in which this minority opinion was expressed gave guidance to the majority that later declared what the Constitution requires);

that the sources of moral courage are deeply mysterious–I am thinking of the courage of Frederick Douglass and his little band (p 307), the five slaves who, here, in this Chesapeake region, planned their run-away to freedom;

that the God of the Bible, just and merciful as he may be, is not *nice*.

You have acquired some proficiency in laying out a mathematical demonstration or executing a laboratory exercise. You have had experience of the pleasure of discerning what makes a proof or a theory tick–what links the many argumentative and observational steps into one melody of connection among connections, and of the pain of not getting it, of the notes of reasoning *not* swelling into song for you.

Occasionally, unpredictably, while working on a paper, or chatting in the coffee shop, or reading a poem out loud that previously would not yield, there has been an epiphany.

And in anticipation of the next night's seminar, you have, twice a week, stuffed yourself, sometimes nearly to bursting, with very big books.

But this little sample of the things that you have done or that have happened to you while we were here together does not capture what's been distinctive of our endeavor. Bear with me as I try for a better description.

In the second week of your freshman year, when you began to study *The Elements*, you noticed with surprise and pleasure that this mathematics book, unlike all the others you had read previously, does not hide the fact that the words that are coming at you from the page have an author. Your implicit knowledge that the words that are made available by a language do not, on their own, arrange themselves into speeches, that even mathematical speech is personal, was made startlingly explicit through the recurrent formula *lego hoti*, "I say that..."

Every theorematic proposition began with an *enunciation*, a statement claiming that all figures or all magnitudes or all ratios that fall under a given description also fall under a second description. While promulgating this all-sentence the author simply declared.

In the next portion of the proposition, the *ekthesis*, or "setting out," the hidden first person who was the source of the declaration made plain that he was addressing a second person, ourselves, the readers, because he issued a command or request, such as "Let ABC be an isosceles triangles having the side AB equal to the side AC," and even so-called "third person imperatives" place responsibility for the execution of the command on the addressee, the second person.

Because of the fact that our editions of Euclid's *Elements* supply a picture of this very triangle ABC that was just mentioned, we mistake, perhaps, what's happening in the "setting out": Maybe it's not the *promulgator* of the all-statement by *we*, the hearers, who (to grasp the sense of the enunciation's grammatical subject) are invited to draw a case that instantiates it. Otherwise we cannot know what the hidden author is talking about.

Now comes the *lego hoti* step: the author pops out and proudly proclaims in the first person singular that *our* triangle ABC has the property *he* promised all of its kind to have. And, in the *apodeixis* itself, he makes good on his words by experimenting on *our* case and winning our assent to *his* claims about it.

Finally, and this is the logically most mysterious step, the proposition circles back to its opening all-statement and claims that "therefore," which means, presumably, as a result of the conversation, which seemed to be about particulars, the universal enunciation holds, apart from that conversation (cf. *Post. Anal.* I 3 73b32; Proclus on the "conclusion" of a Euclidean proposition, quoted p. 131 Heath, volume i).

The conversational reading of Euclidean proposition that I just laid out stems from the feeling that there is more than a little overlap between what goes on in Euclid's *Elements* and what happens in Plato's dialogues.

Take, for instance, the episode in the *Meno* where Meno asks Socrates to teach him that what men do when they study is more properly viewed as recollection than as getting taught (81e). Socrates says:

It isn't an easy thing, but still I should like to do what I can...I see you have a large number of retainers here. Call *one* of them, *anyone you like*, so that, *in him* I may demonstrate *for you*...

It sure *looks* as though both Euclid and Socrates believe that they do not have to run through an infinity of instances to obtain the logical right to make their statements about *all* triangles or *all* learning human beings so long as they grant their interlocutors the freedom to select the example that is to be experimented on–either in fact or in imagination.

The slave who comes to be used by Socrates as though he were some triangle ABC drawn by Meno was perhaps not the cute little "boy" that many of us conjured up for ourselves as we read the dialogue. In ancient Athens, as in the still not entirely bygone American South, even a white-haired old man would be called "boy", so long as he was a slave. By calling these morally uncomfortable features of the situation to mind, we are helped to realize the following: Socrates may have been trying to persuade Meno that, since even when the interlocutor is at liberty to pick his instance from the least likely subspecies of humanity–slaves–it turns out that the learner actively participates in achieving his second, his educated, nature and does not persevere as a mere piece of wax that gets imprinted by the informing teacher, therefore *all* situations of human learning are misdescribed when the teacher, or speaker, is conceived of as artisan, the student, or hearer, as his material.

Euclidean-style deductive science is, as Kant points out (in a section of the *Critique* which you were not assigned), the wrong model for philosophical inquiry. It's absurd to talk about human beings as though they were triangles. Deductive reasoning (though it's always going on in the interstices of our talking and listening and thinking), is an evanescently tiny fraction of it. Granted. And, as you found out by reading Lobachevsky and Einstein, if you want your geometry to be not only consistent but also cosmologically true, the imagination may have to be stretched to what feels like its breaking point. All of this is true and important. Yet doesn't my main contention stand–that it is only when the reader or hearer cooperates with the speaker or author by using his conjuring faculty, his imagination, and tries to "set out" for himself what the author is saying, that he grasps his meaning?

Don't your four years here confirm that it was by entering upon conversational exchange with the author who speaks in, say, *Leviathan* or *Genealogy of Morals* or the *Discourse on Inequality* that you were enabled to guess at what he means and to determine on what interpretation of his words they would merit your assent? And isn't the courtesy of hearing the author out so damnably strenuous chiefly because our powers of imagination, of calling up the instances to which our author's words apply, are too weak and uninformed for us long to sustain the fellowship with him that we demand of ourselves?

Fellowship with speakers who are present in the flesh, who offer us faces and hands to look at, not only words, is in some respects easier to sustain. Besides, isn't it both the source and the goal of fellowship with authors? It *ought* then, to come more naturally! But all of us know–from our years of St. John's coffee shop, classroom, dining hall, not to forget parties and soccer or baseball games–it's not all *that* easy. It takes concentration, patience, suppleness, humor, the willingness to risk saying or doing or asking something foolish. It takes tact, and (as was so beautifully said at last year's Class Day), it takes hope: Hope for hearing the unexpected, which may even come from you own mouth!

There was a time when advocates of a St. John's-style education claimed that it educates people to live where other colleges groom them for merely earning a living. Said in a certain tone of voice, this smacks to me of haughtiness and of regret at or disdain for the fundamental fact that, living as we do in modern America, our dignity, who we are in our own eyes and in the eyes of others, must depend heavily on how we spend our working day, how worthy we believe our work to be, how fit we are for doing it, and how much of ourselves we give to doing it as well as we are able.

Since all of this is involved in the phrase *earning* a living, I hope that over the long haul you will be able to say truthfully that your *alma mater* has helped you become a person who earns his or her living.

This will not be easy. It may take more than a little time and cause you some suffering. Yet I do believe that the all-required program of studies at this talking college has given you not only a preliminary sketch of some of the main continents of the intellectual and moral globe but also some participatory sense of the *work* that went into and continues to go into the making and maintenance of this humane globe. Apt speaking and hearing–as you've had occasion to find out here, and as your working and leisure life henceforth will confirm–is by no means the sole condition for its existence. But it is a prime condition.

In Yiddish, the most heartfelt word of praise is *Mensch*, human being. My wish–for you, for myself, and for the next generation–is that you'll be a Mensch.

excerpts from: "Becoming Human: A Dialectical Journey Towards Species Being

✷

Lydia Polgreen

Introduction

The *goal*, Absolute Knowing, or Spirit that knows itself as Spirit, has for its path the recollection of the Spirits as they are in themselves and as they accomplish the organization of their realm. [Phenomenology of Spirit, § 808]

The metaphysical question of the relationship of subject to object is taken by modern philosophy from the time of Hegel to be a matter of the history of the subject's relationship to the objects that make up its world. This is the *dialectical* point of view: the subject is not a fixed quantity, but rather a fluid, changing one, and as it changes, so, too, does the object and its perception of the object.

If formulating a world history is the task of philosophy in our modern era, then the question remaining is from what premises this history is to proceed. The first formulation of a dialectical history of the world was made by Hegel, in his *Phenomenology of Spirit*. He begins from the premise of individual consciousness as a substance existing in itself, and from there lays out the history of that consciousness and its journey towards its ultimate end, its solution to its metaphysical quandary, Absolute Knowing, or knowledge of itself as Spirit.

Marx proceeds on very different premises. He begins with the fact of human existence *in the world*, rather than in mind and in itself, and formulates world history on that basis, with the goal of *species being* as the end of its dialectical quest. Species being is analogous to absolute knowing, but the latter is a state of consciousness existing in itself, while the former is a state of man's existence in the world.

The goal of this essay is to examine the premises upon which Marx formulates his dialectical history of the world, and follow this dialectic through to its logical conclusion, species being. The first section, entitled *Dialectic*, is an exposition of the Hegelian dialectic of consciousness. I will then take up the inadequacy of the Hegelian point of view, and propose the material dialectic as the true formulation of world history. In the second section, *The Marxian Dialectic*, I will follow the thread of this dialectic through Marx's argument as given in *Capital*, in order to understand why Marx believes idealism is inadequate. I will then examine the effects of the material conditions of capitalist production on man's consciousness in the section entitled *The Material Dialectic of Consciousness*. The final section of this essay, *Communism*, will deal with the actualization of species being, which Marx sees as the end of the material dialectic.

II. The Marxian Dialectic

The Production of Commodities in General

A commodity is, in the first place, an object outside us, a thing that by its properties satisfies human wants of some sort or another. [C.I, p.43][1]

Commodities are produced to satisfy some human want. The very first kind of production takes place when man produces the objects needed for subsistence out of what is presented to him in nature. The work involved in this process is of a definite kind: it is the labor expended for the object itself, and it is expended by the one who is to enjoy the fruits of his labor. This simple worker works only to satisfy his wants, and the value of the objects is determined by the intensity of his desire for them. This value is true for the self-laborer only, it has no universal content. As the wants are his, and their intensity entirely subjective, there can be no common measure of them for all men. This is what Marx calls use-value.

The worker feels no need to measure the value of the objects of his work when he works only for himself, because his subjective desire for the object is all that is required for its production. When division of labor begins, for whatever historical reasons, the need for a universal standard of value inevitably arises, as the worker no longer works only for himself. His relationship to the object he produces has changed: it is no longer an object of desire for him in itself, but rather an object of desire for someone else. He produces it in the hope of gaining some object that he desires from someone who desires the object he has produced. In a word, he wishes to exchange his object (for which he has no need) for an object he does need or want. This is the origin of barter. The two producers involved mutually exchange their products for one another. It is precisely when he produces for another that the object on which he has labored becomes a commodity:

Whoever directly satisfies his own wants with the produce of his own labor, creates, indeed, use-values, but not commodities. In order to produce the latter, he must produce not only use-values, but use-values for others, social use-values. [C.I, p.48]

Similarly, the work that goes into the production of the commodity is of an essentially different kind. It is work with another in mind. I call this kind of work labor, as opposed to simple work. Labor is work done with the aim of exchange, rather than consumption.

The Division of Labor

Only such products can become commodities with regard to each other, as result from different kinds of labor, each kind being carried on independently and for the account of private individuals. [C.I, p.49]

Prior to any talk of exchange there must be a division of labor. In order to engage in exchange, one must produce what one does not need in the hopes of exchanging it for another commodity. The division of labor takes place quite naturally. It exists already in the family, according to Aristotle.[2] The various tasks of the household are divided among the family members according to who will best be able to perform them. Here, of course, it is difficult to see the "work-for-other" that shows itself quite clearly in the social division of labor. Members of families probably did not see their relations as alien from themselves, much less opposed to them, but still, the concept seems to exist here first and most simply.

The social division of labor also seems to happen rather innocently. Natural ability makes some people more adept at certain kinds of work. If each man had to farm his land, sew his clothes, cobble his shoes, and forge his tools, his days would be quite arduous. In order to reduce his labor time, or perhaps improve the quality of the goods he consumes, he undertakes only one occupation, leaving the rest to others who will practice their trade much better than he did, no doubt. And so begins the division of labor, or "*work-for-other.*"

The division of labor is the first revolution that takes place in the history of production. Adam Smith describes its advantages for production.

The division of labor... so far as it can be introduced, occasions, in every art, a proportionable increase of the productive powers of labor.[3]

The division of labór undeniably increases the productivity of labor, and probably increases the quality of the goods produced. It is a natural, rational, and dialectical motion, demanded by the inadequacy of the previous mode of production. Work-for-self is inadequate for meeting the aims of work, so it is sublated into work-for-other. The division of labor better accomplishes the end of work, which is the satisfaction of human wants.

This revolution has inevitable consequences for its participants. It places men in relationships of both mutual independence and dependence:

The social division of labor causes his [the owner and producer of commodities] labor to be as one-sided as his wants are many-sided. This is precisely why the product of his labor serves him solely as exchange-value. [C.I, p.108]

Producers are independent insofar as they produce different commodities, but are dependent because each one must rely upon others for the satisfaction of the wants he cannot satisfy with his own commodity. The division of labor transforms the producer of any particular commodity from an undifferentiated human being into a baker, weaver, smith, or carpenter, and defines his being in terms of the commodity he produces. His social position is determined by the commodity he produces, something that simultaneously brings him together with other men (although only because they possess commodities he needs) while separating him from them as individual men apart from the commodities they produce. The division of labor, then, necessarily brings about an alienation of man from man. It brings men together as producers of commodities, entangled in an antagonistic, estranged relationship with them as producers of other commodities, or simply as *others.* Once work-for-self is sublated into work-for-other, the former antagonism between man and nature is transformed into an antagonism between men in the form of barter, the first kind of exchange.

The division of labor marks the beginning of *society* among men as we know it. Society is a conglomeration of individuals dealing with one another as individuals. *Social* relations are the relationships between individuals in the context of society, that is, where there exists both attraction to and repulsion from other men. The division of labor necessitates the recognition of man simultaneously as an independent individual and as one dependent upon other men. Hence all social relationships between men are merely a function of the division of labor and the beginning of exchange.

Exchange Value and the Market

Commodities come into the world in the shape of use-values.... This is their plain, homely, bodily form. They are, however, commodities, only because they are something two-fold, both objects of utility, and, at the same time, depositories of value. [C.I, p.54]

When our producer of commodities wishes to exchange his commodity, he brings it to the market, where the exchange of commodities takes place. The challenge he faces here is to ascertain what he can get for his commodity. He knows that it is worth nothing to him in terms of use-value. He did not produce it for that reason. He cannot gauge the subjective value of the commodity to another, as he will surely be cheated in such an exchange. He cannot look into the wants of another in order to find the intensity of his desire for the commodity, and the person with whom he hopes to exchange cannot fathom his desires. Their respective desires for each other's objects cannot serve as the medium of exchange. The only thing that the two commodities have in common, then, is the amount of labor invested in each. How can one compare two objects that seem to be unrelated? Only with respect to some *quantity*, some common measure, can they be compared. Since they are qualitatively different, the quantitative measure must be completely abstract, like number.

We said earlier that the amount of work invested in an object when man works exclusively for himself was determined purely by the intensity of his desire for the object. When the laborer produces the object as a commodity for consumption

by another, he speculates on the amount of desire that the other might have for the object. He expends the same amount of labor as when he produced the object for himself, but the labor involved is essentially different. He guesses, in essence, how much labor the other would be willing to invest in the object if he were producing it for himself. This is how they come to agree on the terms of exchange. Each looks at the labor required to produce the commodity, and bases the value of it in terms of exchange exclusively upon this. Each has labored a certain amount to produce his respective commodity, and this is all the two commodities have in common. This, therefore, is their only measure of value with respect to one another.

The labor involved in producing particular use-values is of a particular kind, such as weaving, wood-working, forging, and so on. But as far as the commodity is concerned, the labor invested is entirely undefined and formal. For the purpose of exchange all forms of labor are merely different expressions of the same thing: human labor as a social substance. Thus the labor that is used in measuring value for the purpose of exchange is what Marx calls "socially necessary labor." This is the amount of labor that would be required to reproduce the commodity today, expressed in terms of a social mean, or average. The qualitative differences between the various kinds of labor are as unimportant in exchange as the qualitative differences between the commodities they produce. All that matters is the quantitative difference in socially necessary labor. This value is the exchange-value of the commodity. Exchange-value is a purely social expression:

> The value of commodities is the very opposite of the coarse materiality of their substance, not an atom of matter enters into its composition.... If, however, we bear in mind that the value of commodities has a purely social reality, and that they acquire this reality only insofar as they are expressions or embodiments of one social substance, viz., human labor, it follows as a matter of course, that value can only manifest itself in the social relation of commodity to commodity. [C.I, p.54]

The commodities begin to take on a social meaning, and with it a life of their own. They become not just external objects in the world, but objects imbued with a certain social quality, the mirror image of the social relation of buyer and seller. In fact, it is rather more accurate to say that the social relationship between the two people is a product of the relationship of their commodities, as it is for the sake of these commodities that they came to market in the first place.

> A commodity is therefore a mysterious thing... because the relation of the producers to the sum total of their own labor is presented to them as a social relation, existing not in themselves, but between the products of their labor. [C.I, p.77]

The reason for the mystery, of course, is that in producing the object for another, man alienates his labor, and by so doing gives it an independent, objective existence in the world. This objective existence is a condition of the possibility of exchange. With object in hand he goes to market, and the objects enter into exchange by their own nature. Once they have been produced, the producer is merely transportation and a mouthpiece.

It is important to note at this juncture the important change that has taken place in this abstraction from use-value to exchange-value. Each producer estimates the value of the commodity in terms of his own labor, but that labor is abstracted, as it has not actually been performed on the object they are now hoping to obtain. Each takes the value of his own labor to be the same as that of the other. Once a value is assigned to labor, it is labor of an essentially different kind. The *work* that produces use-values is a means to the end of satisfying wants, while the *labor* involved in producing use-values is a means to exchange. Work is the activity of gaining one's sustenance for oneself from nature; labor is work performed for an other with a view to exchange. The dialectical antagonism of use-value and exchange value that arises out of the division of labor is expressed here by the end of each kind of production. In the first, use-values are the primary end, in the second, exchange values. Hence what was once a use-value, or an end in itself, has now become a means to an end, exchange. So the commodity leads a double life; it has at once both use-value and exchange-value, the latter of which is completely alien from it as a use-value. The commodity is speechless with respect to its use-value; this value is inexpressible.[4] Accordingly, this value cannot be alienated from the commodity, as it resides inherently in it. It can, however, through its seller, articulate its exchange-value. Its exchange-value is precisely the amount of socially necessary labor required to produce it as a commodity. This quantity has meaning independent of the commodity itself; it is fully alienable. Labor, as something universally applied to nature in order to bring forth use-values, is a quantity that can be articulated.

Use value and exchange-value express the two-fold antagonistic nature of the commodity both in its production *and* in its exchange. It exists in two ways: for the seller, it exists only as a receptacle of value, while for the buyer, it is a good he can use. For each, the exchange-value that they agree on in common is an articulation of their alienation from one another and from their commodities. Implicit in the reliance upon an alien standard of value is an alienation of the buyer from the seller. They meet one another as opposites, brought together by their differences: each has a commodity that he does not need, produced by labor that he alienated specifically for the purpose of exchange. They meet not as men, but as buyer and seller. Their relationship is defined by the relationship between their commodities. One has a commodity to sell, the other has realized value which he hopes to exchange for unrealized value, i.e. something he can use. Each offers the other something he has alienated.

Also implicit in this expression of value is the acknowledgment that there is an other, that the two people in this situation are fundamentally different and that the difference between them with respect to the commodities they produce is what brings them together. In resorting to an abstract measure of exchange they in effect say to one another "You are not myself, and furthermore, I have interests that do not coincide with yours." This expression isolates one 'I' from the other, and drives a permanent wedge between them.[5]

Although the buyer and seller are alienated from one another, they seem also to have a natural affinity for one another. They are a beautifully matched pair, each perfectly meeting the needs of the other. But this harmony is a mere semblance. Exchange is possible only because commodities are two-fold, having two separate modes of existing in the world. The first is as themselves, as use-values. The second is as exchange-value, or as an expression of human labor invested in them. These two are at odds with one another, because they are housed in the same object and yet are of essentially different natures. Buyer and seller approach one another as mouthpieces for their respective commodities, as beings defined entirely by those commodities.[6] The commodities have a natural affinity to one another, but they have this affinity only as two ways of expressing exchange-value. The commodity the producer hopes to exchange attracts other use-values because it has exchange-value. Therefore it is only because the commodity is dual that the exchange can take place. The commodity and its owner recognize something of themselves in the commodity they hope to gain from the buyer, something that simultaneously brings buyer and seller together and repels them from one another.

> The quantitative division of labor is brought about in exactly the same spontaneous and accidental manner as its qualitative division. The owners of commodities therefore find out, that the same division of labor that turns them into independent private producers, also frees the social process of production and the relations of the individual producers to each other within that process, from all dependence on the will of those producers, and that the seeming mutual independence of the individuals is supplemented by a system of general and mutual dependence through or by means of the products. [C.I, p.109-10]

The dependence brought about through the products is the true state of affairs. The alienated products have a truly social relationship with one another, while the producers simply tag along. For what does it mean for men to have a social relationship? The two parties involved must be simultaneously individuated and mutually dependent. The truly social relationship exists between the commodities first, and in the owners only after the fact. The producers come to market for the sake of exchange, for the sake of the social relationship of their commodities. Separated from their respective commodities, the buyer and seller have no relationship at all. Their products are the result of alienated labor, labor brought forth into the world as objective being-for-other, and hence have a life entirely independent of the producer. The commodities are a kind of Frankenstein, a creature created out of noble hopes, but necessarily imbued with an independent existence which inevitably must supersede the original intentions of its creator.

The Division of Labor and Private Property

> The *subjective essence* of private property - *private property* as activity for itself, *as subject*, as *person* - is *labor*. [EPM, p.128][7]

Private property arises directly out of the division of labor. Labor for another necessitates the existence of private property. The philosophy of the natural rights of man, which claims that work is the agency of ownership, mistakes work for labor, and confuses cause with effect. John Locke, one of the primary founders of the philosophy of the rights of man, describes the process of appropriation thus:

> Whatsoever then he [man] removes out of the state that nature hath provided, and left it in, he hath mixed his *labor* with, and joined to it something that is his own, and thereby makes it his *property*.[8]

But Marx considers this account inaccurate. It is only when the division of labor takes place and the time for exchange arrives that there is any question of ownership. Work is the operation of creating use-values for one's own consumption. It is hard to see how this gives the worker any *right* over either the means of production or the product itself. For what does right mean here? Rights only become meaningful when man is alienated from man through exchange. With the division of labor, man allows himself to come into relations of dependence with other men, while simultaneously putting himself at odds with them. For labor is the work performed with a view to exchange. In order for this exchange to take place, there must be some kind of ownership. This is when labor (not work) becomes the hallmark of ownership. It is not simply by performing work that one makes something one's own. It is by performing labor and bringing the fruits of that labor to market. But this is not the agency that brings about private property. Private property is simply the name we give to the means of production and the commodity produced for the sake of exchange.

Furthermore, the owner of private property is necessarily alienated from that which he owns. For how is it that he owns it? He is said to own it only because there is an other. Private property, then, is merely the material expression of the work performed for the other, or labor.

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So far we have considered only the simple barter exchange, which arises out of the division of labor, and examined how private property comes into being out of this same division. We have shown the dialectical move from work-for-self to work-for-other. With the division of labor and the beginning of exchange, which both bring about private property, all the elements are in place for capitalist production. We must begin our investigation into capitalist production with an examination of the various kinds of exchange, and the dialectical motion from one to the next, beginning with barter, and ending with trade by means of money.

IV. Communism

> [Communism] is the *genuine* resolution of the conflict between man and nature and between man and man - the true resolution of the strife between existence and essence, between objectification and self-confirmation, between freedom and necessity, between the individual and the species. Com-

munism is the riddle of history solved, and knows itself to be this solution. [EPM, p.135]

Thus far we have given an account of production not in its overall history, but within the dialectical process of the capitalist mode of production itself. There are actually two dialectical processes taking place simultaneously according to Marx. The first is the inner dialectic of each particular mode of production, which finds its roots in the individuals who produce and the antagonisms implicit in their self-production. The second is the larger dialectic of world history, which is made up of the serial progression of the modes of production as sweeping historical movements. Each new era in production brings with it a new kind of property, or with reference to the subject, a new mode of *ownership*.

Marx gives a brief sketch of this progression in *The German Ideology*. The first kind is tribal ownership, that arises out of the hunting and gathering mode of production, which included animal husbandry and farming on a small scale. The division of labor here is entirely in the family, and the tribe is merely an extension of the family unit. Ownership here is communal in the sense that no particular individual holds title to the land, animals, or other property; they are all owned in common by the tribe, which is divided along familial lines.

These tribes eventually come into contact with one another, through trade or war. Because of mutual interest or by means of conquest, they begin to consolidate into city-states. With conquest come slaves, hence the mode of production changes, and agriculture and large-scale construction become possible. Also, commerce develops between states, and cities become mercantile centers, with greater populations. The slaves are the laboring class and the members of the conquering tribes, citizens, are the masters, with the state as the owner of property. Property is still owned in common by the citizens, but now by means of the state rather than the family. Here we see the first real separation of classes between citizens and slaves. Also, the division of labor between states, brought about by the natural resources available to each state and the various industries indigenous to each, leads to commerce, and hence antagonism, between states.[9]

Feudal property arises not out of cities but rural areas. Marx gives the decline of the Roman Empire as a possible reason for the rise of feudalism. Commerce, which was made possible by the vast reach of the Roman Empire, was virtually destroyed by its fall, and in its place came large-scale farming of land owned by local nobility. The laboring class consisted of the local peasantry who became serfs, and farmed the land for the feudal lords. In the towns, industry flourished in the form of guilds, which consisted of small capitalists who employed apprentices to ply their trades. This set up the opposition between town and country, as commerce between them was necessitated by the division of labor implicit in the feudal mode of production. Manufactured goods invariably came from the cities, and were traded for agricultural goods from the country. The feudal system, then, created two kinds of ownership out of its particular division of labor: the small industrial capital of the cities, and the large land-based ownership of the country.

In these three modes of production we see how labor is divided. The property, or mode of ownership, associated with each is identical to its particular way of dividing labor. Property, then, is simply the expression of how a particular organization of people, be it a family, state, or trade, divides the labor involved in its mode of production. There is a further division, however, between the owners of property on the one hand, and the property-less workers on the other. In the ancient communal property of the state there are the slaves, acquired through conquest, and in the feudal system the serfs. (The feudal system is somewhat more complex, as there are two kinds of property and two kinds of workers, whereas in the ancient communal system there is only one kind of property and one kind of worker.) Hence we have two kinds of antagonism existing in each system, the first in exchange, the second between the owners of property and the property-less workers. These are separate antagonisms, and they do not intermingle, as exchange does not generally occur between the classes, but rather between states or between the owners of property. There is no real intercourse between them, and hence the issue of property and the issue of exchange seem completely separate.

The means of production in any given era are given by the particular circumstances of those producing, as we saw in the three modes of production outlined above. The mode of production is simply the way in which these means are used in order to produce. This is identical with the division of labor: the mode of production is necessarily dual. It divides society into two classes, the owners of property and the property-less workers. The mode of production is the sum total of this relationship. It manifests itself as a *class struggle* between the two groups.

Capitalist production begins with the appearance of labor as a commodity for sale on the market. The conditions that bring labor to the market place have been set out elsewhere in this essay, but they primarily consist in the decline of feudal agriculture and the flight of serfs to the cities, and the decline in the guild system due to improvements in technology and growth of the small capital invested in manufacture. The division of labor in capitalist production exists between capitalists, who exchange with one another. Capitalism brings with it *private* property, that is, property owned strictly by individuals. In the feudal mode of production the owners of particular kinds of property were allied with one another and did not engage in exchange, for they all essentially produced the same things; feudal lords almost exclusively produced agricultural products, guilds produced different manufactured goods, and the two groups engaged in exchange as groups. But capitalist production places individual capitalists in competition with one another, as capitalist production can take place in any industry and in any place. Thus the alliance of property owners is broken.

With the advent of capitalist production the antagonisms inherent in exchange and in property ownership which once were separate become identical. The property-less worker in the capitalist system sells his labor as a commodity, and intercourse between the owners of capital and workers begins. They are both free individuals, coming together as equals in exchange on the common market. But the laborer is not exactly property-less. Labor here is taken as a kind of private property, something *alienable*. Since everyone owns private property (now that labor is included as a kind of property), the antagonism of ownership and non-ownership between the classes seems to be resolved. Now the worker has a commodity he can sell, his labor, so all that remains is the antagonism between the various producers of commodities, brought about by the division of labor and exchange.

Just because everyone now owns property, it does not mean that everyone is a capitalist. To the contrary, only the owners of property other than labor can be capitalists. Hence what appears as an elimination of the class distinction between the owners of property and the disenfranchised is actually the reinstatement of this same distinction in a different form. The division of labor is the true source of all divisions in society, and exchange is the source of all antagonism. Once ownership is the right of an *individual* rather than a *class*, the division of labor and exchange reveal themselves to be two sides of the same coin. Thus the capitalist class is one of individuals engaged in antagonistic relationships of exchange. Their mutual interests as a class are secondary to the desire of each individual capitalist to expand his capital. The laboring class, the proletariat, is engaged in an antagonistic relationship with the capitalist class because there is exchange between them. Labor, the production of use-values for the sake of exchange, is divided amongst the capitalists, and they engage in exchange with the laborer as well as other capitalists. Where there is exchange, there is alienation, hence the capitalist is alienated from both his fellow capitalists and the workers he employs.

The free sale of labor is the first and most important condition of capitalist production. The laborer and the capitalist must meet in the open market, where "Freedom, Equality, Property and Bentham" [C.I, p.172] rule. Capitalism depends completely on the freedom and equality of the laborer and the capitalist, as these are the fundamental conditions of any exchange. But so soon as the laborer leaves the market and follows the capitalist to his factory, his labor becomes, albeit only for a stated amount of time, capital belonging to the capitalist. The laborer becomes property just like a slave or a serf, but it is for a limited time, and rather than being placed against his will in servitude, he went to the market willingly.

But this freedom is a sham, one that must be debunked if we are to understand the true nature of capitalist production. The laborer is not free; he finds himself forced to sell his labor by the conditions that surround him. The only other choice is death; he sells his labor as the last possible way in which he can sustain himself. The dialectic of the modes of production has delivered him to this state. The laborer is no more free than the slave delivered into servitude by his conquerors. He is brought to that point by forces that are beyond his control. The notion that a person can own himself as property, as something external and hence something that is within his control, and by definition, alienable, is fundamentally untenable.

Capitalism, by placing property in the individual and not the class, destroys the fortress that formerly safeguarded it. It is the antagonism between capitalists that brings about the final destruction of capitalist production. The opposition between the capitalist class and the proletariat is a product of capitalist production, but it is not the cause of its downfall.[10] The proletariat need not destroy capitalism by force, as it dies at its own hands. Capitalism relies on the laborer as a free individual, but this freedom is merely an idea, not an actuality. Real freedom is the absence of material constraint on the life-activity of man. This is clearly not the kind of freedom that the laborer has. His freedom is in name only.

Similarly, the capitalist is constrained by his material conditions. Capital by nature wishes to be expanded, and the capitalist is simply the human form of capital. He is as enslaved by capital as the laborer is. He has even less freedom than the laborer, as he is at odds with everyone and allied with no one. He seeks only his own interest, which is obtained necessarily at the expense of others in his class as well as the laborer. The laborer has only one antagonist: capital. There is no natural source of antagonism within the proletariat as there is no exchange between them, because there is no division of labor. They labor only for the capitalist, and hence are able eventually to unite and see their common interests. The capitalist class, by its very nature, can never do this.[11]

Marx calls communism the "positive transcendence of private property." [EPM, p.135] Private property is the kind of property that arises out of the capitalist division of labor, property owned by *individuals*. It places individuals in opposition to one another. In the earlier modes of production tribes were opposed to tribes, states to states, and classes to classes. Capital pits man against man directly, without recourse to some unified structure to support his claim. The resolution of this antagonism, of this estrangement, necessarily demands the sublation of private property, the rendering of it into its opposite, social property.

This sublation puts the means of production that formerly served capital in the hands of the proletariat. The means of production determine the mode of production, which has been up to this point antagonistic. By removing the concept of individual ownership from production, communism removes the class struggle completely. The mode of production is simply the way in which the means of production are set in motion in order to produce. When this is undertaken on a *social* level, the means of production are set in motion by *society* as a whole, not by some particular class. This is possible only when society *as a whole* owns the means of production.

But the dialectical process is essential, as it makes the division of labor an unnecessary division. The division of labor arose out of the inadequacy of the previous mode of production, but in capitalist production it eventually becomes its opposite. It is rendered useless by the capitalist mode of production. Private property is the result of the division of labor, so the removal of the latter destroys the former. Capital, through its accumulation, continually improves production and systematically reduces the amount of labor and level of skill required to produce commodities. It reduces all labor to

essentially the same thing, and effectively turns the division of labor into its opposite. The division of labor in capitalism exists only between the various kinds of manufacture, which are represented by individual capitalists. This division has no meaning for the laborers.

The transcendence of private property consists in the birth of social property. This can only take place when man recognizes himself as a *species being*, rather than an individual. Man as species being sees nothing as alien from himself, but sees all objects as objectifications of himself as a species being.

> [M]an is not lost in his object only when the object becomes for him a *human* object or objective man. This is possible only when the object becomes for him a *social*[1a] object, he himself for himself a social being, just as society becomes a being for him in this object. [EPM, p.140]

Man becomes an object for himself by negating the reality of the objects outside himself as something alien, and hence independent of him. By so doing he *appropriates* the objects as expressions of himself as man. This can only take place on a *social* level, that is, on the level of common recognition of all men as social beings, or species beings. The true inner equality of man lies in the common condition of all men, that of work. The recognition of this equality takes place through the destruction of the division of labor as a *qualitative* division. Commodities long ago realized that they were all expressions of the same social substance, human labor. There is no alienation between commodities, only between the producers of commodities, for the commodities, as commodities, are aware of nothing in themselves other than the labor invested in them. This is how exchange is possible. Man must recognize himself and other men in the same manner, as being qualitatively the same, and hence equal and unified. Exchange brings alienation only because the producers of commodities see their labor, and thus their products, as something alien from themselves, and see themselves as separated from other men, with whom they necessarily exchange, by the qualitative difference between their commodities.

This alienation disappears when man ceases to produce for another individual and commences production for all of society. This is not a backwards motion to the prehistoric state in which man worked only for himself; it is a *progressive* motion towards a new state, in which man works for society, with which he sees himself to be identical. The common social substance, work, becomes a unifier of men, rather than of commodities. The laborer, by producing himself as a commodity, learns well the lesson that commodity production teaches: that all commodities are essentially the same with respect to other men. By becoming a commodity himself, man recognizes the essential equality of himself as a working being. This is why it is the proletariat that becomes the ruling class. They unlock the secret of human equality through having found themselves made essentially equal (albeit against their will) by capital. The dialectical motion from work-for-self to work-for-other thus completes itself in work-for-self, where the self is taken as a *species being*.

Man thus enters into the social relationship that commodities once enjoyed, and appropriates it for himself. He, as a conscious being with a life-activity, work, recognizes himself as species being. This is the end that communism, as the transcendence of private property, makes possible.

Man's life becomes an object for him, rather than his being himself an object of his life. That is, his life-activity is his *essentially*, and is an end in itself, rather than the means to an end. Once his life is his, the dialectic of antagonisms ends. The key is the *activity* of man: the dialectic moves man by its own forces, propelled by antagonisms that are the product of something external, the material conditions of his life, which are fundamentally beyond his control. His individual will is powerless to overcome them. The recognition of the other (be that man or nature) as identical with man, allows man to appropriate the activity for himself, and the seemingly external activity of the dialectic becomes the self-propelled and self-controlled life-activity of man. This cannot, however, take place on an individual level. It relies on the universal recognition of man as a species being. Communism is "the riddle of history solved" because it resolves all the antagonisms that seem to be essential to human existence. By placing man's essence in his *species* being rather than his individual existence, it removes all traces of otherness from the world.

The resolution of Marx's material dialectic is essentially identical in form with Hegel's dialectic of consciousness. But for Hegel, the end of dialectic lies in a certain kind of knowledge, rather than a certain way of being, or way of life. Consciousness's knowledge of itself as Spirit, something over and above itself of which it is an expression, is state of *mind*. Species being is a mode of being in the world, which Marx sees as the only possible mode of being. Being in the mind, or knowledge, must necessarily be an expression of being in the world, not the other way around.

To the question "why a material dialectic?," Marx would surely answer this: "Show me an idea that exists independently in the world as a force that moves men, and I will give up my material dialectic." The argument for a material dialectic is clearly an argument of the whole, and is made from experience. The world is made up of objects, and objects are moved by other objects, not by invisible forces of the mind. Man's conscious being only reveals itself when he is engaged in some kind of activity, or being *in the world*. Hence the notion that his ideas are independent of this being, or that the world is a product of these ideas, is essentially backward. Man becomes conscious through activity, and through his activity he makes the world around him. His activity is not a result of his consciousness, his consciousness is the result of his activity.

If we set out from the premise that man first and foremost exists in the world, and thence proceed to his consciousness of his existence as a means by which he perpetuates his existence, we fully understand the material dialectic and its primacy over the dialectic of ideas. This, Marx argues, is the correct understanding of the history of the world, and the only means by which we can realize the ultimate goal of the human species. Idealism, for all its attractions, fails to address the fundamental question of human existence, man's being in the world, because it places his being elsewhere than in the world.

The fundamental problem of human existence lies in *existence*, that is, in the world, and nowhere else. To find its solution, we must look only to the world, the world of objects, of which man is one. His consciousness exists only on the condition that *he* exists, and hence his material life, his being in the world, is necessarily primary. This primacy is the key to understanding the necessity of a *material* dialectic.

This dialectic is one of man's *becoming*. At the end of his journey, man becomes human. In order to become human, man must undergo the dialectical process that facilitates this becoming. Man's humanity lies in his activity, and because he is conscious, that activity must be *his* essentially. The only way in which man can possess himself in this manner is by becoming a species being. Once he becomes a species being, man becomes himself. Thus as the dialectic draws to a close, man is completed, and with this completion, man actualizes the true essence of himself by means of work, the conscious activity that ultimately defines him. As with every other mode of production, communism produces a certain kind of man. Communism makes men equal and free, not as a mere idea, but as an actual state of being in the world. Communism is a return to work-for-self, but the concept of self has been expanded to include the whole species. Thus it is not really a return, but a sublation. Man is both preserved and transformed. This expansion, this dialectical growth, is the fundamental process of the history of the world, and its immanent resolution is that which propels it. History, that with which philosophy is primarily concerned, ends with the resolution of its process. Where history ends, so too does philosophy. Here man leaves off his investigation of himself and the world as something outside of himself, and begins *living* in the world, which is merely an expression of himself. The end of philosophy marks the beginning of truly human life. The commencement of this *human* life is that to which the entire process of history is ultimately directed.

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Footnotes

1 The C in my notation refers to *Capital*. The roman numeral following it refers to the volume number.

2 "The family is the association created by nature for the supply of men's everyday wants...." *Politics*, 1252b 13-14.

3 An Inquiry into the Nature and Causes of the Wealth of Nations, Vol. 1, Book 1, Chapter 1, Adam Smith.

4 That is, for commodities to have universal meaning, as they do in exchange, they must have a *language*. Note here the resemblance to Hegel's description of language: "Language is self-consciousness existing *for others*, self-consciousness which *as such* is immediately *present*, and as *this* self consciousness is universal." [PS, § 652] It is also interesting to note that this description comes in the context of morality. What is consciousness trying to bring into the world of objective existence through language? Its inner worth, or *value*. So the exchange value of a commodity is actually the commodity existing as a universal, or for another.

5 This is the true beginning of the "mine and thine" that so embittered Rousseau. Private property begins with the division of labor and the birth of self-interest in opposition to

other men. This is perhaps the force of Rousseau's distinction between *amour-propre* and *amour de soi-meme*. The former he sees as a product of society, while the latter is but an expression of the instinct for survival.

6 There is a kind of *community* of commodities, they have a truly social relationship. That is, they recognize themselves as identical with one another *as values*. There is no alienation between commodities, only between their producers. Commodities are social in the sense of being of the same social substance, human labor. The social relationship between producers is a reflection of this, but necessarily different. The attraction and mutual recognition of commodities leads to repulsion and mutual alienation between the producers.

7 The EPM in my notation refers to *The Economic & Philosophic Manuscripts of 1844*.

8 *Second Treatise on Government,* Chapter V, John Locke.

9 In Section II of this essay we saw that wherever there is division of labor, there is exchange, and wherever there is exchange, there is antagonism. (The exception to this is the family, where there is no real exchange.)

10 This raises an interesting question about *The Communist Manifesto*. What is it if not a call to action on the part of the proletariat? The rhetoric of the *Manifesto* seems to contradict the notion that the dialectic will be the primary cause of the end of the antagonistic mode of production. Marx's use of rhetoric elsewhere is similarly troubling. What place could rhetoric possibly have in dialectical philosophy?

11 This is parallel to the Lord and the Bondsman in Hegel. The double alienation of the bondsman from his lord and the object he makes for his lord leads the bondsman to find new certainty in himself through his activity and progress dialectically. The lord, because he has no activity other than pure negation of the objects the bondsman produces, from which he is alienated, cannot progress, and his consciousness plateaus. The fundamental difference between Hegel's account of this stage of consciousness and Marx's account of the laborer is also revealing; for the bondsman in Hegel, the next stage is stoicism, certainty in oneself and indifference to the outside world. For the laborer in Marx, this change in consciousness must be manifested in the world if it is to have legitimacy. It must take the form of a demand for changes in the conditions of his life.

12 It is clear that by social Marx does not mean here the society of individuals as alienated from one another by exchange, which is the sense in which this word was used earlier in the essay with reference to man in society. He clearly means social in the sense that commodities are social; they recognize their mutual identity as expressions of a common substance, human labor.

Untitled Woodcarving

Marianne Thompson

The Tension BetweenMercy and Justice in Shakespeare's Measure for Measure

✷

Heidi Jacot

William Shakespeare's Measure for Measure is a study of the uneasy tension between the principles of justice and mercy in government. The theme is debated by the play's main characters. It appears in the conflict between public and private duty, and is raised as a struggle between two competing systems: divine justice and earthly justice. The tension between mercy and justice is most visible in Isabella as she fights within herself to find compassion in her heart for the man she hates above all, whose very life is placed into her hands.

If there is one crucial moment in Measure for Measure, it is undoubtedly the moment of Isabella's indecision, when, struggling between Mariana's pleas, she shows mercy and her own desire for revenge, standing silently before Angelo. In this moment, the play hovers between comedy and tragedy with Isabella's soul in the balance. She is being tested by the Duke, whose enigmatic speech urges her first to show mercy and then to exact revenge:

> For this new-married man, approaching here,
> Whose salt imagination yet hath wronged
> Your well-defended honor, you must pardon
> For Mariana's sake.
> .i.449-521

Here he brings out her "imagination," her "well-defended honor," and her friendship with Mariana as grounds for mercy. However, the tone changes as his speech continues:

> But as he adjudged your brother–
> Being criminal, in double vision
> Of sacred chastity and of promise-breach
> Thereon dependent–for your brother's life
> The very mercy of the law cries out
> Most audible, even from his proper tongue,
> "An Angelo for Claudio, death for death!
> Haste still pays haste, and leisure answers leisure;
> Like doth quit like, and Measure still for Measure.
> V.i.452-60

It is as if these words are Isabella's own thoughts, swinging between pity and anger. There is a curious line here: what does he mean by "the very mercy of the law" which demands Angelo's death in recompense? The word "mercy" is surprising in this context–we usually think of mercy as a departure from the letter of the law, not the fulfillment – but perhaps the Duke intends for it to ring in Isabella's ears. The conclusion of the speech goes beyond the righteous feeling of "death for death," it focuses on the parallel between Angelo and Claudio in order to bring out Isabella's empathy:

> Then, Angelo, thy fault's thus manifested;
> Which, though thou wouldst deny, denies thee vantage.
> We do condemn thee to the very block
> Where Claudio stooped to death, and with like haste.
> V.i.461-5

Perhaps Isabella is brought up short by this blunt comparison. She does not speak; instead, Mariana and the Duke alternately beseech and goad her on, and Isabella is swayed from one side to the other. Although the Duke speaks sharply, his purpose is still to test Isabella, hoping that she will rise above her instincts and ask for Angelo's pardon. It is less of a test *of* Isabella than *for* her. For Isabella stands in danger of being consumed by self-righteous anger and a desire for revenge– by the inhuman coldness with which she had accused Angelo.

When put to the test, Isabella finds it hard to give mercy, although her pleas on behalf of her brother to Angelo in the second act are among the most eloquent and moving lines in the whole play. This woman, a novitiate from the convent, who stands in our minds as the representative of divine mercy in the play, has another side to her as well– one that is less forgiving. Pushed to her breaking point by Angelo's lascivious demands and her brother's cowardice, which makes him willing to sacrifice her honor for the shred of life, Isabella at one point cried out against the brother she sought to save:

> O fie,fie,fie!
> Thy sin's not accidental but a trade
> Mercy to thee would prove itself a bawd:
> 'Tis best that thou diest quickly.
> III.i.156-73

In this moment, Isabella sees such foulness in her brother that she claims that mercy itself would act like a procurer to help him on to further evils. This is the same Isabella who, in her rage at Angelo's treachery (the broken promise of pardon for Claudio's life), says in fury, "O, I will to him and pluck out his eyes!" (IV.iii.119). Her experiences in the world have brought her a long way from the convent and her idyllic vision of "fasting maids whose minds are dedicate/ To nothing temporal," (II,ii,189-90). Before the Duke in the last scene, she cries out against Angelo, calling for "justice, justice, justice, justice!" (V.i.28). The invectives she hurls publicly against Angelo are some of the most severe in the play. How does this passionate, vengeful fury we see in Isabella, the young novitiate, fit with what we saw in her earlier appeals to Angelo to show divine mercy? This is the same woman who movingly pleaded with Angelo:

> ...How would you be
> If He, which is the top of judgement, should
> But judge you as you are? O, think on that,
> And mercy then will breathe within your lips
> Like man new made.
> II.ii.97-101

How can we understand this disparity in Isabella's character which shows itself in such vindictive extremes and tender appeals?

Let us look, though, at those appeals in Act II scene ii. We usually think of mercy being invoked because of extenuating circumstances, coming from the consideration of the particulars of the individual case. In the case of Claudio, Isabella could have pleaded his engagement (a legally recognized precontract no less), and intention to marry Juliet, hampered only by lack of money. She begins, however:

> There is a vice that most I do abhor
> And most desire should meet the blow of justice;
> For which I would not plead but that I must;
> For which I must not plead but that I am
> At war 'twixt will and will not.
> II.ii.40-4

This speech of Isabella's comes out sounding simply garbled: She is forced to plead to save her brother–although it comes in conflict with her natural inclination and sense of duty– so that she is at war between will and will not. It is neither a defense for Claudio nor a passionate appeal to show mercy. In fact, when Angelo argues with her about the justice of Claudio's sentence, Isabella agrees with him, "O just but severe law!/ I had a brother, then" (II.ii.55-6), and prepares to go! She acknowledges the claims of law on her brother's life, and, having done her duty in asking for his pardon, is ready to relinquish. There is something chilling in the absolute detachment of, "I had a brother, then," she really does consider herself as part of the convent and divorced from life and its "earthly concerns" already.

But Lucio will not let her give in so easily, and under his insistence she returns to Angelo. She presses him with unsettling questions. Backed into a corner by his own contradictory statements, he tries to send her away (II.ii.85). But Isabella is not to be gotten rid of easily. This seemingly callous dismissal from Angelo has needled her. I hear her response, a kind of "I would I were you," coming out of long pent-up frustration at a woman's dependent and submissive role. In this speech we see Isabella genuinely affected and reacting from the inside, shaking off the demure and reverential character she has assumed. It is not furious, but it is a passionate statement about herself and I think that it is this that catches and fixes Angelo's attention:

> I would to heaven I had your Potency
> And you were Isabel! Should it then be thus?
> No, I would tell what 'twere to be a judge
> And what a prisoner.
> II.ii.86-9

Stung in turn, Angelo reacts, and the scene escalates. At her appeal that lechery is, after all, a common sin, Angelo suddenly turns on her with the full force of his righteous anger blazing:

> The law hath not been dead, though it hath slept...
> *Isabella*: Yet show some pity.
> *Angelo*: I show it most of all when I show justice;
> For then I pity those I do not know,
> Which a dismissed offense would rather gall;
> And do him right that answering one foul wrong,
> Lives not to act another. Be satisfied.
> Your brother dies tomorrow; be content.
> II.ii.115-32

It is a weak conclusion to such a powerful speech. He has lost the force of his argument and tries awkwardly to cover over the brutality of his own anger by telling her to take comfort. But where Angelo breaks down, Isabella gains strength, and she comes back at him (provoked by his insufferable arrogance) in a tone of contempt:

> So you must be the first that gives this sentence,
> And he that suffers...
> Could great men thunder
> As Jove himself does, Jove would ne'er be quiet,
> Forever pelting, petty officer
> Would use his heaven for thunder,
> Nothing but thunder!
> ...but man, proud man,
> Dressed in a little brief authority,
> Most ignorant of what he's most assured,
> His glassy essence, like an angry ape
> Plays such fantastic tricks before high Heaven
> As makes the angels weep...
> II.ii.133-50

Rather than appealing to a higher law than man's, Isabella attacks human justice itself. Her criticism of the pretensions of man are less reflections on law and government than arrows aimed at Angelo's pride and self-righteous attitude. As we have seen, her first speeches (delivered in cooler blood) show a reverence for and acceptance of the jurisdiction of human law. It is her interaction with Angelo that leads her further and further into making ardent statements which have the sound of religious conviction. Righteousness meets righteousness: Isabella reacts to Angelo's disdainful coldness and arrogance; Angelo is driven to extremes by her attack on him, on law, but mostly on his authority which rests uneasily on his shoulders. When we look at her speeches and how this first scene between them unfolds, we see that Isabella speaks less out of conviction than in response to him - impulsively. We might not be so surprised to find her behavior inconsistent with her statements. Perhaps now we have a better understanding of her character and why it turns out to be so difficult for her to put these petitions for mercy into practice in her own life.

For Isabella it is an effort to forgive. Isabella needs to learn to let go: she is holding herself so tightly. She shares with Angelo a fierce pride and love of absolutes, grand-sweeping gestures, and high principles; which is precisely why they feed off one-another in their arguments. Having so much in

common with the temperament of Angelo, she too stands in danger of sharing his fate: self-loathing and self-control taken to such extremes that natural longings finally break through violently, destroying the last threads of moral conscience. To feel self-righteous is a pleasant satisfaction, but pride is no more a source of happiness than it is of power – Isabella must learn to forgive out of compassion or, nourished by her anger, she will shrivel away.

That she does, in that moment of struggle, finally go down upon her knees on Angelo's behalf, is a singing triumph of the power of mercy and love in the play. Swayed one way and then the other, she is caught and held by the sudden similarity she sees between Angelo and her brother (whom she believes dead), and by what she sees in Mariana. When she joins Mariana on the ground to beg Angelo's pardon, it is not because of Mariana's offers to lend Isabella all her life to do her service, or even out of love for Mariana, but because she begins to see –as if from far off– the unfathomable depths of Mariana's love for this man. Looking at Angelo again and wondering what must be in this man that he can be so loved, perhaps simply struck by the intensity of love a woman can feel for a man; drawn toward what she barely knows, Isabella make the choice to extend forgiveness to the man who forced her to search into her deepest fears and sense of shame. Haltingly, she begins:

> Most bounteous sir,
> Look, if it please you, on this man condemned
> As if my brother lived. I partly think
> A due sincerity governed his deeds,
> Till he did look on me. Since it is so,
> Let him not die. My brother had but justice,
> In that he did the thing for which he died.
> For Angelo,
> His act did not o'ertake his bad intent,
> And must be buried as an intent
> That perished by the way. Thoughts are no subjects,
> Intents but merely thoughts.
>
> V.i.500-10

In contrast to her impassioned speeches to Angelo for mercy earlier, this plea sounds somewhat grudging, on conditional terms rather than on principle. The argument has been "an Angelo for Claudio, death for death," and Isabella recasts it in terms of law again: Claudio died for committing the act of adultery, but "for Angelo," (and there is a heavy pause here in the text), he has not, in fact, taken her maidenhood and stands not condemned under the law's sentence. For mercy, this sounds very much like justice. If it is mercy –pardoning what the law condemns– it must be because justice does not demand intent be dismissed as "merely thoughts" and excused. We might have hoped her petition here would have been in a more lofty vein – some grand redeeming gesture of loving compassion. Instead, what Shakespeare gives us, is a much more human Isabella. We see what a great effort is required on her part to even bring her so far. In part, such great gestures which paint life in high principles, black or white, have been brought into critical scrutiny in Angelo's character.

Perhaps Isabella's mild plea for mercy at the end of the play is a mark of wisdom her character has come to in the play. More experienced, less fantastically idealistic, she has learned to plead *within* the framework of human justice, and to consider the case as that of an individual, rather than as an abstract matter: a fault to which both Angelo and she are prone.

It is a triumph for Isabella to have overcome the strong temptation to take revenge, and she is now rewarded with the "heavenly comforts of despair/ When it is least expected" that the Duke promised: Claudio returns, seemingly from the dead, and is joyfully reunited with his sister!

But despite the affirmation in the last scene of the play of the prevailing power of love shown in mercy, this scene is characterized <u>not</u> by mercy, but by justice! Angelo himself begs nothing more than justice according to the law: "I crave death more willingly than mercy:/ 'Tis my deserving and I do entreat it" (V.i.537-8). He stands by his vow made earlier to Escalus (although little thinking at the time that his sin would be Claudio's), "When I, that censure him, do so offend,/ Let mine own judgement pattern out my death,/ And nothing come in partial" (II.ii.31-3). But Angelo is not to be let off so lightly. He longs indeed for death to bury the shame and self-loathing that has become interminable to him. Instead, he is "punished" with life, the heavier burden for him to bear.

The Duke measures Angelo not by justice according to the laws of the land, but with dramatic justice– which punishes and rewards, in exact and appropriate measure, good and evil in proportion to the character's actions. Angelo has not killed Claudio, he shall not die either. He has wronged Mariana's honor, he must restore than honor by taking her now in marriage. In so determining, the Duke also rewards Mariana with her due, honor for dishonor, the fulfillment of her wish for marriage in return for her years of sorrow at Angelo's rejection. The plays supporting characters also receive their desserts. To Escalus the Duke gives "thanks... for thy much goodness," and promises more to come, "that is more gratulate": that is, rewards for his faithful service (V.i.592-3). The Provost, although first arraigned for his disobedience to the deputy is released for his loyalty to the Duke and also thanked. Claudio is given his due as well. "She...that you wronged, look you restore." (V.i.598). Everything seems to be tidily concluded: the Duke returns and reassumes his rightful place, and Angelo is exposed and forced to make amends. Yet there is one man at the end of the play who does *not* get what he deserves...

Barnadine– a prisoner of nine years, a murderer, perpetually drunken and surly, who was to share Claudio's fate. He is introduced to us first by the Provost:

> Call hither Barnadine and Claudio:
> Th'one has my pity; not a jot the other,
> Being a murderer, though he were my brother.
>
> IV.ii.60-2

Barnadine provides a foil to Claudio in prison: Claudio is noble and princely, Barnadine seems to be little more than an animal. Their pairing is especially meaningful because throughout the play, Shakespeare has been raising a question in the comparison of murder and begetting bastards, children born out of wedlock. Angelo is the first to put these crimes side by side when he says (half to Isabella, half to himself):

> ...It were as good
> To pardon him that hath from nature stol'n
> A man already made as to remit
> Their saucy sweetness that do coin Heaven's image
> In stamps that are forbid.
>
> (II.iv.47-51)

And he intends to punish lechery as severely as murder: with beheading. To Angelo the crimes are one and the same. Isabella's reply to this is "'Tis set down so in Heaven, but not in earth" (II.iv.55). In the eyes of God both sins are equally grievous, but on earth, lechery is given more leeway. Again and again it is said in the play, by Lucio, by the Provost, that Claudio is a man "more fit to do another such offense/ Than to die for this" (II.iii.15-16), while for Barnadine there is only the disgust his crimes and dissolute life have earned him. He is regarded by the Duke and Provost in Act IV as something dispensable, a substitute whose head might be used in place of Claudio's. The coupling of Barnadine's fate with Claudio's has the effect of making us ask: is adultery a crime? And , if so, is it as great a crime as murder? Only Angelo stands behind the state's old laws which demand death as penalty. The opinion among the play's characters, however, seems to swing in favor of answering no. Dramatic justice demands the taking of Barnadine's life since he, unrepentantly, took another's. But Bernadine does not die. Instead, the Duke has Barnadine secreted away with Claudio, and offers free pardon to him when he is brought into the Duke's presence at the end of the play. How can it be just, by law or by deserving, to set this unrepentant murderer free? Why does the Duke release him?

To answer why the Duke rescinds his policy of justice according to desert, releasing Barnadine, we must look back at his experiences as a friar, in disguise, and how they have changed him. In this role he faced and began to come to terms with his fears, his inadequacy, his moral incertitude, and to reach a new level of understanding of the church and the place of God in the world of men.

Seeing the degeneracy of Vienna, the Duke has decided, before the play opens, that the old, stern laws, which during his rule he has let slide, must be reawakened. He thinks it will be perceived as tyrannous though, if he, who had given vice tacit permission by failing to punish it, were <u>now</u> to unleash strict Justice. Instead, he resolves to leave Angelo to reinstitute the laws in his place, since he "may, in the ambush of my name, strike home, / And yet my nature never in the fight / To do it slander" (I.iii.44-6).

Is it a brillant political stroke? Or is it overly optimistic to think that the people will not turn against him when he returns? Perhaps they would be angry if he suddenly began to enforce the laws, but will they be any happier when he returns and picks up where Angelo has left off? He merely delays the effect. It might, in fact, be worse if the people had been looking forward to his return to end the "oppression," only to find him in support of the new regime. My sense is that the Duke thinks the people will resent a reinstatement of the law from *him*, having let them get so out of line, but that they will be surprised, rather than angry, at Angelo because he has no such expectation to maintain. I also suspect that the Duke is not thinking of these "strict" laws in the particular–that he never intended for Angelo to put anyone to death. Angelo is to him a trial case, a figure of his own creation, not a ruler in his own right. Is this shifting of duty admirable? As a ruler, perhaps his plan makes good pragmatic sense, but however astute a political maneuver it may be, how can we respect a man who loads the blame on another's shoulders and walks away? The fact that the Duke is telling his reasons for leaving the state in Angelo's hands to Friar Thomas, unashamedly, leads me to think he does not consider what he is doing and his reasons for it as such a bad thing. We the audience, however, have that friar's observatioon, "It rested in your Grace / To unloose this tied-up justice when you pleased..." which I tend to read as the voice of the play casting a doubtful shadow on the Duke's behavior at this point. It is difficult to justify.

On the other hand, in a certain regard, it *does* seem like the perfect plan. The Duke is freed from a duty which is distasteful to him, and the job is put into the hands of Angelo– a man of spotless reputation, free from the taint of hypocrisy or blame, who embraces the task of reinstating the laws willingly. At the same time, this gives the Duke an opportunity to test Angelo himself and see "if power change purpose" is in him (I.iii.56-7). What is more, though conceived of the necessity of reestablishing the laws, the Duke is not entirely sure of his plan (after all, he has not ruled this way in fourteen years). Through a substitution he gets to observe, from the outside and at the ground level, what such a system would be like. With this end in mind the Duke disguises himself, choosing the habit of a friar. It is for this purpose he has come to ask Friar Thomas' assistance in Act I scene iii:

> ...to behold his sway
> I will, as 'twere a brother of your order,
> Visit both prince and people: therefore, I prithee,
> Supply me with the habit and instruct me
> How I may formally in person bear
> Like a true friar
>
> I.iii.46-51

Here it is apparent from his words that the Duke believes that as a friar he can "visit both prince and people," that that character is somehow outside the political sphere, neither ruler nor ruled. But as Lucio, more wisely than he knows, remarks, "Cucullus non facit monachum,": a cowl does not make a monk (V.i.298), and the Duke finds the role to be more demanding than he had expected. His treatment of Pompey, whom he meets being led off to prison in chains, shows him still reacting more like the duke he isthan the friar he is pre-

tending to be:

Duke: Fie, sirrah! a bawd, a wicked bawd!
The evil that thou causest to be done,
That is thy means to live. Do thou but think
What 'tis to cram thy maw or cloth thy back
From such a filthy vice...
Canst thou believe thy living is a life,
So stinkingly depending? Go mend, go mend.
Pompey: Indeed, it does stink in some sort , sir; but yet, sir,
I would prove–
Duke: Nay, if the Devil hath given thee proofs for sin,
Thou wilt prove his. Take him to prison, officer.
Correction and institution must both work
Ere this rude beast will profit.
III.ii.20-35

There he speaks as a ruler, as one who must think of the general welfare and public safety, not as a priest for whom the individual soul is of primary importance. Would a friar advocate "correction and instrcution" in prison for the well-being of Pompey's immortal soul? The Duke shows in his language he considers Pompey even less than a man with an immortal soul, for he is a "rude beast," incapable of responding to anything but physical punishment and reward. It is worth taking a moment to recall that this violent rebuke of Pompey for being a bawd comes almost immediently after the Duke arranges with Isabella Mariana's secret tryst with Angelo. Is it possible that some of the abuse the Duke hurls on Pompey comes out of a secret disgust with himself? He is not as unlike Pompey as he would like to think.

The real moment of change, when the Duke begins to grasp both the inseparable connection between political and spiritual matters and at the same time his own incompleteness and inadequecy, is in his encounter with Barnadine in prison. Taken by surprise by Angelo's double-dealing treachery which will deny Claudio life through the forfeit that has been paid in a maid's dishonor, the Duke has to quickly come up with another plan to save Claudio's head. A substitute must be found for Claudio as there was for Isabella. And why not Barnadine? Barnadine, who has been proven guilty beyond doubt, and who openly confesses his crime without penitence; Barnadine who is sentenced to die the same day–might *his* head not be struck off early and be sent to Angelo in Claudio's stead? "Call your executioner," the Duke tells the Provost, "and off with Barnadine's head. I will give him present shrift and advise him for a better place" (IV.ii.221-23). But Barnadine proves to be more of a challenge: he will not consent to die! Dragged, half drunk from his prison cell, he refuses to listen to the Duke's prepared speeches and sanctimonious words:

Duke: Sir induced by my charity, and hearing how hastily
you are to depart, I am come to advise you, comfort you,
and pray with you.
Barnadine: Friar, not I: I have been drinking hard all night,
I will have more time to prepare me, or they shall beat
out my brains with billets. I will not consent to die this day,
that's certain.
Duke: O sir, you must: and therefore I beseech you,
Look forward on the journey you shall go.
Barnadine: I swear I will not die today for any man's
persuasion.
Duke: But hear you-
Barnadine: Not a word! If you have anything to say to me,
come to my ward; for thence will not I today.
IV.iii.49-63

The Duke is absolutely stymied! Barnadine he finds "unfit to live or die" (IV.iii.64), and he cannot bring himself to order his execution. Perhaps the Duke is a somewhat squeamish who prefers "the life removed" and theory to practice, but I think that there is something that he sees in Barnadine which makes him unable to carry out the sentence of death upon him. It is not that he suddenly perceives something noble in Barnadine's life to make it worth preserving, but the opposite. Barnadine's life bespeaks intemperance and brutality. He has shown himself to be more of an animal than a man. He has wasted away, idle, in prison these nine years, a social outcast neither harming nor benefitting his fellow man. If Barnadine were to die now, what could be said about his life? Is man no more than this? The horror he feels in this reflection makes it impossible for the Duke to give the order to end this life and so conclude the story. Moreover, the same concern which he showed in this instance that Claudio be persuaded to be reconciled to death cries out against the beheading of Barnadine in his drunken stupor.

Yet, as a Duke, it is his reponsibility to see that the law and the punishment of criminals are carried out–and in this particular case, it is necessary if his own plot is to work. Helpless, in disgust, he gives the order for Barnadine's death, but confesses to the Provost that Barnadine is "a creature unprepared, unmeet for death; / And to transport him in the mind he is / Were damnable" (IV.iii.68-70). Here, and for the first time, the Duke shows some concern for the state of his own soul–and doubt in himself.

From this predicament, the Duke is saved, not by his own cleverness, but by the hand of God. "Here in the prison," the Provost reveals, "there died this morning of a cruel fever / One Ragozine, a most notorious pirate, / A man of Claudio's years, his beard and hair just of his color..." "O, 'tis an accident that Heaven provides!" the Duke exclaims (IV.iii.70-8). God has provided a ram caught in the thicket to be offered in place of the son whom it would be a sin to kill.

The experiences of the Duke in disguise are for him, life-changing. In diguise, the Duke has watched Angelo strip off his virtuous "seeming"; in disguise he has been startled by Juliet and has fallen in love with Isabella. He has seen the inadequacy of "reason" to persuade Claudio, and its complete and utter failure before a man like Barnadine. He has heard his own character abused by Lucio (and had to struggle to hold his temper). He has been confronted by the frustration of wanting to act, and the conflict between acting as a man of state and a man of God. His understanding of what it is to be a ruler, in the end, is expanded to include the religious. His images of leadership now include both the sacred and the secular. To Isabella he says:

Come hither, Isabel.

Your friar is now your prince.
Advertising and holy to your business,
Not changing heart with habit, I am still
Attorney to your service.
V.i.426-31

What he has gained from his experiences is a new respect for religious concerns and for the providence of God in the political realm. The roles of friar and ruler have become blurred. What the Duke has learned reflexing upon the example of Angelo is this:

He who the sword of Heaven will bear
Should be as holy as severe;
Pattern in himself to know,
Grace to stand, and virtue go;
More nor less to others paying
Than by self-offenses weighing.
III.ii.265-70

Here the Duke is saying the ruler ought not to punish "more nor less" than what he finds within his conscience. This is diametrically opposed to Angelo, who casually accepted that, often, "the jury... / May in the sworn twelve have a thief or two / Guiltier than him they try" (II.i.20-23).

Affected by this reflexion, (perhaps having gained new wisdom into the commonality of man, or perhaps moved by Isabella's plea for Angelo) when Barnadine is led before him in the final scene, the Duke addresses him thus:

Sirrah, thou art said to have a stubborn soul
That apprehends no further than this world
And squarest thy life accordingly. Thou'rt condemned:
But, for those earthly faults, I quit them all;
And pray thee take this mercy to provide
For better times to come. Friar, advise him;
I leave him to your hand.
V.i.542-58

If he is condemned, it is by Heaven, for the Duke will not presume to pass judgment upon Barnadine for his earthly crimes. Not to the correction of a prison cell where he once sent Pompey, but to the care of a friar the Duke now commits this man who had been proclaimed, "careless, reckless, and fearless of what's past, present or to come; insensible of mortality, and desperately mortal" (IV.ii.157-9). In light of this example of mercy, I believe the intention of the Duke's speech, "He who the sword of Heaven will bear," is not that one ought to take care to be spotless in virtue, but, (coupled with the telling example of Angelo's fall) that no man can hope to attain such freedom from imperfections, and that we are bound accordingly to use the utmost mercy. The title phrase "Measure for Measure," (which appears in the Duke's speech to Isabella in Act V, inciting her to take revenge on Angelo as he has killed her brother) comes from the Sermon on the Mount in Matthew–and the meaning there is not to justify the Mosaic law, "An eye for an eye; a tooth for a tooth." Quite the opposite: Jesus in Matthew's account says to the crowds, "If you want to avoid judgment, stop passing judgment. Your measure will be used to measure you" (Matthew 7:1-2)[2] . To God is left the power to judge and to condemn; men must use mercy as they hope for grace. Sexual offense, the play has implied, is less grave than murder, but the Duke's pardoning of Barnadine goes beyond even this distinction: all crime, even crime as grievous as murder, can be forgiven. Punishment now in the Duke's realm is to be instruction, not by blows, but by spiritual counsel. With Barnadine's judgment, the play is raised beyond the narrow margins of justice by the Duke's visions of commonality, and therefore sympathy, among all men.

It is an inspiring moment, but unfortuneately, this is no way to rule a kingdom. Law has been and will be created to protect a stable society from the ravages of crime bred by greed and unchecked license. If one wishes to pardon all offenses, one would have to live secluded from the world or die its victim. There must be a balance in the state between justice and mercy, although this seems to be against the spirit of Matthew's writing. Shakespeare recognizes and brings out the tension between political and private duty. How can you be a ruler who must judge and enforce law against your fellow man, and yet obey the spiritual injunction to forgive as you yourself hope for forgiveness from God?

In some ways Angelo is a better ruler because he knows this, and makes a careful distinction between what is public and what is private. Nowhere is this more apparent than in the example he gives Escalus of a jury passing judgment who "may in the sworn twelve have a thief or two / Guiltier than him they try." This is the basis of his conception of law and its proper use: "What's open made to justice, / That justice seizes. What knows the laws / That thieves do pass on thieves?" (II.i.23-5). Justice (which for Angelo means carrying out the penalty of the law) concerns itself only with what is made public; private causes or sympathies are not to be urged for they are irrelevant for this understanding of government. Although he claims concern for the good of the polity, discouraging crime by invoking harsh penalties, it seems to me that Angelo has essentially two motives in wanting to see justice served. The first is simply a love of rules and stricture which shows reverence for the law as a thing in itself: because a man has broken the law, he will pay the penalty directed by that law (not from any consideration of what that penalty is, but solely because it is handed down by tradition); the second is a natural desire for reciprocity, to insure that he who injures aniother is hurt in equal measure. Angelo blends both of these motives to see justice wrought: a strong motive of vengeance which he cloaks (even without knowing it himself) in the objective, political garb of doing his duty as a deputy of the state.

To a certain extent, Angelo's attitude towards justice does make him a good ruler, since he respects the law and makes it his primary concern to see it carried out. He neither expects nor considers any exceptions on personal grounds; he understands his position and accepts the responsibility alone for his decisions, keeping the distinction between public and private. His view is pragmatic. I find his argument for the justice of Claudio's sentence according to the law strong and convincing. At the same time, how can we help but be aware of how Angelo (untried, ignorant and unforgiving of

his own humanity) is setting himself up for a fall?

Against Angelo's uncompromising reliance on the law stand Isabella and Escalus, who try to persuade Angelo to mercy by appealing to conscience. They ask him to regard the situation as if he stood under the judgment of Heaven rather than think of himself as the dispenser of justice on earth. In contrast to the earthly justice Angelo represents, Isabella and Escalus urge a kind of divine justice which differs in two respects: 1) the judge himself is judged, "and wilt thou say to thy brother, Let me pull out the mote from thine eye; and, behold, a beam is in thine own eye?" (Matthew 7:4)–both of which urge the ruler to think of himself first as a man and take care for his own soul; 2) desire is equivalent to crime in Heaven just as surely as if you had committed the act: "Ye have heard it was said by them of old time, Thou shalt not commit adultery: But I say unto you, That whosoever looketh on a woman to lust after her hath committed adultery already with her in his heart" (Matthew 5:27-8). Both Escalus and Isabella rely upon these two premises of divine justice in their arguements. When Isabella asks Angelo, in essense, to love the sinner and hate the sin, Angelo replies scoffingly:

> Condemn the fault and not the actor of it?
> Why, every fault's condemned ere it be done.
> Mine were the very cipher of a function,
> To fine the faults whose fine stands in record,
> And let go by the actor.
>
> II.ii.50-4

Which is true; such a protest leaves no room for earthly justice. Just as Isabella demands of Angelo "Go to your bosom: Knock there and ask your heart what it doth know / That's like my brother's fault." Escalus' argument is:

> Let but your Honor know...
> Had time cohered with place or place with wishing,
> Or that the resolute acting of your blood
> Could have attained the effect of your purpose,
> Whether you had not sometime in your life
> Erred in this point.
>
> II.i.9-16

But consider carefully the foundation of Escalus' argument:

There is a logical fallacy called "Pointing to Another Wrong," a means of confusing the issue at hand by intoducing another. In Fallacy–The Counterfeit of Argument [3]:

Though many give lip service to the adage "Two wrong do not make a right," few are not tempted to mitigate blame for wrongs on one side by citing those on the other. Justice seems to demand that one who complains of wrongdoing should himself have "clean hands." Powerful charges are difficult to answer, by showing that the accuser himself is guilty of misconduct. This device is an effective rejoinder in controversy since it both deflects attention from the original grievance and creates sympathy for the accused party... Yet even when the countercharges are deserved, all that is demonstrated is that *neither* side is right when both are wrong.[3]

Whether or not Angelo has ever felt the desire is irrelevant. Even if Angelo had committed adultery that fact is logically unrelated to Claudio's sentencing, although it might make for a powerful emotional appeal. But Angelo has, in fact, not committed the crime for which Claudio is arraigned, as Ecalus knows, and so he makes a "you would" argument, which moves rhetorically from desire to action: it is only a matter of inauspicious circumstance which keeps desirer from becoming fact in Angelo's case. Angelo's response is to separate desire and action, "'Tis one thing to be tempted, Escalus, / Another thing to fall..." (II.i.18-9), and to emphasize the impartiality of the law and his willingness to give up his own life under the same charge. Two wrongs do not make a right.

The appeal of Escalus' to "natural inclination," desire, makes me wonder what it is we pass judgment upon? Fact, answers Angelo, deed, violation of the law. "Thoughts are no subjects," Isabella says at the end of the play, but "Go to your bosom and knock there" in Act II. This seems to be a crucial distinction between earthly and divine justice. On earth, how can we know punishment on the basis of motive alone? We have access only to deeds, to public, not private matters. On earth, the person standing trial must be considered separately, apart from any other at that moment in time–someone else's crime is irrevelant (if we agree that two wrongs do not make a right). We may feel sympathetically, at the same time, that crime should not be punished if many others or the judge himself is guilty of the same crime. But, before Heaven each man stands trial himself, and there can be no pointing fingers to your neighbors' sin as greater than your own. The crimes of my fellow man are not my concern, only my conscience before God. And we are not judged only for our deeds, but for our desires as well.

How can the ruler on earth perform his duty under the weight of the perpetual duty to Heaven? Earthly justice requires that we consider each crime as a separate case, and that we punish on the basis of action rather than desire, but to say this is to remove oneself from the juristiction of Heaven: the ruler must, temporarily at least, think of himself as not under the judgment of God. The arguments for justice and mercy in the play reveal a tension between the idea of earthly and divine justice and and call into question the possibility of being both a good ruler and a man.

What I do not understand is how Angelo can be so right, and at the same time so wrong. Examinded piece by piece I find myself wholeheartedly in agreement with the practices and principles of what I have called earthly justice, but he is under assault throughout the play from Escalus, from Isabella, and from the Duke, and these people are vindicated (morally) while Angelo descends lower and lower into hypocrisy and corruption. It is true that if we expect our rulers to be free from all taint, and even impulse, then no one can live up to demands made on the ruler in the Duke's speech, "He who the sword of Heaven will bear..." (and this means a radical statement against all forms of government, unless one can be conceived of which is not disciplinary), but why should the ruler have to try to live up to this impossible standard? Is Angelo's position wrong because he becomes unscrupulous? By his own understanding, no, since two wrongs do not make a right–*condemn me then to if I so offend, the law stands by itself, not subject to my example.* The danger of that thought surfaces in Claudio's shaky morality. His definition of crime depends upon the judge, and he reasons that an action can not be considered a crime if teh judge is guilty of the same. Angelo, for all his strong arguments, does not stand by them, because he did not turn himself in as he ought to have done if he really did believe in the absolute objectivity of the law as he says he does. Would anyone have turned himself in? Is the problem not "can anyone be of sin to judge," but, "can we expect anyone to show such honesty?" There are judges who are not guilty of breaking the law, but this is considering crime to be deed rather than inclination. The powerful thing about inclination that I cannot quite let go of is that it is the basis for seeing commonality of men. There is something so profound and beautiful to me in the Duke being able to look at Barnadine and see something of himself. The moral we draw is not, *we are all sinners, therefore I am wretched and evil*, but, *here is something to pity and to love*, loving your neighbor as yourself.

And indeed, at the end of the play Angelo, the judge, himself comes under the sentence of the law and is judged. Angelo stands condemned for two different things: for adultery which is a matter for the law, and for the death of Claudio, which is not since Angelo is in this case entirely justified according to the law and by the power invested in him by the Duke. It is the death of Claudio which Isabella pardons him for, though, and the remainder of her plea for "mercy" for Angelo focuses on the fact that Angelo really did not committ adultery with her. These two separate charges become confused in the end, because the argument is that Angelo is guilty of the one (Claudio's death) only because he is guilty of the other (adultery). Not only does this reason rely on the same "two wrongs" fallacy, but the characters who prosecute Angelo for his misdeeds have wanted to argue throughout that play that adultery is not a crime. Actually they are passing judgment on Angelo for being a hypocrite.

What is Angelo's crime? To me it is not Claudio's death (real or supposed) which is legally justified, not even desiring Isabella or making love to Mariana since she is a willing and consenting party, but that moment when he realizes, "Who will believe thee, Isabel..."; that he can use his position to force her, that acceptance of hypocrisy, duplicity in choosing from then on to hide the truth behind until he is utterly confuted by the Duke's revealing himself.

But whether we side with the justice of Angelo or of the Duke, there are elements in Angelo's character which make him, even at his best, a poor ruler of men. We see this in act II, scene i, when the bumbling constable Elbow and his two prisoners appear before Escalus and Angelo. Although Angelo strives to maintain his "gravity," that cool, collected mask of impassivity, Elbow's malapropisms, Pompey's coarse, high-handed manner (conducting his own trial), and the general confusion and ineffectuality of the whole proceedings drive him to the breaking point of utter frustration where he suddenly explodes:

> This will last out a night in Russia
> When nights are longest there: I'll take my leave
> And leave you to the hearing of the cause,
> Hoping you'll find good cause to whip them all.
>
> II.i.136-9

Escalus remains and spends his time listening, trying to sort out the complaint; he tries to reaon with Pompey and reawaken his conscience , indulging in a little humor on the side. Escalus (whose name contains the word "scale") considers each case separately and tailors his punishment accordingly. Unfortunately, the play casts doubt on the effectiveness of Escalus' methods (Pompey leaves unrepentant and fixed in his ways), but Escalus' example is chiefly important here for the contrast it provides to Angelo's pent-up fury, pride and impatience. Because Pompey is of low birth, Angelo sees him (not unlike the Duke in Act III) as incapable of instruction: punishment alone will keep him in line (nothing better can be expexted of such a creature), and his punishment will be whipping. Angelo judges Pompey unworthy of death; indeed, how can one punish with severity a man in whom vice is regarded as simply nature?

Angelo's class prejudice and impatience expose the weakness of his character and of his rule. Control, for Angelo, is primary. He wants people and events to conform rather than stopping carefully to look and listen to the way other people perceive the situation. Behind this lies a certain self-importance and lack of consideration. Although Escalus is able to see the humor in the misguided ramblings of Elbow, Angelo is frustrated to the point of rage by the confusion and incompetence which surrounds him. But in no small part, frustration at incompetence is also a feeling of righteous self-satisfaction. It contains a judgement that the situation is important, and that it is someone *else's* mistake which is causing the "trouble," (another value judgment about outcome): I know better, but it's his fault that what I think is right is not happening. The situation is important to Angelo because it is a case for the law to be enforced, but the *details* of the case (precisely what Pompey emphasizes) he finds interminable. Angelo has no patience with "trivialities": everything must be big and bold, principle against principle, of heroic, tragic stature–smallness and ambiguities are repulsive, life is to be lived greatly with drama and power. The message Angelo communicates by his abrupt departure is that trivialities are a waste of his time (my time is important), and that his work here thwarted, now to be sought elsewhere, is pressing and significant (I am important). Angelo's outburst is not only a response to the imbecility he sees around him, but to Pompey's repeated attempts to take charge of his own trial. In this situation control is tenuous, and the authority of the law and the statesman is mocked, Angelo is unable to tolerate such high-handedness from an underling.

A good ruler, however, cannot have such contempt for his subjects, nor hope to avoid the mundane business of government. The state is a collection of people, after all, and any ruler who forgets this and looks on justice as something abstract is either tyrannical or ineffectual. The Duke, I believe, succeeds, where Angelo fails. The dramatic justice which the

Duke delivers at the end of the play shows him to be individualistic where Angelo is absolute, forgiving where Angelo is proud and untouchable. Our concern should be, though, whether the Duke shows mercy to a fault. What has happened since the beginning of the play, when the Duke decided greater strictness ought to be enforced?

Must law be upheld? So much seems to depend on how disordered the city has become. The evidence we have of the lawlessness of Vienna comes almost entirely for the Duke's own report, and the question is whether his perspective is an accurate reflection of the dissolution of state. Then, too, the only crime which Angelo and the Duke are concerned with is sexual promiscuity. Why should licentiousness be a political concern? Possibly it encourages instability and helps to nourish other small petty crimes such as gambling, stealing, or drinking which fill the brothel-taverns. Possibly there is a very real public health concern about the proliferation of venereal disease among the populace–our only other hint as to the condition of the city, in fact, is this: a comic scene in which Lucio and his friends pun on venereal disease and its spread.

Has the duke changed his methods of governing, or has seeing the example of Angelo caused him to reevaluate the need for strict laws? The change we saw in his character wrought by his experiences as a friar is the inclusion of a religious or spiritual concern in politics. This is most apparent in contrasting his treatment of Pompey, and later, Barnadine–but then we ask has the Duke's policy changed, or are the causes of Pompey and Barnadine different in kind? The one a clever, long-time bawd, the other a brutish and violent single offender. If Pompey had appeared in the final scene (though he and other low-life of the play are, perhaps conspicuously, absent), would the Duke have found it in his heart to offer pardon to this repeat offender? Will the Duke, put-off by Angelo's deadly justice, turn to the other extreme and set all free?

When we look at the judgements the Duke passes at the end we see the difference between Angelo and Duke's conception of the *purpose* of justice. Angelo is not a statesman pure and simple; he wants to purge the state, not just keep it in reasonable functional order. Angelo's conception of justice is carrying out the penalties incurred by the violations of the law–his system of justice is based on expectations and absolute measures which leave no room for mercy except as weakness on the part of the judge in being susceptible to emotional appeal. Mercy is foreign to Angelo's concept of statesmanship; pity he understands only as the extirpation of criminals from society which both removes the offender and forestalls, by the severity of the example, further vice:

> I show it most of all when I show justice;
> For then I pity those I do not know,
> Which a dismissed offense would after gall;
> And do him right that, answering one foul wrong,
> lives not to act another.
> II.ii.127-31

But this second argument which has slipped in here is curious. "Do him right"? How is it "doing" the criminal "right" to punish the crime? His betterment by instruction? Claudio is to die, not learn from his error. Does it better his soul in heaven to have his crimes punished on earth? Or is "right," not better, but justly served?–a sentence which does not benefit but balances the account. The purpose of justice in Angelo's eyes is to remove the offender from society and to deter others by making harsh example, but, underneath, it is fulfilling a desire to see evil deeds punished.

The Dukes' purpose in passing judgement is the social good, the effect it will have on the society–so that punishment is not an end in itself but a means to some further end which protects the polity. This is appropriate because justice is a concept of community. The "dramatic justice" he serves in the end accomplishes this. Angelo's justice is rooted in a sense of moral outrage which demands that a man who has hurt another is to be hurt himself in equal measure. He would fit the punishment to the offender so that he is punished by the excess of his own crime. But the desire to see offense punished equally could be accomplished by demanding equal payment, such as an eye for an eye. Or, in a milder form, the trespass might be accorded some unspecified punishment which is only concerned with making the criminal suffer in *some* way for the suffering he has caused. Now, all of these are different from the dramatic justice the Duke shows in the end because the purpose of dramatic justice is to compel the offender to make amends, not to inflict more injury to make it "right".

This is a radically different idea of the purpose of justice, and one which focuses more on the ramifications of the punishment than on the punishment as an end in itself. Dramatic justice does not resolve the tension between earthly and divine justice: it is still a kind of judging, and as such belongs to the realm of earthly justice, but holding a people to make retribution without inflicting further penalty is the closest a system of government which still protects its citizens can come to acting a according to the idea of divine justice. It is therefore a kind of compromise between the extremes Angelo and Isabella argue.

In the dramatic justice the Duke dispenses in the final scene of the play he manages to hold people accountable for their misdeeds, but not to punish them beyond making amends–the sentence of death Angelo, Claudio, and even Lucio, stand under is commuted to marriage: the tragedy becomes a comedy (another kind of substitution!). In this final scene Lucio stands out because he is the one the Duke claims he *cannot* find it in his heart to forgive. In Barnadine the duke saw something of himself, and pardons him as he hopes to be pardoned in turn, but here he says, "I find an apt remission in myself;/And yet here's one in place I cannot pardon..." (V.i.561-2). Lucio's slanderous, snide witticisms have gotten under his skin, and he proposes to have him whipped and then hanged, against which Lucio (for once deprived of his supercilious, cocky air) cries out piteously. He is, of course, forgiven his slanders (as I suspect the Duke intends all along), and let off with only the injunction that he must marry the woman he got with child, (another case of marriage being used to restore honor and make amends), and Lucio, one of the most comic characters in this dark tale is taken away protesting that being married to a whore "is pressing to death, whipping, and hanging!" (V.i.586-7). The reversal further underscores the tragicomic nature of the play when Lucio can complain that marriage is like death to him!

We have seen that the play raises the question of acting with regard to the judgment of heaven or according to the laws on earth, and that this places the ruler in the problematic position of being both the one judging and the one being judged. It would be wrong to say that the tension between political and private duty is resolved by the end of the play, but the Duke does manage, in a way, to combine roles of both a ruler and a man. In the final scene we see him dispense well-measured justice–the capable ruler–and we are made aware of him at the same time as a single, private man by his offer of marriage to Isabella. Previously he had considered himself past marriage, preferring to study rather that "to haunt assemblies/ Where youth and cost a witless bravery keeps" (I.iii.10-1); well-defended, as he thinks, from "the dribbling dart of love" that cannot "pierce a complete bosom" (I.iii.2-3). But his experiences as a friar have changed him, not only in bringing him close to Isabella, a woman he deeply admires, but in forcing him to see things larger than himself and face situations where his powers were inadequate to the task. Perhaps one of the motivations behind his decision to leave in the beginning of the play was to test Angela as a successor. If so, that has been subsumed by his decision to marry.

And Isabella? Is she also allotted justice in the end? The ambiguous end of the play, which leaves her no lines to accept or decline the Duke's proposal, has often been interpreted darkly as a final miscarriage of justice. Whether Isabella is thwarted in her religious aims, or suppressed by a dominant male society, she stands in the fading light as a tribute to the good that can be corrupted by society. Underneath, however, this is a fundamentally self-righteous feeling, and such self-righteousness has been criticized throughout the play in the person of Angelo. It is my belief that the end of the play is comic, as its form implies. The end of Measure for Measure contains typically comic elements: the apportionment of dramatic justice, marriage between the principle characters, and the loose ends tied together in a last epilogue-like speech given by the Duke in the style of Theseus in A Midsummer Night's Dream, Leontes at the end of The Winter's Tale, or the King in All's Well That Ends Well–where the confusion which has reigned has finally been sorted out and as Puck says, "Jack shall have Jill;/Nought shall go ill" (Midsummer III.ii.62-3) (although we may doubt the passions of the characters in Measure for Measure can be so tidily concluded without a magic love potion). Why should we look for comedy at the end of this often grim play? Because the genre of tragicomedy seems to be a statement about life: life is not all high tragedy and extremes of love or death, but, on the whole, a joyful and often amusing thing. One of the messages of the play is superiority of temperance, acceptance of human failing, and love, over high-principled idealism was which thrives on abstractions and is fueled by righteous pride. To read the final scene of the play as dark in tone is to ignore all that has come before.

The real argument for a happy ending lies in Isabella herself. It is tempting to read her as a kind of martyr to the cause (be it religion or feminism, as I have seen it performed), but look closely at her character and one begins to find inconsistencies, pride and petty jealousies, fears and temptations, which make her fallible and real. She stands so close to Angelo, and she must be won slowly, by degrees, to the temperance and understanding the Duke embodies and represents. The play details not only the secularization of her character, but also the transformation she goes through in order to descend from her tragic heights to a comic, life-embracing, heroine who does not always take herself seriously and is able to laugh

Isabella, I believe, really does not belong in the convent, where she starts out. Her passion and demand for stricter rules are naively exaggerated. It is tempting to picture her as a young novice walking about the gardens, but it is worth remembering that Claudio has sent Lucio off with the words, "This day my sister should the cloister enter" (I.ii.182). She is taken from the convent before she has a chance to experience its life; her descriptions of its transcendent joys are really the fanciful work of imagination. There is something eerie in the ardent, otherworldliness of her picture of "preserved souls...fasting maids whose minds are dedicate/To nothing temporal" (II.ii.188-90). She longs for exalted heights rather than seeking, realistically, a quiet life of prayer and menial duties. I see Isabella, in her scenes with Angelo, slowly driven back into personal involvement with the world, a change which allows for her transition between the impervious detachment of "O just but severe law,/ I had a brother, then" and "Die, Perish!" with all its fiery passion and wounded anguish. Her encounter with Angelo in the play brings sharply into focus the tension between the two sides of her personality. On the one hand, she is a person of quick wit and great intelligence, on the other a woman who is expected to be both cold, submissive, alluring, and desirable at the same time. We see this double standard in Claudio's picture of his sister:

> ...in her youth
> There is a prone speechless dialect
> Such as move men; besides, she hath prosperous art
> When she will play with reason and discourse.
> I.ii.187-90

This same dual nature which women are expected to have in society is reflected by the rules of the convent:

> When you have vowed, you must not speak with men
> But in the presence of the prioress.
> Then if you speak, you must not show your face;
> Or, if you show your face, you must not speak.
> I.iv.10-14

There it is again: show our face (loosely, be admired, *be looked at as a woman*) or speak (use reason and discourse), but you cannot do both. And it is Angelo in that emotionally

overwhelming scene of his abominable proposition who says, "I do arrest you words. Be that you are,/That is , a woman" (II.iv. 147-8). Having chosen the convent, Isabella–consciously or not–denied her sex, but she is dragged by her brother's plight back into the world of men (where, as we have seen, she is desired by Angelo less for her mind than for her beauty). It may be that Isabella is not entirely unaffected by Angelo herself. So often one feels in productions that Angelo only percipitates revulsion in her, but could the encounter between them not be an awakening (however surprising and unwelcome) of the feelings she has denied, as it is on Angelo's side? Could the extremity of her reaction to his proposal, when she finally understands it, be not so much fear of *him* as fear of herself? Is it possible for a young woman of Isabella's vibrancy to be touched for the first time by a man and not physically overwhelmed by the experience?

Threatened by Angelo, betrayed as she feels herself by her brother (the only man she could turn to in her distress), she turns naturally to the Duke in his friar's habit and clings to him as someone "safe" and sympathetic to her distress. It is easier to see that he is struck by her than to gauge her reaction to him, but the two of them end up putting their heads together and working as a team. Although it is true that in the second half of the play Isabella has almost no lines until the final scene in which she accuses Angelo, it seems to me that she is working in close conjunction with the Duke, as much a part of the planning as he is. The scene in Act III in which the Duke first approaches her with the idea of Mariana's taking her place, the details of Mariana and Angelo's past and the trick they will play on him appeal to her immensely and she becomes wrapped up in the proposal: Isabella and the Duke think alike; they share a love of puzzles and tricks. Simple consideration for the balance of the drama might lead us to draw this conclusion: watching their gradual coming together and the awkwardness of the friar's guise which both allows them to be together and keeps them apart drives, I think, the second half of the play, which otherwise is apt to flounder in production under the weight of pure plot devices. What must her reaction be when, in that final scene, he stands revealed, the friar's hood torn away?! The Duke's two proposals of marriage have drawn criticism as being informal and public rather than romantically private, but I now think it is possible that his manner can be attributed to their closeness and the "naturalness" of the arrangement. Having undergone throughout the play this process of secularization, discovering in her energy and her love of plans perhaps a calling to a life of practical virtue, how can she return to the convent of her exalted but sterile fantasy? Is marriage for Isabella dramatic justice? Is it an appropriate reward for her virtuous words and deeds, and triumph over temptation? The other marriages seem just, but Isabella needs no such justice from marriage. For Isabella, marriage is not so much dramatically fitting, or just, as it is necessary if she is to end up where she belongs, among her own kind.

Marriage is not, however, a "reward," in this play–nor is it the romantic fulfillment of love. The spirit of Paul dominates: "to avoid fornication, let every man have his own wife, and let every woman have her own husband...it is better to marry than to burn" (Corinthians 7:2-9). The disorder of the state at the beginning was in the form of sexual promiscuity; the play ends with a series of marriages which "legalize" sexual desire. Marriage is society's recognition of lawful or unlawful intercourse and determines a woman's honor or dishonor. It is a way of bringing passions potentially destructive to society under control and imposing the stability of family. In the midst of this play about sexual crimes and "after the fact" marriages the Duke and Isabella might be exceptional: a couple married for the sake of romantic love. But the proposal is ambiguous, Isabella's reaction impossible to determine, and the union in many ways is so unexpected that it is less likely that they represent an exception than that their marriage takes its color from the many examples which surround it. Isabella's experiences have made her more aware of her sex; possibly they have awakened desires in her which she had forbidden. Whether or not her marriage with the Duke is truly for love, it allows her a socially acceptable role in the world as a wife.

The Duke is a more curious example–his falling in love, or discovering passions in himself, is surprising, not only to him (having thought himself immune) but to us as audience who might otherwise be tempted to see him as a manifestation of the author or divine presence, determining the action of the play but being removed from it himself. His proposal to Isabella (and his reaction to Lucio's jibes) bring him back into the play as a real character with quite human tendencies to love and anger. One might have thought, still, that like Paul he would have encouraged others to marry while remaining apart himself. But it is interesting to find this ruler, whom I am tempted in so many other ways to call almost ideal, knows and accepts himself as frail–as human–as his fellow men and women. To deny that would have made him another Angelo, who fell trying to climb too high. Who is there to bestow dramatic justice on the judge himself? What dramatic justice is there for the Duke in the end? Somehow, he distributes dramatic justice on himself in his new self-knowledge. Having learned by being confronted with his weaknesses and passions, he knows something more of what is appropriate to him as a ruler and as a man.

Is there a moral to this story and its struggle between the principles of mercy and justice? If so I think it must be the truth the Duke recognizes at the end of the play, that we are all flawed, that a man should not take pride in virtue or set himself apart, and that should teach us not to judge harshly. No one can obey the law truly. Although this sounds more like the divine than earthly law, perhaps the implication is that there is not such a great difference between them as we are used to imagining. We have an idea of sin which somehow we recognize all men are prone to an frequently slip into. The law is supposed to be something most people can follow, and only the willful wrong-doer indulges himself with predictable consequences. But in this play even the most virtuous have discovered their frailty. Between the example of Angelo (the "angel" who fell), of the futility of trying to be "holy and severe" enough to wield the sword of Heaven, and Escalus' argument that only lack of opportune circumstances keeps us from sin, there emerges from the play a warning against righteousness and self-justification, against thinking we stand on better ground than our neighbor since we have not committed the same crimes. The play reveals Angelo's practice of government insufficient and, in fact, detrimental. We have called Angelo's justice "pragmatic," but it is the Duke's policies, his concern for the individual and willingness to forgive (his focus being not punishment as an end in itself but a question of how best to turn social disorder into social benefit), which are truly pragmatic. Human beings cannot be confined by narrow precision and the use of fear.

Footnotes

1. Line numbers are taken from the Folger Edition. Shakespeare, William, Measure for Measure, ed. Louis B. Wright, Simon & Schuster, New York, 1975.

2. Translations from the King James Version of the Bible

3. W. Ward Fearnside and William P. Holther, Fallacy–The Counterfeit Argument, Prentice-Hall, Englewood Cliffs, New Jersy, 1959, p. 126.

4. Is it possible that this desire in us to see wickedness punished and good rewarded also stems from self-righteous pride?

The King of Israel

✷

Samuel Davidoff

And they said unto Moses, Speak thou with us, and we will hear: but let not God speak with us, lest we die. (Exodus 20:19)[1]

The nation of Israel's peculiar predicament is that they are a divine nation. They are chosen by God but they are nevertheless human. They are not of the same make as their leader, and their communication with this leader, with God, must always be mediated. Starting with Moses the medium that God chooses is prophecy. The major prophets in each generation are people who have direct communication with God, such as Moses, who spoke to God "face to face" or Samuel, whom the Lord speaks to "in his ear." Even in the case of certain lesser prophets, prophets who merely see God in dreams or visions, there is a decidedly verbal aspect to their interaction with God. God speaks to His people through His prophets. It is through the prophets that the people know the commandments of God, the advice of God in particular situations, and, in some cases, the future intentions of God. In the book of *Samuel I* it is primarily the prophet Samuel who conveys the people's requests to God and who reports God's responses. Later, when a king is appointed, it is Samuel who, under God's guidance, selects him and Samuel who tells King Saul the wishes of God. But while Samuel, and perhaps some of the lesser prophets of the time, may be the only voices of God, the only speakers of God's word, it is not the case that other people do not experience God. Contact with God, however brief, plays a crucial role in the lives of several other figures in the story of the origins of monarchy in Israel.

"...And it shall come to pass, when thou art come thither to the city, that thou shalt meet a company of prophets coming down from the high place with a psaltery, and a tabret, and a pipe, and a harp, before them; and they shall prophesy; And the spirit of the Lord will come upon thee and thou shalt prophesy with them and shalt be turned into another man... And it was, that when he had turned his back to go from Samuel, God gave him another heart: and all those signs came to pass that day. And when they came thither to the hill, behold, a company of prophets met him; and the spirit of God came upon him, and he prophesied among them. And it came to pass, when all that knew him beforetime saw that, behold, he prophesied among the prophets, then the people said to one another, What is this that is come unto the son Kish? Is Saul also among the prophets?" (Samuel I *10:5-6, 9-11)*[2]

The scene occurs immediately after the anointing of Saul, the first king of Israel. Samuel's feelings and God's words about the appointing of a king are ambivalent and unenthusiastic. The people have clamored for a king and God has seen it as an act of rebellion. Why should they have a human king when they have the Lord? But God has granted their request and has sent them a king to be "captain over His inheritance" and to save Israel from the hand of the Philistine. Regardless of God or Samuel's feelings about the correctness of Israel having a king, the establishment of a monarchy has certain necessary effects on the people. In particular the choosing of king must in some way alter the nation of Israel's relationship with God. Until now they have been led more or less by God through the medium of His prophets, but now they are to be led by a king. He is to be invested with the power of leadership; a power that formerly was the domain of God. The new king will, in a way, fulfill an almost religious role for the people. The new king is not merely replacing an old leader but is in some sense replacing God.

What kind of man does God pick? All we are told about Saul is that he was "a choice young man" and "from the head and shoulders upward he was higher then any of the people."(9:2) The description seems to be merely one of physical beauty. We are told nothing about Saul's soul or his heart. But God does not ignore these things. Immediately after he has Saul anointed we have the scene quoted above. The Bible says that the spirit of the Lord descended on Saul and he prophesied with the result that he becomes a new man. Prophesy here does not seem to refer to the type of communication with God that we usually associate with that word, such as the communication that Samuel has with God. We are not told that God "says" anything to Saul. Instead what we know is that Saul is among a troop of prophets, but not prophets like Samuel; there is something Bacchanalian about these prophets with their psaltery, and pipe and harp. When Saul prophesies he does not speak the word of God, instead he receives a new heart and becomes another man. What Saul experiences seems to be a sort of ecstasy. If only for a moment he sees something of the divine, he is touched by God, and he is forever changed. I think that what this contact with God instills in Saul's heart at that moment is a longing for further contact with the divine, a love of God or perhaps even a lust for God. And so the first king of Israel is picked, perhaps, merely for physical appearance, but he is then bound to God through an ecstatic vision.

Saul's action as the king of the nation of Israel reflect this unusual process of appointment that he has undergone. What we see in Saul's actions, and particularly in his failures, as the king of Israel is almost directly a result of how he is bound to God. There are two peculiarities about the relationship that God establishes with Saul. First that Saul is bound by some sort of transcendent experience as opposed to a verbal communication or prophecy of the kind that Samuel and the other prophets receive. Second that he is instilled with a longing for God as opposed to being granted an ongoing relationship with God. He is granted a yearning for God not a communion with God. With one exception, which I will discuss later, Saul has no other direct experience with God. All his other communication takes place through prophets and priests. Both aspects of Saul's experience with God make themselves most apparent in Saul's failures as king.

Saul is not a bad king in consideration of military or political leadership goes. He neither loses any wars nor is there any sense that the people are unusually dissatisfied with him at any point. Saul fails with respect to his position relative to God. He may serve well as king but not as the king of God's people. Saul is disobedient to God and it is this that causes his kingdom to be taken from him.

The first instance of disobedience occurs in the second year of Saul's reign right before a battle with the Philistines. Saul is waiting for Samuel to arrive so that they can make a sacrifice before the battle. Samuel does not arrive and so Saul makes the offering without him. Then Samuel arrives:

"And Samuel said, What hast thou done? And Saul said, Because I saw that the people were scattered from me, and that thou camest not within the days appointed, and that the Philistines gathered themselves together at Michmash; Therefore said I, The Philistines will come down now upon me to Gilgal, and I have not made supplication unto the Lord: I forced myself therefore and offered a burnt offering. And Samuel said to Saul, Thou hast done foolishly: thou hast not kept the commandment of the Lord thy God." (13:11-13)

Samuel then tells him that his kingdom shall not continue. The second, more prominent failing of Saul is also an act of disobedience. In this case he has been instructed by God to utterly destroy the nation of Amalek. Instead, Saul spares the king and the livestock. Samuel rebukes Saul and tells him that "Because thou has rejected the word of the Lord he has rejected thee from being king... And Samuel came no more to see Saul until the day of his death... and the Lord repented that he had made Saul king over Israel." (15:23,35)

The second example of Saul's disobedience seems to be incongruous with the first. In the war against Amalek Saul fails to completely follow God's instruction concerning the battle. However, in the first war Saul disobeys God because it seems he is to eager to please God before he goes into battle. Saul thinks he is giving God some token of his faith. This desire is characteristic of Saul. We are told several times of his building altars before battles and his consulting priests. Most notable is his attempt before his final battle to contact the dead Samuel through a sorcerer.

"And Samuel said to Saul, Why has thou disquieted me to bring me up? And Saul answered, I am sore distressed; for the Philistines make war against me, and God is departed from me, and answereth me no more, neither by prophets, nor by dreams: therefore I have called thee, that thou mayest make known unto me what I shall do?" (28:15)

This striking dependence on God's approval of his battle plans seems odd when compared with Saul's supreme act of disobedience in which he disobeys God's instructions for the managing of a particular battle. What sort of picture are we to form of Saul? Does it make sense that a man would be on the one hand so eager to please God and yet on the other hand be found guilty of flagrant violation of the divine command?

I think that both of Saul's failures stem from the particular attitude Saul, as a result of his ecstatic experience, has towards God because of his ecstatic experience. As said above, Saul's experience of God has two aspects: first, its transience which leaves him with a sense of unfulfilled longing and second, the visceral and emotional aspect of it as opposed to the rational and communicative prophecies of Samuel. Saul's position is an odd one. As a young man he has an extremely powerful experience with God and is then left alone. He is left, though, with some idea about the nature of his responsibility to God; after all, he is made king of God's nation. Due to the particular nature of his divine experience, Saul is left with a peculiar sort of motivation. He wants a repetition of the rapture he experienced previously. He does not desire to fulfill the will of God, but merely to experience or 'see' God again. It is this type of longing for God that makes Saul crave the type of assurance he does before he goes into battle. He does not sacrifice so much to please God, but to please himself through an attempt to bring God closer to him. What he fails to realize is the importance of following God's commandments. The nature of his experience with God has caused him to see this as unessential to being close to God. This causes his disobedience in the war with Amalek. He spares the animals so that he can sacrifice them. This particular disobedience is paradigmatic of his misunderstanding of his relationship with God and Samuel says as much in his rebuke: "Hath the Lord as great delight in burnt offerings and sacrifices as in obeying the voice of the Lord? Behold, to obey is better than sacrifice, and to hearken than the fat of rams."(15:22). In fact, this is exactly Saul's misunderstanding; he has a longing for the presence of God, but not for the word of God.

Let us leave Saul for now and look at another example of a man who has contact with God, Saul's son, Jonathan. The first time we meet Jonathan is during the same war with the Philistines in which Saul first disobeys God. Saul and his army are reluctant to attack and are waiting in Gibeah near the Philistine garrison. Unbeknownst to Saul, or the rest of the army, Jonathan takes his armourbearer and they go up to the camp of the Philistines.

"And Jonathan said to the young man that bare his armour, Come, and let us go over unto the garrison of these uncircumcised: it may be that the Lord will work for us: for there is no restraint to the Lord to save by many or by few." (14:6)

Jonathan then proposes a test. They will call up to the Philistines and if they are told to come up to the camp they will know the Lord is with them. The Philistines respond appropriately and Jonathan and his armour bearer, alone, destroy their camp.

Right away we see that Jonathan has a unique faith in God He believes that God can bring destruction to the army of the Philistines even with only two men. He believes also that God

is with the nation of Israel and favors them over the uncircumcised nation of the Philistines. Of course one could ask if there is anything particularly special about this kind of faith? After all isn't there something obvious about the sort of belief Jonathan has? In the period of the people of Israel's initial establishment in the land of Israel their warfare has been noticeably characterized by the presence of God. It is typical of Israel's battles that the many should defeat the few with the help of God. What, then, is unusual about the faith Jonathan exhibits?

Most of the examples of faith we have seen fall into two different categories. There are the obvious examples of the faith found in people who have direct communication with God. Abraham and Moses come to mind. The greatness of their faith did not lie in their belief in the existence or the ability of God. After all they spoke with God and so the question of his existence does not have the same force in their case as in Jonathan's. In general, the faith of the forefathers and prophets seems to be on a grander scale then the faith of a smaller character like Jonathan. There is a less obvious kind of faith that we find exhibited by the people of Israel. After all they must have gone into battle in the times of Moses, Joshua, and Samuel with a certain faith in God's protection. But the faith we find in the people of Israel at large is of a different nature the Jonathan's. It is only indirectly a faith in God. While it has been Israel's experience that the many have defeated the few, the connection to God has been less evident. Israel has always been under a leader of some sort, a prophet or a king. The people's communication and faith have been in the leader as the medium between them and God. I do not think that the nation has gone into battle, as Jonathan did, with faith in God so much as with faith in their leader, the emissary of God. Therefore, Jonathan's faith is different. He believes in God directly despite the fact that he has had no communication with God. He has the experience of a common man but a faith that approaches the faith of the prophets.

Jonathan's contact with God, however, is of a completely different nature than Saul's. Jonathan does not have any direct experience of God or any mystical or divine ecstasy. God does not come down and touch him, at least not in the way He does Saul. Jonathan's invasion of the Philistine's camp is not simply an act of faith. He does not march blindly into the camp with confidence that God will help him. There is the test that he proposes to his servant so as to determine whether or not they will be successful. While there is no doubt that faith plays a decided role in this scene, Jonathan's use of a test changes the character of the scene. Jonathan asks for a sign, he is given it, and then what amounts to a miracle occurs. He and his armourbearer destroy the Philistine camp. I imagine that Jonathan must see the hand of God clearly manifesting itself at this moment. He has faith in God to be sure, but when he is granted a sign of his victory it seems to point decidedly to the fact that what occurs in the invasion is divine intervention. God comes down and wins the battle. Jonathan too has a communication with God, not a mystic experience but a revelation, a miracle.

These two examples of God's communication with individuals comes at an important time in the Bible. The important issue at this point in Samuel I is that of the monarchy. As discussed above in the case of Saul, the appointment of a king calls into question this very issue, the issue of people's relationships with God. Thus far, we have seen two categories of relationships that the majority of the people, the non-prophets have with God. There is primarily the relationship of the people to God through the medium of the prophets, but there are also these examples of divine contact that individuals have at certain moments, such as those that Saul and Jonathan have. For the most part the former relationship to God, the relationship through the prophets, has been the standard. The people have believed and known God because of the prophets. With the creation of a monarchy it is this very relationship that is called into question. It is no longer God's intention to communicate with the people through the prophets He intends now to have kings. There is, however, the same problem that was present in Saul. What kind of man will God choose? We might reformulate the question now to ask, what kind of man will God choose as his intermediary with the people? The king will be the leader of the people, but, as a leader, he replaces God to some extent. Who should be picked? The answer is David. I think in David God picks a new form of communication with the people. He picks a form similar to the sort of individual communication manifested in the examples of his relationships with Saul and Jonathan.

The first hint of David's existence that we get is when Samuel tells Saul, after his first disobedience, that he will eventually lose the monarchy. "But now thy kingdom shall not continue: the Lord hath sought him a man after his own heart." - this, of course, is David. What this description means is unclear. We first meet David when he is anointed by Samuel after Saul's second disobedience. The Lord tells Samuel to go to Jesse's house for he has chosen a king from one of Jesse's son's.

"And it came to pass, when they were come, that he looked on Eliab, and said, Surely the Lord's anointed is before him. But the Lord said unto Samuel, Look not on his countenance or on the height of his stature; because I have refused him: for the Lord seeth not the outward appearance, but the Lord looketh on the heart." (16:6-7)

Finally David, the youngest, is called.

"And he sent, and brought him in. Now he was ruddy, and withal of a beautiful countenance, and goodly to look to. And the Lord said, Arise, anoint him: for this is he. Then Samuel took the horn of oil, and anointed him in the midst of his brethren: and the spirit of the Lord came upon David from that day forward." (16:12-13)

It is odd that while we are told that God looks on the heart we are not told anything about what he sees in David's. In fact all we get of David is a physical description of his beauty, a description that sounds suspiciously like the initial description of Saul and, furthermore, a description of characteristics that sound just like what God explicitly told Samuel not to look for. We are also told that the spirit of the Lord descends on David, but we are not told that he was changed as in Saul's case, furthermore, though we are told several times that the

Lord is with David, in all of Samuel I we never see God say anything else to David. There is, in fact, a decided absence of God's explicit appearance, particularly around David.

We do see, however, David's effect on the people around him-particularly on Saul and Jonathan. I think that by looking at David's relationship with these two we will gain an understanding of what kind of choice David is for the future king of Israel.

The first thing we are told of after the story of David's anointment is that "the spirit of the Lord departed from Saul, and an evil spirit from the Lord troubled him."(16.14) Saul's longing for God has met with despair, Samuel has left him and he has been told that the kingdom will be torn from him.

"And Saul said unto Samuel...Now therefore, I pray thee, pardon my sin, and turn again with me, that I may worship the Lord. And Samuel said unto Saul, I will not return with thee: for thou hast rejected the word of the Lord, and the Lord hath rejected thee from being king over Israel. And as Samuel turned about to go away, he laid hold upon the skirt of his mantle, and it rent. And Samuel said unto him, The Lord hath rent the kingdom of Israel from the this day...[Saul] said, I have sinned: yet honour me now, I pray thee, before the elders of my people, and before Israel, and turn again with me that I may worship the Lord thy God." (15:24-30)

It is as if Saul is a lover who sees all his ties to his beloved slipping away from him. He is not concerned with the loss of the kingdom in and of itself (this is actually the second time he has been told he will lose it) but rather with the loss of the gift of the Lord. He pleads with Samuel to pray with him so that he might not lose all hope of feeling God's presence again. But it is to no avail; his links with God are gone, and his only hope of receiving the presence of the Lord is gone. He falls into melancholy, the Bible says "and the evil spirit from God came upon Saul, and he prophesied in the midst of the house"(18.10). The use of the word "prophesy" to describe Saul's depression seems ironic when compared to his previous prophetic rapture. He is at the other extreme of his experience of the divine, as far from God as he can imagine. What his servants tell him is to call "a man that can play well." Hence, David is sent for.

"And David came to Saul, and stood before him: and he loved him greatly; and he became his armourbearer... And it came to pass when the evil spirit from God was upon Saul, that David took an harp and played with his hand: so Saul was refreshed, and was well, and the evil spirit departed from him. (16:21,23)"

There are two things that work to dispel Saul's melancholy; the first is David's music, the second is his presence. I think it is important that we are told that Saul loves David. What causes the evil spirit to depart from Saul is listening to music as it is played by a boy who we already know is "of a beautiful countenance, and goodly to look to." In a way the scene is parallel to the scene of Saul's initial rapture in the presence of God. In both cases the experience is transcendent but in both cases it is also intensely physical. Although in the first instance Saul is experiencing the presence of God, nevertheless, there is also something decidedly material about a scene filled with singers and music. Saul "sees" the beautiful in God in a corporeal sense, as opposed to having an rational, intellectual, or verbal understanding of Him. His senses are overwhelmed, not his mind. When he sees David he has a similar experience. He hears music, as before, and he sees this beautiful youth, whom we are told he loves. Perhaps he even sees David's beauty as divine for the spirit of the Lord is with David. David's coming before Saul is the only time that he is comforted, it is the only time that his melancholy is dispelled. It is as if David's presence serves the same purpose for Saul as God's. His reaction to David is also very much like his reaction to God. While he does not receive a new heart, we are told that he loves David. With David's approach Saul sees a glimmer of hope, a glimpse of his beloved. He sees that there is a chance that the spirit of the Lord has not utterly forsaken him.

This is not to say the Saul's relationship to David is perfect. While it is true that he feels closer to God in the presence of David he at the same time sees David as a threat to his other link to God - the monarchy. Saul has a paradoxical relationship to David. It is at the times when he sees David as the most divine, when David plays for him, that he sees him as the most threatening. The two times that we are told of Saul's greatest anger towards David are when David is playing for him and Saul attempts to kill him with his javelin. Saul's pursuing of his hatred for David leads to an instance that I think portrays this paradox of Saul's hatred for David coupled with his seeing the divine presence in David. In Chapter 19 Saul has decided that he must kill David. He appeals to his closest relatives, to Jonathan and then to his daughter Michal, to kill David. Both of them refuse to help him out of love for David. David meanwhile flees to Samuel in Ramah and Saul himself decides he must pursue him there. He goes to Ramah expecting to find David, but what he finds instead is God.

"And he went thither to Naioth in Ramah: and the spirit of God was upon him also and he went on, and prophesied, until he came to Naioth in Ramah. And he stripped off his clothes also, and prophesied before Samuel in like manner, and he lay down naked all that day and all that night. Wherefore they say, Is Saul also among the prophets. (19:23-24)"

The scene is almost identical to the scene of Saul's initial rapture. Even the people's reaction is the same. But what is interesting is the timing of this scene. The scene comes when Saul is forced to search for David himself after all his followers refuse to help him out of love for David. Saul too is prevented from finding David by his love for God. It does not seem to me coincidence that the scene of Saul's second rapture comes at the same time as his pursuit of David. The presence of God defeating Saul's attempts to murder David underscores the idea that somehow the presence of David goes hand in hand with the presence of God. When David comes on the scene so does God's presence and we see this most clearly realized in the rapture seeking Saul.

In Jonathan, Saul's son, we find another person who is greatly affected by his contact with David.

"And as David returned from the slaughter of the Philistine, Abner took him, and brought him before Saul with the head of the Philistine in his hand. And Saul said to him. Whose son art thou, thou young man? And David answered, I am the son of thy servant Jesse the Bethlehemite. And it came to

pass, when he had made an end of speaking unto Saul, that the soul of Jonathan was knit with the soul of David and Jonathan loved him as his own soul." (17:57-18:1)

What has Jonathan seen in David that causes him to "love him as his own soul"? The most obvious event is David's slaying of Goliath, but what is it about that event that makes Jonathan love David? Jonathan has seen David, a young boy, challenge and defeat the champion of the Philistines with only his sling. However, it is not merely David's courage that Jonathan admires. I think he sees something in David's action against Goliath that reminds Jonathan of his own contact with God.

"Then said David to the Philistine, Thou comest to me with a sword, and with a spear, and with a shield: but I come to thee in the name of the Lord of hosts, the God of the armies of Israel, whom thou has defied. This day will the Lord deliver thee into mine hand...And all this assembly shall know that Lord saveth not with sword and spear: for the battle is the Lord's, and he will give you into our hands. (17:45-47)"

David's words and his faith in God almost mirror Jonathan's at the time of his invasion of the Philistine camp. Jonathan must see in David's success a repetition of his encounter with the Philistines. Both of them went into battle against overwhelming odds with confidence in God and in both cases God made clear the correctness of their belief. And so Jonathan does not merely love David, as we are told of Saul, but he loves him "as his own soul": Jonathan sees himself in David. But Jonathan does not see an exact mirror of his situation in David's. David does not ask for a sign from God before battling Goliath. While Jonathan had faith that God could turn the battle in his favor, David has faith that God will. Jonathan does not see an exact repetition of his miracle in David's slaying of Goliath, for David's action is not the same as Jonathan's. David's absolute confidence and the absence of a sign in his case seems to me to show a different manifestation of God. While in Jonathan's case God responds to Jonathan and helps him defeat the Philistines, in David's case God acts through David. There is no dialogue between David and God. It is as if David's action of going against Goliath and God's defeating of Goliath are the same act. God does not respond to David, David and God act as one.

Jonathan's initiation of his friendship with David represents this aspect of David's relation to God.

"Then Jonathan and David made a covenant, because he loved him as his own soul. And Jonathan stripped himself of the robe that was upon him, and gave it to David, and his garments, even to his sword, and to his bow, and to his girdle.(18:3-4)"

This is the first of three covenants that Jonathan is to make with David. The next is made before David flees Saul's palace in Chapter 22, the third when David is fleeing from Saul in Chapter 23. A covenant is an odd expression of love, one that we have only seen before between God and man, namely with the forefathers. Michal, Saul's daughter who loves David, marries him. Saul, when he first meets David, takes him from his fathers house. Jonathan sees, when he first loves David, that David's relation to God does not permit this sort of man to man closeness that Saul and Michal attempt. Jonathan has seen the hand of God work through David and realizes that there is something superior about David. We are told how much Jonathan loves David but the only mention of David's love for Jonathan comes much later in a psalm he composes after Jonathan's death. This is not to say that David does not love Jonathan but there is a certain disparity in their positions. The expression of love that Jonathan turns to is the expression of love, not that exists between equal people, but that exists between man and God, a covenant. What Jonathan does is bind David to him with God as an intermediary. Before David leaves Saul's palace, after he and Jonathan have made a second covenant, Jonathan says that the Lord will be "between thee and me for ever." An oath allows Jonathan to express his love for David in a way that does not require physical proximity. Instead Jonathan has the Lord between him and David.

So what do we see of David in all these stories of his life with Saul and Jonathan? What do we see of David the future king and chosen of God? One thing we do not see, as said before, is God having anything explicitly to do with David. His voice is, with one minor exception, never heard from the scene of David's anointment until the end of Samuel I. It is not exactly true, however, that God is not present. Having seen David's interactions with Saul and Jonathan I think that God's presence with David is made strikingly clear. When David comes into the story both Saul and Jonathan find their experiences with God mirrored in him. Saul finds a form of his ecstasy in the presence of David. Before David approaches Saul, Saul is as far from God as he has ever been, a state of melancholic prophesy. After David comes to Saul, God becomes once again present in Saul's life. In some way, his presence is equivalent to Saul with the presence of the Lord. In Jonathan's case, he sees two things in David. He sees his own faith in God mirrored in David's actions but he also sees God's work made manifest in David. When he sees David, he sees the hand of the Lord. Jonathan sees David's defeat of the Philistines repeat, in fact embody, the Lord's actions towards himself. His way of expressing his love towards David, with covenants, is the way that man relates to God because Jonathan has seen in David the same thing he has seen in God. It is interesting to note that the stripping off of his clothes that Jonathan performs when he makes his first covenant with David is the same act of devotion that Saul performs when he has his second ecstatic experience.

Now let us consider the notion that David is a man that God has chosen "after his own heart," I think that we see in David a type of leader that we have never seen before. David is not, like Samuel or Moses, an intermediary between God and the people, neither is he a leader like Saul who is fastened to God though not really under His command. With David God finds a new answer to the problem of the establishment of the monarchy. Israel's position when God alone was their leader had two aspects. There was the political sense in which God led the people, deciding which wars to fight, which lands to conquer etc., but there was also the fact that there is something spiritually unique about a people led by God. The nation whose king is God must necessarily have a special connection to the divine. With the establishment of a monarchy we then have two questions which we saw first addressed with Saul. First, who would be merely a good king in a political sense? In this respect Saul was a good choice, he won his wars and behaved for the most part as is to be expected of a king. Second, how is a nation to maintain its relationship with God in the face of His abdication of power to a monarch? It is David who is the answer to this question. In the choosing of David God picks a man who is first of all a good leader. Presumably we find this out later in Samuel II, but I believe this similarity between David and Saul is already suggested by the fact that they are both described as beautiful when they are first introduced. More importantly, David's appointment also serves as some sort of way of allowing the children of Israel to maintain their relationship to God. Having abandoned prophecy as the form of leading his people, God finds in David, the people's new leader, a way of maintaining a more individual relationship with them. I think that the fact that Saul and Jonathan's interactions with David parallel their interactions with God point to what is unique about David. He is not an intermediary between God and the people but rather a representative of God. Jonathan and Saul show us that people see in David a manifestation of the divine presence. When David acts they see God acting through him, when they feel David's presence they feel God's presence. I think this is the way to understand that fact that we are told "But all Israel and Judah loved David because he went out and came in before them." (18:16) It is not that David communicates God's will to the people but merely that he is there. The spirit of the Lord is not alongside David but is in him.

Let us then take one final look at David, the man whose actions are imbued with the divine spirit, this time after he has become king. After the death of Saul, all the tribes of Israel come to David and ask him to accept the monarchy. He does, and we then hear his first decree as king.

"And David said on that day, Whosoever geteth up to the gutter, and smiteth the Jebusites, and the lame and the blind, that are hated of David's soul, he shall be chief and captain." (Samuel II, 5:8)

It is fitting that David's first decree should be in his name and not the Lord's. After all David does not communicate the word of God, but manifests it. His actions are not done in the name of God, moreover, they are performed under the Spirit of God. But perhaps it is also fitting that David's first action as king is one that is violent and terrible. The mediation of the prophets between the people and God was necessary partly to shield the people from the terror of God as seen in the previously mentioned quote from Exodus "let not God speak with us, lest we die." I wonder if David's first action as king is not the action that most shows David to be God's representation. For with the removal of the intermediate, with the approach of the spirit of God within David, it seems appropriate that the people would see again the horror that they fled at Mount Sinai.

Footnotes

1. All quotations are from the King James Version of the Holy Bible.
2. All quotations are from the book of Samuel I unless otherwise noted.

A Translation of ÉmileVerhaeren's "One Night"

✸

Eli Wiggins

He, who of an eve and not age of ours, will ope'
Me up, disturb my verse in slumbers or in cinders,
Lend new life to far-off feelings, and surrender
To how we of today did arm ourselves with hope,

Let him know with what wild dash towards the fray
My Joy has hurled itself through cries, revolts and tears,
Into the proud and manly war of woes and fears–
For love to level them like conquerors their prey.

I love my fevered eyes, nerves, brain, the blood wherein
My heart has life, the heart inside which lives my torso;
I love Mankind and too the world, and I adore so
The force my force can take and give the All and Man.

To live is this: to take and give with jolly rush.
My fellows find themselves exalted just the same
As I myself feel hungry, heaving, hardly tame
At intense Life and its own wisdom's ruddy flush.

Hours of Downfall or Grandeur! All is gone
Blurred and, in the blaze that is existence, bereft
Of former form; so long as Longing yet is left
In leaving, 'til Death, before th'horizon's wakeful dawn.

The one who finds is thus a wiseman not above
Communing with the sweeping swarm, humanity.
The spirit dives now drunk in full immensity;
In order to discern with genius, one must love.

One great kindness can fulfill the grating grope
Of knowledge; it exalts the beauty and the force
Of the world; foretells the basic bonds and source.
Oh you, who an eve and age is not ours, ope'

Me up, see wherefore you're summoned by my verse?
'Cause in your time some hothead will have had to gauge
From his own heart, no doubt, the truth, the empty page,
To draw from it the meaning of the universe.

Un Soir

Celui qui me lira dans les siècles, un soir,
Troublant mes vers, sous leur sommeil ou sous leur cendre,
Et ranimant leur sens lointain pour mieux comprendre
Comment ceux d'aujourd'hui s'étaient armés d'espoir,

Qu'il sache, avec quel violent élan, ma joie
S'est, à travers les cris, les révoltes, les pleurs,
Ruée au combat fier et mâle des douleurs,
Pour en tirer l'amour, comme on conquiert sa proie.

J'aime mes yeux fivéreux, ma cervelle, mes nerfs,
Le sang dont vit mon coeur, le coeur dont vit mon torse;
J'aime l'homme et le monde et j'adore la force
Que donne et prend ma force à l'homme et l'univers.

Car vivre, c'est prendre et donner avec liesse.
Mes pairs, ce sont ceux-là qui s'exaltent autant
Que je me sens moi-même avide et haletant
Devant la vie intense et sa rouge sagesse.

Heures de chute ou de grandeur!– tout se confond
Et se transforme en ce brasier qu'est l'existence;
Seul importe que le desir reste en partance,
Jusqu'à la mort, devant l'éveil des horizons.

Celui qui trouve est un cerveau qui communie
Avec la fourmillante et large humanité.
L'esprit plonge et s'enivre en pleine immensité;
Il faut aimer, pour decouvrir avec génie.

Une tendresse énorme emplit l'âpre savoir,
Il exalte la force et la beauté des mondes,
Il devine les liens et le causes profondes;
O vous qui me lirez, dans les siècles, un soir,

Comprenez-vous pourquoi mon vers vous interpelle?
C'est qu'en vos temps quelqu'un d'ardent aura tiré
Du coeur de la nécessité même, le vrai,
Bloc clair, pour y dresser l'entente universelle.

A Literal Translation and a Verse Translation of William Von Goethe's "Nature and Art"

✷

Eli Wiggins

Natur und Kunst, sie scheinen sich zu fliehen,
Und haben sich, eh man es denkt, gefunden;
Der Widerwille ist auch mir verschwunden,
Und beide scheinen gleich mich anzuziehen.

Es gilt wohl nur ein redliches Bemuehen!
Und wenn wir erst in abgemessnen Stunden
Mit Geist und Fleiss uns an die Kunst gebunden,
Mag frei Natur im Herzen wieder gluehen.

So ist's mit aller Bildung auch beschaffen:
Vergebens werden ungebundne Geister
Nach der Vollendung reiner Hoehe streben.

Wer Grosses will, muss sich zusammenraffen;
In der Beschraenkung zeigt sich erst der Meister,
Und das Gesetz nur kann uns Freiheit geben.

Prose Translation

Nature and Art, they seem to flee one another,
And they have, before one thinks it, found each other;
Aversion has also disappeared from me
And both seem to attract me equally.

Only an upright effort counts!
And if we once in measured hours
With spirit and industry bind ourselves to Art,
Then may Nature freely glow in our hearts again.

This is how it stands with all education:
Unbound spirits will vainly
Strive for the completion of pure heights.

He who wants greatness must pull himself together;
In limitation only does the master prove himself,
And Law alone can give us Freedom.

Verse Translation

It seems that Nature always flies from Art–
Has found and fast embraced it, though it flee;
And all aversion vanishes in me,
Till both with equal pull tug at my heart.

Upright pains and toil alone are blest!
And if at first in measured hours we bind
Ourselves to Art with work and spirit's mind,
Then Nature may burn freely in our breast.

All learning, too, must listen to this call:
The unbound spirit strives in vain to stand,
To perch upon perfection's purest height.

Man, to be great, must snatch himself up small;
For Confines limit Lords however grand,
And Law alone will lend us Freedom's light.

A Note on Goethe's "Nature and Art"

✷

Eli Wiggins

Whenever we translate Greek or French poetry at this school, we strive first for literal accuracy and leave the style ans the sound of our English more or less to unconsidered chance. This I find unfortunate. It makes sense to translate without regard to style someone like Aristotle, who obviously gave no thought to it himself. But as soon as we set before ourselves the task of Anglicizing a dialogue of Plato, which is dripping with self-consciousness of syntax, meaning, and their interplay, it is criminal to come up with an English version, no matter how painstakingly "accurate," and claim that it is a true translation if it doesn't *sound* good in our own language. And what is criminal with regards to beautiful prose approaches deadly sin when we slug our way through the poetry of Sophocles with the same plodding literalness that Aristotle deserved. (I think our essay-writing–or at least my own–also suffers from this sole attention to meaning at the cost of style.)

I find that the best translators are by no means the Lattimores and the Fitzgeralds of to-day, who turn Homer into a fusty old scholar, but rather Chapman and Pope, who may well make Homer out to be a boisterous, wordstruck Elizabethan and decorative, neo-classical Georgian, respectively, but who at least keep him a *poet!* I am most enamoured of the mediaeval school of translation, through which Boccaccio's Il Filostrato doubles in size, entertainment, and beauty to become Chaucer's Troilus and Criseyde, or by which King Alfred's Boethius can list "ensamples" from everyday life in seventh century England. In our readings for the Goethe Preceptorial last semester, the translations of Faust by Kaufman and Arndt, although they were in rhyming English verse which which should leave them open to more innacuracy than prose, disturbed me far less than Mueller's rendition of Goethe's Botanical Writings. Mueller seemed to omit all the force and vigor of Goethe's style, missed the strength of his choice of verbs, and ignored the wonderful connections that Goethe draws between disparate elements by the links of syntax alone without descending to the grubby trouble of stating the likeness explicitly.

Therefore, after giving us as bare a literal translation of Goethe's poem as I could, I decided to try my hand at turning "Nature and Art" into an English sonnet. Despite Goethe's insistence that the master proves himself by limiting his enterprise, I have chosen to disregard the limitless list of good reasons against amateur college students slaughtering the true works of art by presuming to render Goethe's poetry in English verse. Amidst this process I feel that I have learned to notice more about the brilliance of Goethe's poetry than I ever would have had I stopped at the literal translation. It has also been grand fun. Allow me to remark briefly, however, on the inadequacies of my verse that mar its ever approaching the elegance and beauty of the original.

In general, since English usually requires fewer syllables to say something than does German (observe lines 3-5, 10, 11, & 14 of the literal translation especially), I was forced to pump up the English lines with stuffing of my own in order to fill the pentametre. I tried to do so with as much significance and as little hindrance as possible, but I know that the least amount of extra baggage slows the slick, unburdened journey of Goethe's sonnet.

Another general problem is a perennial curse of philosophical poetry in English: whereas German, Greek, and other languages have built their metaphysical terminology from the simple, everyday language of their own tongues, English took the lazy route of borrowing all our complicated words from French, Latin, and Greek. Latinate verbiage such as "industry," "education," "completion," "limitation," and any other "tion"s and "ism"s have no place in English poetry. Their German equivalents, however– "Fleiss," "Bildung," "Vollendung," and "Beschraenkung"– are quite natural constructs that sound no fancier than the simple words which break them up. Philosophical poets in English have to be doubly clever: not only in the intricacy of their thought, but in the subterfuge by which they trick their readers into following their thoughtlines without putting them off with un-English fancy-talk.

The greatest structural change in my translation was in the rhyme scheme of the second quatrain. Goethe repeats the ABBA structure of the first quatrain, setting off the tone of the A rhyme, however, by slipping in "Bemeuehen" and "gluehen" in place of the "fliehen" and "ziehen" in lines 1 and 4. The "ue" diphthong is often rhymed with "ie" in German, but they are far enough near-rhymes to signify a change- a sort of A_tBBA_t. I despaired of achieving this subtlety in my own version, and resorted to a complete switch in CDDC in the second quatrain, which is still a viable form of Petrarchian sonnet, but of course sacrifices the tighter unity of the octet that Goethe achieves.

Goethe's rhyming alone comments beautifully on the meaning of his poem. Two pairs of opposites are bound together in dual unity by the four rhymes of the first quatrain alone. The A rhymes ("fliehen"–to flee from and "anziehen"– to attract towards) point towards the inevitabil-

ity of opposing forces working together. They share the encompassing places of the first and last rhymes. Framed between them "gefunden" (found) and "verschwunden" (disappeared) compliment each other with equal opposition.

The final rhyme in the poem is also meaningful. In the last line Goethe writes that law will *give* us freedom. Line 11 stresses how useless it is to *strive* for this freedom if we are unbound. As even the modern English spellings of "give" and and "strive" suggest, they once rhymed in their Germanic roots, and "geben" and "streben" dutifully rhyme in German. It is wonderful how Goethe uses this rhyme to emphasize how we can achieve nothing by our own will (as subject) striving, but only when we submit to the strict exactions of scientific method will this law (as active agent–subject) give us (as object–indirect, even) liberty.

I attempted, certainly, to make the poetic devices and the structural requirements of my sonnet more than vapid and empty formulae, but I think that after all I have made only a rhymed rendering of Goethe's meaning, and have not written a poem. It would require a poet to do that, and he, like Chaucer and King Alfred, would end up with a work similar in premises, perhaps, to Goethe's sonnet, but with a poem apparently independent from its germinal seed.

Goethe's poem is entirely composed of various yet complimentary weaves of self-referential threads. He wove them so tightly and seamlessly together that my version can only be an unravelling knot in comparison. But perhaps my fraying edges can point to some of the beauty of the eternal boundlessness that pleased Goethe so much, and that he imitated in his inimitable verse.

Shu-tao: Of Grammatology, Chinese Style

✷

Cordell D.K. Yee

The title of this essay may require some explanation. *Shu* means "writing," and *tao* might be translated as "discourse."[2] *Shu-tao* might serve as a translation of "grammatology," discourse on writing.[3] Those hoping to read something about Jacques Derrida–or perhaps waiting to pounce on him–will be disappointed. The subject here is far less theoretical and far more trivial than deconstruction and the margins of philosophy. The subject is the material of Chinese text, specifically Chinese writing itself.

Writing is perhaps the most distinctive feature of Chinese civilization. Few things separate us more from Chinese culture than its writing. Our writing is, more or less, a phonetic script. Our letters are, more or less, attempts to represent units of sound. Chinese script is logographic. Each character represents a word or, more accurately, a complete syllable. The linguistic differences between Chinese writing and ours are explained in detail in more than a few popular and academic works on the Chinese language,[4] and I will not deal with these differences any further. What is of more interest to me is the difference in the value placed on the two kinds of writing as art.

For us in the West, writing has been at best a minor art. Normally we do not rush out to the National Gallery, say, to look at samples of handwriting. With computer graphics widely available, interest in handwriting seems quaint, nostalgic, and even backward. For us, writing is usually not meant to be noticed; it should not be obtrusive; it should not call attention to itself. We want to see past it to the words it represents. Reading efficiency is what matters. For us, writing is not supposed to be a complicated matter. Its elements are as simple as ABC.

In the Chinese scholarly tradition, writing was far from a simple matter. Good handwriting was one of the crowning achievements of the intellectual life. Virtually no one could be considered as having any intellectual virtue without mastery of the art of writing. If we ask what accounts for the high place of writing, satisfactory answers are usually hard to come by–at least answers satisfactory to us brought up in the Western intellectual tradition. If we turn to traditional Chinese works on the subject, we do not seem to get much help at first. On the most important and most serious matters, Chinese works tend to be long on assertion and metaphor–and short on argument. In works devoted to the art of writing, we might read that writing contains "profound secrets of change," and that it is "the integration of reason." This sounds promising, but no explanation is given. Instead we will get comparisons of writing to the flight of geese, the wings of a cicada, a firm mountain.[5] Understanding the Chinese art of writing seems to be like reading inkblots. The art seems to be highly subjective, lacking in universality.

If we turn to the modern scholarship on writing, we fare perhaps a little better.[6] At least the terms are easier to grasp. In traditional China, from the seventh century on, the ability to write well was linked to power, wealth, and privilege, even more so than in the West. The government bureaucracy provided the main avenue of upward social mobility, and a prerequisite of government service was the ability to write. Writing was a form of cultural capital that helped one gain membership into a political and economic elite. This elite was highly exclusive. During the sixteenth century, for example, only one in 10,000 males could expect to pass the "advanced scholar" examination and gain a position in the imperial bureaucracy.[7] If the same standards were applied here, only one student out of 100 classes at St. John's would be awarded a degree. With such tremendous odds against success, it is easy to understand why those seeking economic and political advancement practiced writing diligently.

If there are any doubts about the relationship between economics and the value of writing, what has happened to Chinese writing in this century should dispel them. Take away the political apparatus of the empire, and the importance of good handwriting diminishes. Replace a managed agricultural economy with a capitalist market system and a somewhat more liberal political regime, and the art of making money becomes more important. In the modern world the art of making money is not identified with the art of writing. In one context the art of writing is the means to power. In the other context it is a sign of power, specifically economic power–a form of conspicuous consumption. One purchases works of writing much as one buys antique furniture. The experience of modern Chinese societies confirms that the art of writing was of a certain value in a particular place for a period of time. It is not of our time and place. In our time, it should go the way of bound feet.

This is a strong conclusion, and there is a great deal of truth in the account that leads up to it. But the argument has a number of omissions. Some are factual, but the most serious omission concerns method. It is possible to do political and economic analyses of art with one's eyes closed. I mean that such analyses often emphasize context at the expense of the art itself. Such was the case in the account I summarized. And for that reason, we do not find it fully persuasive.

So to make up that defect, let us begin to look at the writing itself.

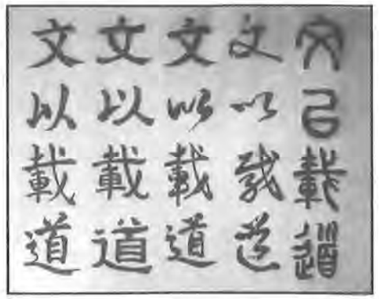


FIGURE 1. *WEN I TSAI TAO*, WRITTEN IN THE FIVE MAJOR FORMS OF CHINESE SCRIPT. THE EARLIEST FORMS OF SCRIPT ARE NOT SHOWN; FOR THE MOST PART, THE ARTISTIC TRADITION WAS NOT CONSCIOUSLY AWARE OF THEM. THE WRITING IS BY CH'EN PO-CHIN (CHEN BOJIN), A PRESENT-DAY PRACTITIONER OF THE ART.

Presented here (Figure 1) is a highly simplified and truncated view of the development of Chinese writing. Reading vertically from the right, the first four characters, *wen i tsai tao*, might be loosely translated as "Writing transmits the way." It is typical of Chinese sayings in that its tone of certitude is matched by the uncertitude about what exactly it means. As we look at writing, at least a few ways of interpreting this statement will emerge.

For the sake of comparison, the saying has been written four more times, each time in a different style. From right to left the styles appear in more or less chronological order. The rightmost style is known as the seal script, dating from the third century B.C.E.[8] It is followed by the cursive, semicursive, and clerical scripts, which are almost contemporaneous.

The style on the far left is the most recent style and dates from about the second century C.E. It is probably the most familiar to us in the West. It is seen on most Chinese public signs, and perhaps most important for us, it is found on most Chinese menus. It is sometimes called the perfected script. When we move from right to left on the chart, it seems that the other forms are striving toward it. The leftmost style is also called the standard script. From a formal point of view, the standard form seems to be the one from which the others arise. The other forms seem to be deviations from it, the variation increasing as one moves from left to right. Even those with little familiarity with Chinese script are able to sense the rightness of the standard script.

The notion that a script can be right might be somewhat disconcerting to those of us brought up to believe in the arbitrariness of the written sign. With some hard looking, though, it becomes clear that something is not right with the seal script. The seal script characters can be intricate and thus difficult to memorize. Each character seems to present a different set of structural elements; each seems to have its own organizing rules. In addition, writing in the seal script presents difficulties, since it is hard to tell where one stroke ends and another begins.

The standard script seems to address those problems. The contours of the characters have been simplified, as have the components of the characters: we see more straight lines and more figures composed of straight lines. The types of strokes have been reduced to basically three: dots, lines, and hooks; or points, lines, and angles. In the traditional criticism, the standard script is described as square and straight. These adjectives are also classical Chinese geometric terms, and the coincidence in terminology seems more than accidental. What happened in the movement from seal to standard script was that writing was mathematized. Its forms became clearer and more abstract, thus easier to read and reproduce. Writing transmits the way in the sense of mathematical reason.

One of the ways in which the chart of styles is misleading is in suggesting that characters in all styles are in a uniform size. In fact, it is characteristic only of the standard script to be written in such a manner.

FIGURE 2. WEN CHENG-MING (1470-1559). DETAIL OF *TSUI-WENG T'ING CHI* (ACCOUNT OF TSUI-WENG PAVILION).

Here (Figure 2) the writer has supplied boxes around his standard forms as if to emphasize their regularity and uniformity. The appearance of the text is suggestive of movable type. We can imagine each square representing a piece of type. The standard script does lend itself to mechanical reproduction. Its straight-line forms are easier to carve than the curvilinear forms of the other styles. Because it was a good typeface, one might consider the standard script to be a remarkable technological achievement. As a typeface, it has been fairly stable for more than ten centuries. Chinese printed texts from the ninth century are still highly readable today.

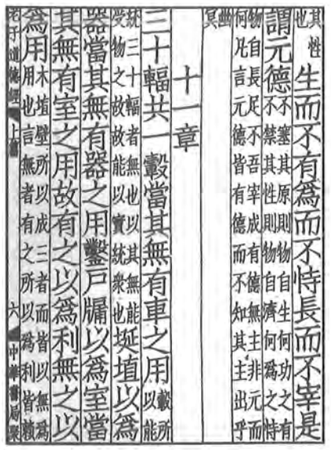


FIGURE 3. *TAO TE CHING* (CLASSIC OF THE WAY AND VIRTUE; FACSIMILE OF A SUNG DYNASTY PRINTING). THE BOOK IS OPEN TO CHAPTER 11, WHICH DEALS WITH MAKING SOMETHING OUT OF NOTHING.

This (Figure 3) is an example from the tenth or eleventh century, a printed edition of the *Tao-te ching*.

If the development of a good type style does not sound particularly impressive, consider that we are still waiting for a satisfactory typeface for Greek lettering. I haven't really analyzed the Greek situation carefully, but these examples make one source of the problem clear.[9]

FIGURE 4. SAMPLE OF GREEK TYPE: EUCLID FONT.

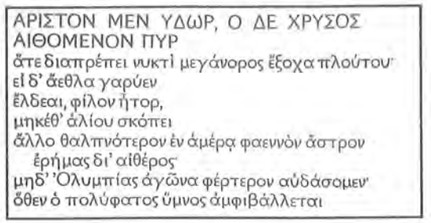


FIGURE 5. SAMPLE OF PRINTED GREEK TEXT IN NEW HELLENIC FONT: PINDAR'S ODES (TOP); THUCYDIDES, PERICLES' FUNERAL ORATION (BOTTOM).

In Figures 4 and 5, the upper case forms are block letters, mostly rectilinear. The lower case letters are curvilinear cursive forms. The two do not harmonize well and even irritate.

Having just asserted the importance of the standard script for its legibility and mechanical reproducibility, I will go on to say that the art of writing the standard script begins where legibility leaves off. It does not take a genius or much talent to write clearly. It does take something more than clarity to lift writing to the level of art. The end of writing qua art is vitality. This is a quality seldom associated with typographic forms, which seem static, inert, dead, with their boxiness and uniform appearance. Writing as art aims to counteract the inertness. It does so by departing from the norm.

Several departures from the norm are illustrated on this example (Figure 6). First, the writer has altered the spacing. On a printed page, the characters are as close together as they can be without causing confusion about word boundaries. Here the writer disrupts the reading process by increasing the spacing between characters. He forces a reader to linger on each character. The writing calls attention to itself, and when we pay attention to it, we notice more deviations. The horizontals are not true horizontals, but are slanted. We seem to be viewing the characters obliquely. The writing space appears to be three dimensional. The characters seem to have volume, monumentality, a sculptural quality. We notice also that certain elements seem to be incomplete. Elements normally joined or closed are left open: we see open rectangles, angles without vertices. We get the sense that we are viewing the characters as they are coming into being. Here the lines seem to be reaching out, stretching out, toward each other.

FIGURE 6. CH'U SUI-LIANG (596-658). BEGINNING OF THE YEN PAGODA PREFACE TO THE BUDDHIST CANON.

The strokes themselves seem to pulsate as a result of the variations in their thickness. At their best, characters are often thought of as organic: in traditional criticism, characters are spoken of as having bone, blood, breath. As organisms, they have weight: they must be shaped so as to be able to stand and maintain their wholeness. The example we have been looking at does not exhaust the ways in which one can make the standard form new.

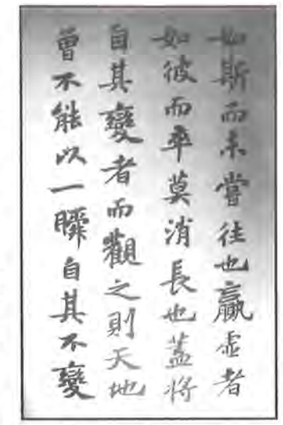


FIGURE 7. SU SHIH (1036-1101). SECTION OF CH'IH-PI FU (RHAPSODY ON RED CLIFF).

In this example (Figure 7), again in the standard script, the writer has perhaps tilted his horizontals even more than in the previous example, and has altered the proportions of his characters so that they appear more squat.

FIGURE 8. LIU KUNG-CH'ÜAN (778-865). SECTION OF RUBBING OF STELE AT HSÜAN-MI PAGODA.

In Figure 8, in the standard script as well, the writer has elongated his characters and has varied the pressure applied to the brush so that certain strokes appear bolder than others.

Excellence in the standard script was measured in part by how far one could depart from the standard and still be recognized as following the standard. The same could be said of the other styles of script. A common goal was to produce vital forms of script. In order to excel, one needed to have some ingenuity, some

manual dexterity, and some perceptiveness.

In this way writing bore the imprint of a person's mind. It provided some indication of a person's mental capacities. It was also important in shaping a person. Writing transmitted the way in the sense of ethics. Those who mastered writing developed discipline and excellent memories. They had to memorize thousands of characters and their various forms. According to one account, a student should spend eight years studying the standard script, practicing writing it in various sizes and imitating various masters. After that one studied the semicursive script for three years, the cursive script for five, the seal script for ten, and the clerical for five.[10] Fortunately, some styles were studied concurrently, otherwise one would spend thirty-one years practicing and studying writing. Much of the practice was tedious and repetitive. Success required patience and persistence. A dozen characters could take as long as an hour to complete.

Mastering the art of writing also meant mastering its history. A student spent considerable time studying and imitating the works of past masters. Copying past works was not simply a matter of exact reproduction. Too many factors worked against a perfect copy. Variations in ink, brush, paper, even differences in breathing patterns, could affect the outcome. One almost invariably fell short as soon as one put brush tip to paper. In order to make progress one had to learn to adjust as one proceeded, compensating for one's mistakes so that the overall impression of the original would be preserved. Mastering the art of writing meant developing a certain resourcefulness and adaptability. (See Figures 9-11.)

The practitioners held up most often as models were known for the excellence of their characters. Thus, to imitate a model of writing was to imitate the thought and action of a virtuous person, at least for a while. Writing practice was an opportunity to enter the mind of another person, to try to understand why a certain stroke was executed in a certain manner. Writing provided an escape from one's personality, or perhaps a better way of putting it, writing enlarged one's personality. One acquired, in small ways, traits one would not have acquired otherwise.

FIGURE 11. RUBBING AND COPY COMPARED. THE "DEFECTS" OF THE COPY ARE MORE APPARENT ON CLOSE EXAMINATION—NOTE THE DIFFERENCES IN ANGULARITY, IN LINE VALUES, AND IN THE SHAPE OF THE HOOKS.

In the course of one's practice, one would copy out classic works and commit them to memory. This was no mean feat, since the core texts contained more than 400,000 characters. As one worked to master writing, one also worked to acquire a tradition. Writing transmitted the ways of past excellence. The selection of texts a person copied beyond the core works said something about what that person valued. In that sense also, writing revealed the person. This aspect of writing should be familiar. The last time I looked the application to St. John's asked about one's reading. I suppose we would judge a person who could recite the works of Aquinas in the original language differently from one who could recite the works of Danielle Steel in the original language.

FIGURE 9. LIU KUNG-CH'ÜAN. SECTION OF RUBBING OF STELE AT HSÜAN-MI PAGODA.

FIGURE 10. MODERN COPY OF FIGURE 9. SEEN AS A WHOLE, THIS COPY SEEMS TO BE A FAIRLY GOOD MATCH, STROKE FOR STROKE. IT IS CLEAR THAT IT IS BASED ON LIU KUNG-CH'ÜAN'S WORK.

As we do here, so they did in imperial China: as an index to a person, what shaped a person, what a person valued, writing was an important consideration in determining a person's fitness to serve in the government. The cooperation of mind and body, the harmony of wholes and parts, achieved by the mastery of writing, were analogues of the harmonious society that was supposed to be the goal of the ruling elite. Ideally the Chinese official would find political direction in the written word, just as the philosopher-king would find it in his or her vision of the good.[11] The notion that there was a resonance between writing and politics survived even until recently. Chairman Mao's understanding is shown by this sample of his handwriting (see Figure 12).

FIGURE 12. MAO TSE-TUNG (1893-1976). MASTHEAD OF *JEN-MIN JIH-PAO* (PEOPLE'S DAILY).

This is the masthead for the *People's Daily*, written by Mao in 1949, just before the Communists took over China. The characters are still recognizable as standard script, though there are a number of deviations. Mao introduces cursive strokes into the last character. The characters are not uniform in size. Mao enlarges the first and last characters, *jen* meaning "people" and *pao* meaning "report." In the past reports were directed upward. This newspaper addressed to the people reverses that process. Mao also changes the direction of the "legs" of the character *jen*. Normally they would point down. Mao bends them upwards, almost reshaping the legs into wings. From this sample alone, one might read Mao's revolutionary tendencies or at least infer a change in political emphasis: he aims to lift up the masses.

So far I have been describing the political consequences of writing in ideal terms. It was of course all too easy to corrupt the political process. Those who could not write well could cheat by paying someone else to write for them or by purchasing an office. There could be mistakes in judgment or just poor judgment when it came to evaluating writing. The imitation of models could become slavish. Writing could be used primarily to inculcate a respect for authority, a reverence for precedent. These are good qualities to instill in one's subjects if one is interested in maintaining a repressive political structure. It has to be granted that writing often served the purposes of autocratic rule. Even so, it was also a democratizing force. The equipment required to write was not too costly, and once acquired, the art of writing enabled a man to rise above his social class. In order to justify their mandate, emperors were not exempt from the expectation that office holders write well. They often sought criticism of their work, and their ministers might be able to couch political criticism in terms of artistic criticism. In one famous example, the emperor asked for advice because he was having trouble holding his brush straight. One of his ministers replied, "If the heart is straight, then the brush will be straight." It would have been ideal if such freedom of expression had regularly spread to other subjects of discourse, but at least the potential was there for more openness and liberality.

Writing also had its value beyond politics where it often served as recreation. It was a means of liberating oneself from daily cares, especially if politics proved to be too dirty a business. Just as often writing was a matter of serious discussion. Examples of writing were analyzed. Good pieces were canonized. There were at least four standards for canonization. A piece of writing must have stood the test of time, or have appealed to large number of people over the centuries. It must have merit as fine art: it must have vitality. It must be beautiful; it must impress with its order, elegance, and form. It must be original, and it must have influence. What I have just summarized are not only standards of Chinese writing, but also, of course, some of the criteria Scott Buchanan applied to books.

One might question whether works of Chinese writing prompt interpretations and raise questions, thus satisfying more of Buchanan's criteria for greatness. I would argue that they can do both. Subject to interpretation is the movement of the brush, the writer's thinking as he wrote, the qualities expressed in the writing, and its points of excellence.

FIGURE 13. TUNG CH'I-CH'ANG (1555-1636). TRANSCRIPTION OF *T'UNG SHU* (PENETRATING THE *BOOK OF CHANGES*), BY CHOU TUN-I (1017-73).

The interest of the piece shown in Figure 13 goes beyond what it says. The text here deals with a familiar topic: whether one can learn to be a sage. The text says that the key is to be without desire. The writing itself suggests a somewhat different answer. The work is quite large, more than five feet high. Because the characters are large, they are difficult to execute. The coordination between mind and body is quite impressive here, especially considering that the writer was about seventy years old. By writing so large, he seems to answer the question. Yes, one can learn to be a sage, and you are looking at him.

As for whether works of writing can raise questions, questioning was an important aspect of the art of writing. Refinement of the art itself depended on a questioning of the past. Furthermore, in writing a word, one might think about it, question what it means, clarify what it means.

As an example, we can take a rendition of the Chinese characters for the infinite (see Figure 14). It is barely recognizable as standard script because of the indefinition of its boundaries. Something like this indefiniteness, this vagueness, this difficulty in comprehension, is associated with our notions of the infinite. The writing itself thus suggests something about the meaning of the term.

FIGURE 14. CHIN NUNG (1687-1763). *WU-LIANG* (INFINITE), DETAIL OF AN ALBUM.

Practiced at its best, the art of Chinese writing involves a fusion of thought and feeling. It is an art critical of itself, and in that respect it may be considered modern—of our time.

In our time the question of whether Chinese achievements belong in our education has been the subject of some debate. The focus has mainly been on books. But the books have not been entirely persuasive. To many in the West, they do not seem to depend on reason, they often seem

to undermine it, and they often do not seem to encourage questioning. The problem with the discussion so far is that its scope has not been wide enough. If one looks only at books, one gets a limited view of the Chinese intellectual tradition.

We risk misunderstanding that tradition by taking what we would call its philosophical works as representing what is best in it. Chinese scholars often put their highest thought not into discursive prose, but into poetry, painting, and calligraphy, the art of writing. Their highest expression took place not only between the lines, but in the lines. The Chinese elite did much of the work we try to do, but by a different object of study. Their art of writing is in a way a reflection of who we are.

In the end East does meet West. China, after all, gave us the technical foundation for our modern world. In *Novum Organum*, Francis Bacon identifies printing, gunpowder, and the magnetic compass as the three defining inventions of the modern age.[12] All three, as far as we know, originated in China.

The list of Chinese contributions to the West might be expanded without too much effort to include the art of writing.[13] If there is a Chinese contribution to the liberal arts, the art of writing is it. Those who learned it well were freed from having to labor in the fields and allowed to participate in the political process. Learning and practicing it required considerable leisure. In addition, the Chinese art of writing represents the study of grammar at its most basic and perhaps most intense. It involves a kind of rhetoric and a kind of geometrical construction.

I do not advocate that everyone go out and pick up a brush, but I think that a more informed look at Chinese writing is possible. At the very least, consideration of the centrality of writing in China should adjust how we view certain Chinese paintings.

Such paintings often depict scholars writing or discussing writing amid spectacular natural surroundings. In the West, these have typically been interpreted as "landscape" paintings showing the insignificance of human beings in relation to nature. This view is generally a misinterpretation. The paintings are generally not transcriptions of scenes, but metaphors. They affirm the power of human activity, specifically writing. The natural scene often emanates from the scene of writing, as in Figure 15.

FIGURE 15. K'UN-TS'AN (1612-73). DETAIL OF *SHAN KAO SHUI CH'ANG* (TALL MOUNTAINS AND LONG RIVERS).

In Figure 16 the eye's movement up the pictorial space culminates in writing. To write is to be taken from one's urban setting. To write is to be able to make new worlds. To write is also to participate in the processes of nature. The interplay of *yin* and *yang*, ultimately responsible for the phenomenal world, is imitated by the alternation of black and white in Chinese writing. Through writing, human beings resonate with the natural world.

FIGURE 16. SHIH T'AO (1641-CA. 1710). PAINTING OF WILDERNESS COTTAGE. THE POEM AT THE TOP LEFT READS: "THE SHEEN OF BAMBOO SURROUNDS THE WILDERNESS SCENE;/ THE IMAGE OF A COTTAGE RIPPLES IN THE FLOWING RIVER."

Notice in Figure 17 how the writing at the top of this painting merges with the branches of the pomegranate.

FIGURE 17. HUANG SHEN (1687-1766). PAINTING OF A POMEGRANATE.

FIGURE 18. CHENG HSIEH (1693-1765). PAINTING OF BAMBOO. THE TEXT CONSISTS OF A NARRATIVE AND POEM ON THE "INTOXICATING" BEAUTY OF BAMBOO. IT IS UNCONVENTIONAL IN THAT IT READS FROM LEFT TO RIGHT.

Notice in Figure 18 how the writing at the bottom of this painting provides the ground, the nourishing soil, for the bamboo. Writing transmits the Way. The Way is Nature. Nature is writing: it is a book for us to read. Thus we can affirm with Jacques Derrida that there is nothing beyond text.

Suggestions for further reading

Billeter, Jean-François. The Chinese Art of Writing. New York: Rizzoli, 1990.

Chiang Yee. Chinese Calligraphy: An Introductio to Its Aesthetic and Technique. 3rd ed. Cambridge: Harvard University Press, 1973.

Footnotes

1. This is a slightly revised version of a lecture presented on January 23, 1998, at St. John's College, Annapolis.

2. Wade-Giles transcription is used here.

3. Shu-tao is also one of the traditional Chinese terms for the art, or "way," of writing.

4. For example, Jerry Norman, Chinese (Cambridge: Cambridge University Press, 1988.

5. The examples come from Shu-p'u (Treatise on writing), completed in 687 by Sun Kuo-t'ing. A translation of the treatise appears in Two Treatises on Chinese Calligraphy, tr. Chang Ch'ung-ho and Hans H. Frankel (New Haven: Yale University Press, 1995.

6. In this paragraph, I am following, perhaps caricaturing, the types of analyses offered in Literacy and Power in the Ancient World, ed. Alan K. Bowman and Greg Woolf (Cambridge: Cambridge University Press, 1994).

7. Useful accounts of the Chinese examination system are Ichasada Miyazaki, China' Examination Hell: The Civil Service Examinations of Imperial China, tr. Conrad Schirokauer (New York: Weatherhill, 1976); and Ping-ti Ho, The Ladder of Success in Imperial China: Aspects of Social Mobility, 1368-1911. (New York: Columbia University Press, 1962).

8. More accurately, this style is known as the lesser seal script. There are forms of writing older than this one, but for centuries the artistic tradition was unaware of them.

9. Useful discussions of Greek typography can be found in Greek Letters: From Tablets to Pixels, ed. Michael S. Macrakis (New Castle, Del.: Oak Knoll Press, 1996).

10. This regimen was prescribed by Feng Fang in the seventeenth century in "Hsüeh shu-fa" (Learning the art of writing). Feng's essay is translated in Tseng Yuho, A History of Chinese Calligraphy (Hong Kong: Chinese University Press, 1993), 240-42.

11. The philosopher-king is compared to a painter in Plato, Republic, Book 6, 484C-D (see also Book 7, 540A-B).

12. Novum Organum, Book 1, Aphorism 149.

13. It has influenced a few Western artists, such as Robert Motherwell.

Calculations of Moon Crater Depths

Anna-Clare Milazzo
Jill Nienhiser

Objective

The depth of craters on the moon's surface can be determined with simple geometrical concepts. Using a Charge-Coupled Device (CCD) camera with a telescope, we obtained pictures of moon craters. By using a picture of stars in the Great Nebula in Orion, we were able to find the scale factor between visual distances and the known radius of the moon. The corresponding triangle comprised of the length of the shadow cast by the sun across a crater; the distance of the crater from the terminator, the radius of the moon, and the depth of the crater can be demonstrated.

Setup

All images were taken in the St. John's College Observatory.

The pictures of the moon were obtained with a 12" Schmidt-Cassagrain telescope and a Meade CCD camera. For some of the images, a dark cover was held over roughly three quarters of the telescope aperture to diminish marked turbulence in the Earth's atmosphere.

Images of a star were taken to determine the proper focus of the telescope with the CCD camera in place. This focal length is far different than the usual eyepiece used. Twisting the adjustment knob clockwise by quarter turns brought the image into focus.

Procedure

Once the telescope was focused, we centered the moon in the finderscope and took a number of images. In order to proceed with our calculations, it was necessary to obtain pictures of the moon that included the terminator, which is the line that approximately separates the "day" from the "night" on the moon. There is no terminator with a full moon and thus, our images were procured during the first quarter. The terminator also takes into the account the angle at which the sun would appear to an observer on the moon. The sun increases in height by one degree for every degree shift from the terminator.

An image of the nebula in Orion (M42) was also taken in order to determine the scale factor in the images. The two stars very close to the nebula (SAO 132321 Theta2-Orion and SAO 132322) are convenient since they are separated by one arc-minute.

Analysis

For our calculations, it was necessary to treat the sun as a point source at an infinite distance from the moon. The method for determining the depth of the crater required knowing the radius of the moon, the length of the shadow within the crater, and the distance from the crater to the terminator.

The diffraction in the atmosphere of the earth and the irregular geometry of the crater were ignored to simplify the calculation.

The scale factors between the images of the moon and the actual distance were found in the following manner.

The apparent moon's diameter is known to be approximately 30 arc-minutes. The unit of an arc-minute was measured from the image of the Great Nebula.

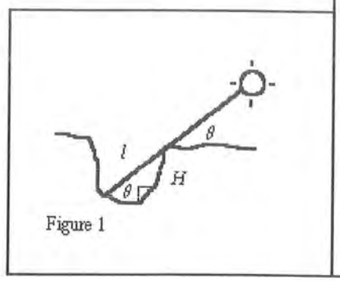


Figure 1

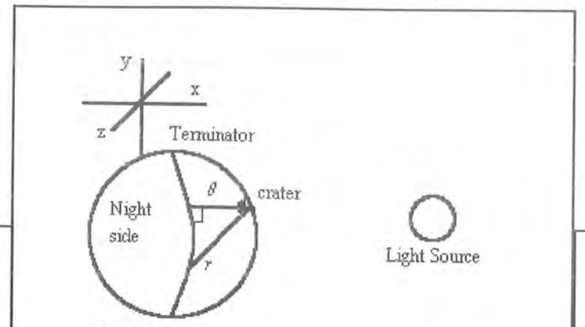


Figure 2

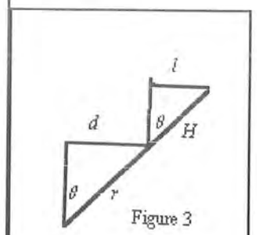
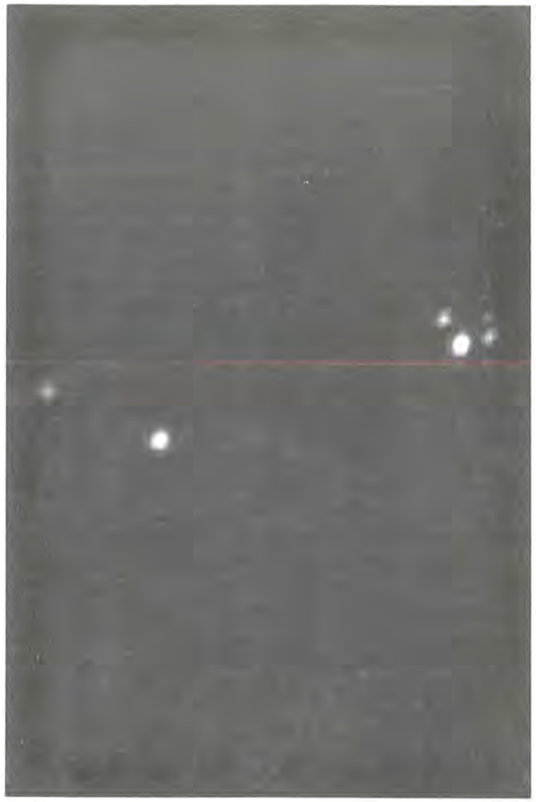


Figure 3



The radius of the moon (R) is known to be about 1738km. Using the diameter, the scale factor between images and the actual moon may be determined. A rate which expresses this scale factor is 30 arc-min.:2*Rkm:: 1 arc-min: 115.87 km.

In figure 1, the crater's shadow and the depth are related to each other through the angle at which the sun light strikes the crater. Sin(theta)=H/L. Figure 2 shows the crater (rotated to demonstrate the coordinate system we are using) with the sunlight striking it at angle θ. The center of the moon is our origin of the xyz coordinate system. Combining figure 1 and figure 2, R and H lie in the xy plane. L and D are parallel to the xy plane and are thus used as straight lines rather than as arcs. Let it be noted that the rotation shown in figure 2 allows us to treat the moon as a disk. However, the results represent a three-dimensional moon. Figure 3 demonstrates the relation between the two similar right triangles formed in the crater and in the sphere of the moon. Because L and D are parallel to one another, sin(θ)= D/R. Thus, a proportion between the two triangles may be created as H:L::D:R. Our final equation is H= (L*D)/R.

The crater we chose to do our calculations upon is located in the picture of the moon attached. The length of the shadow (L)=3/13arc-min. Thus L=26.74 km. The distance from the terminator (D) =173.81 km. Solving for H with the above equation yields H= 2.67 km.

Conclusion

The method employed allowed us to determine the crater depth using a very simple triangulation. However, there are expected errors in this procedure. Besides irregular crater geometry and diffraction, error is expected from measuring distances with a ruler and then converting those numbers to kilometer. Yet, the geometry is elegant and gives a reasonable approximation.

Acknowledgments

We would like to extend our thanks to Hai Sun and Nelson Hernandez for their help.

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The Half-Day

✷

Aaron Pease

The cup lay on his lap, bouncing back and forth beween his knees as the bus lurched up the hill. He cradled it delicately as if it were a chalice, his thumbs caressing the raised gold lettering: "William Ripley, Award for Excellence, 2nd Grade." Katie Mandone received one too, and he let his head fall back against the seat as the ramifications of that fact drifted past. The bus jolted over a pothole and disrupted his thoughts, much like Miss Dranski when she had pierced through his daydreaming fog to inform him that he had won the award. He had burst with pride as he walked through the narrow columns of desks to the teacher. But that had changed when he turned around with the trophy and realized that all eyes were on him. He couldn't see them all, but he could feel them, and they burned like searchlights on his reddening face. He knew that some of them were smirking, and he wished he could just fade back into the blackboard. The eyes followed him as he returned to his desk, and he had spent the rest of the morning feeling guilty for having been singled out. The embarrassment was gone now, and he leaned back in his seat and wondered somewhat abstractly if the trophy counted as a Christmas gift. The bus turned to the left and his lean toward the window was accelerated by the impact of an airborne body. The boy pushed the cup forward as his shoulder and cheek were squeezed against the window.

"Frankie, get off me!"

"I couldn't help it, Billy, the bus turned and threw me over on your seat." The boy answered in a husky voice as he dropped his equally husky body into the seat across the aisle. He wiped the hair from his eyes and grinned at Billy. "I didn't mean to."

"You almost busted it!" Billy thrust out the cup as evidence and just as quickly pulled it back as the other boy's hands swiped outward and narrowly missed it.

"It's plastic," Frankie sneered.

Billy ignored this and scooted over to the window. He watched intently as the close-set houses staggered past, many decked with ribbons of Christmas lights that streamed down the roof and crested over the gables like waves breaking onto the shore. Their porches hung from the eaves like jowls, and they seemed as much fit for Chrismas as a dog wearing reindeer antlers. His reverie was interrupted as Frankie plopped down in the part of the seat Billy had just vacated. Billy turned his head, but in order to shield the trophy he kept his thin shoulders parallel to the window.

"You can't see it, Frankie, it's mine!" he wailed.

"C'mon Billy, lemme see it," Frankie replied, his hand disregarding the frail fortress surrounding the object in question just as his voice had effectively overridden Billy's entreaty. Billy turned away from Frankie's groping hand until his shoulders were pinned between the wall of the bus and the seat. His head, which he could no longer turn toward Frankie, was wedged into the corner to protect against any sorties from above.

Frankie's body followed his hand until he lay on top of Billy, who had slipped down and become a tent folded about his Ark. Frankie rested atop Billy and continued negotiating. "C'mon, I just wanna take one look at it. It'll just take a minute."

Billy didn't answer at first, satisfied with his defenses and content to wait for the bus stop to break the siege. He knew that the next stop, which was his, wasn't Frankie's, even though it was only five blocks from his house. Yet, uncomfortable with the silence that followed his own refusal to answer, he howled into the muffled vacuum, "Frankie, get off me! You can't see it! I know you won't give it back!"

Frankie leaned his head toward Billy. "What's that, Billy? I can't hear you. I just want to see that dumb plastic trophy."

"GET OFF ME!" With this last protest Billy jerked his elbows up, barely missing Frankie's head. Frankie, taken aback by Billy's general convulsion, jumped away. He sat back on his side of the aisle and regarded Billy with a hurt look. "I was just playin', Billy. You don't have to get all worked up over that stupid thing. See if you ever get to play football with us again."

Billy lay prone on the seat, his head leaning against the side of the bus as he looked over at Frankie. His cheeks were flushed and he still held the gold cup tightly in both hands, a situation that became precarious as the bus stopped suddenly and he rolled forward and almost fell into the leg space between the seats as his pivoting lower half found the floor. He gathered himself into the seat and stood up, trying to save a last vestige of dignity from Frankie's steady laughter. He stepped into the aisle and pretended not to notice Frankie staring up at him as he moved toward the door. A feeling of elation caught him as he stepped off the bus into the wet snow. The imminence of Christmas washed over the now distant schoolday and the revelation of his newfound link with Katie pierced through the colorless sky.

"Wanna race?" This, accompanied by a hard clap on the back, sent a chill down his spine. He cringed as Frankie continued, "The winner gets the trophy."

Billy shook off the hand and jumped away. "Frankie, it's not yours it's mine! You can't have it! get away from me! go home!" He had nowhere to go now, and could only spiral fruitlessly to keep Frankie away. Frankie stepped around him and grabbed the trophy. They stood there, Frankie grasping the cup while Billy held the base in his trembling hands.

"Go!" With that Frankie took off. Billy was pulled along behind him but tried to resist. The cup tore away from its base and into Frankie's thick hands. Billy stopped and stared at the plastic square that remained in his grasp.

"C'mon, Billy, finish the race or I'll win!" But Billy did not hear him. He looked at the meaningless lettering with an empty gaze. He gave off a low moan and began to run, gripping the remnant tightly in his hand, past Frankie, past the silent houses whose Christmas finery could not assuage the scowl with which they always regarded each other, the street, and now the boy stumbling past.

He ran home, shedding muffled sobs into the still air as soon as he had breath enough to release them. He stormed up to the house, flung wide the front door, and charged up the steps, his voice fluctuating with his movements until they were both cut off by the slamming of his bedroom door. He had passed his bewildered mother who, alarmed, followed quickly after him. She had been cleaning the house again, as she had just gone to Confession and revealed her many small misdeeds to Father Mitchell. But that didn't help and maybe she had forgotten a few, so she decided one was laziness since vigilance can't be a sin. She was a thin woman, on the tall side with faded red hair. Her features were sharp, much sharper than in her youth, as if time, instead of dulling, had refined and narrowed them, each passing trial and tribulation honing and whetting a blade so fine it soon would be nothing more than an edge.

She came up to his room, and managed to filter his story through his sobs. She wiped his tears away, and gave him an embrace that seemed to surround him with the warmth and comfort of the womb. But then she spoke.

"Who did this, William?"

It was on the tip of his tongue, but, when he opened his mouth to speak, he found he could not answer. He remembered that time when Frankie and his buddy Craig had ambushed Steve and plastered him with snowballs. Steve had gone home and told his mom, and she called the school, and the next day Frankie and Craig got paddled by Sister Elmira. They hated Steve after that, and even Billy felt that Steve had breached some unspoken agreement. So Billy did not answer. His mother pressed his hand tighter and asked again. But there was something else, something more than the mere realization that his friends' punishments could be much worse than anything his parents doled out. He was ashamed that he had allowed Frankie to bully him and take his trophy. He wanted it back. But he realized now that he had to do more than just get it. He didn't want to be the baby who cried until he got his lollipop back. He had to get it back himself, somehow. Even as the thought occurred to him he knew it was wilder than any daydream he could concoct, but his resolve remained in defiance of his child's logic.

He remained silent. His mother, caught between an objectless indignation and a compassion that was the hopeless consort of justice, abruptly rose and released his hand. She left the room on the verge of anger, not wanting the boy to witness her sudden swing of emotion. Children were so unpredictable, one moment wailing as if they were mortally wounded, the next moment going to great lengths to defend their oppressors. She tried to remember what it was like to be a child, but it was like trying to catch a handful of dust motes wafting through a lonely shaft of sunlight in an old, cluttered room.

He spent his solitude lying on his bed, gazing at the bare pedestal of the trophy. The shame was still there, but even now he could not muster any resentment against Frankie. He began to think that, in refusing his mother, he had done something Frankie would understand and sympathize with, and that somehow the indefinable but everpresent connection that bound all children had between them been strengthened. He hadn't tattled, and somehow that salvaged some of the pride he had left at the bus stop.

His reverie was shattered by the ringing phone. His mother yelled through the door that it was for him, and he got up reluctantly and went to the phone. It was Craig. Billy gleaned from him there was a football game down at the public school in a half-hour. This was a difficult process because Craig, whenever he became excited or was saying something funny, sounded like a braying donkey. As he hung up the phone, the full import of the call hit him. By now everyone would know that Frankie had taken his trophy, that he was a wimp and a pushover and couldn't stick up for himself. He dreaded what they would say to him, but he decided to go anyway, not so much because he knew that eventually he would live it down, but because he couldn't (and didn't want to) avoid his friends forever.

He walked down the street slowly and resolutely, like a criminal being led to to his execution who, with the hope of a reprieve inexplicably fresh in his mind, is determined that, whatever the outcome, he would dignify his own memory and that of others. His head still ached from his previous exertions, and his tears were still caked on his face like dry creek beds. He concentrated on the houses looming before him, filling his mind with their every detail, as if their massive immobility would somehow bring him to a halt. They were huge and rambling and mysterious, monuments to a faded intention of opulence that once crowned the hill overlooking the town. They were meant to be a gilded gateway, but were now merely a distraction from the working-class neighborhood which lay beyond. Their images rose up within him, stone bulwarks stemming the emotional tide within. But he kept moving, and one after another they vanished from his imagination like afterthoughts.

He was the last to arrive as he half-slid, half-walked down the slushy slope to the field. As he crunched through the ankle-deep snow he was met by a flying football, which he caught despite his thick mittens. He looked hard at each boy there, searching their faces for some shared secret or an unpleasant smile, but he found nothing. Only Frankie seemed to avoid him. Billy was caught now between that simple, deceptive elation that only implies the absence of worry and a

guarded, suspicious aspect that he knew he could not ignore. No doubt they were waiting for him to mess up (drop a ball, miss a tackle, trip) and then the floodgates would open. He remembered a time over the summer, when they were all here playing baseball. Somehow he had managed to get a hit, and as he led off first base, he gazed up at the deep blue sky and thick white clouds which had broken free of the encircling trees, and became entranced. One of the clouds looked like a dragon, and he imagined himself a knight rearing his white charger before galloping across the blue expanse to save Katie. Meanwhile, the pitcher had thrown the ball over to Frankie at first base, who had leisurely walked up to Billy and tagged him out. He had walked back to the makeshift dugout shamefaced, the angry cries of his own team burning his ears. He had messed up in the worst way: he had done something worthy of being made fun of and had hurt his team's chances of winning. He had determined then that something like that would never happen again.

The teams were picked up. The best athletes in the class, Frankie and Craig, displayed a political savvy that rivalled even the most polished politician of Tamany Hall. They managed, day in and day out, during recess or after-school, to place themselves and a select few on the same team. Using cajolery, jerryrigging, glad handing, and threats, their dynasty showed no signs of crumbling. Billy, as usual, was on the other team, ready once again to play the New Jersey Generals to their Harlem Globetrotters, although this was an imagined matchup between the Steelers and the Cowboys.

The outcome was never in doubt, but Billy surprised even himself with his play. He caught all the balls thrown to him and otherwise managed not to be an embarrassment. As the game was winding down, Craig hiked the ball and pitched it to Frankie, who, despite his bulk and the sliding snow, dodged tacklers half his size. Billy saw that Frankie would run his way and began to move forward. As would-be tacklers dove and missed, some intentionally, he realized a collison was inevitable. He realized that he too could dive and miss, but overriding that thought was fear, a fear mixed with a pride that could stomach any outcome but the discovery that he had been afraid. He was running full speed now, and Frankie saw him and made no effort to spin away. At the last moment Billy threw his whole body sideways, almost on all fours, and hit Frankie directly at the knees.

"Fuuck!!"

The expletive was quickly muffled in the snow. Billy turned around, his body trembling and weak from the release of adrenalin. Frankie rolled slowly onto his back, his face caked with fast-melting snow that concealed any tears. He repeated his first shocked reaction several times with a low moan. He had landed on his face.

"Frankie, are you okay?"

"Whoa, Billy, you almost flipped him!"

Everyone was torn between looking at Billy and the unfamiliar sight of an upended Frankie, so they reserved their stares for one and their words for the other.

That was it, then. Billy clenched his fist and just as quickly unclenched it. He knew how futile it would be against Frankie's sturdy, wideboned face. The only reason he could imagine that Frankie was not astride him and pounding him into the ground was that he had gotten luckier than he would believe possible. He crouched, poised to run, yet he knew full well that he would take his beating in peace. It had not occurred to him that what he had been playing was a game, and that what he had done was not only an essential part of the game, but if done well, could rouse the respect, admiration, and even the fear of his peers. The pride that he had just discovered he possessed he figured everybody else had too, only more of it. Like the child who usually understands the joke too late, he thought that what he had just understood, everyone else had known for a while. This pride would teach him to endure pain and defeat, not because it was the nature of pride, but because he had felt pain and been defeated and probably would continue to be, and he needed a way to cope with it. And Billy, who in his awe of Frankie saw him as the kid in the rocket ship reaching for the stars, like the poster in the hallway at school, knew Frankie must have the same pride, but not the pain, the defeat, or the loss. No doubt Frankie would deal with the pitch and roll in his otherwise steady upward trajectory with the same necessity as a plane lowering its flaps and adjusting its rudder to maintain its altitude.

But Frankie did nothing. He was helped to his feet and with merely a glance at him mumbled, "Damn, Billy, you almost broke my neck."

The game didn't last much longer. Billy felt again that simple elation but this time gave in to it. He felt indistinguishable from Frankie or Craig or any of the others, and he basked in the anonymity. So he was not surprised when he went with everybody else to Frankie's to watch HBO and drink hot chocolate, even though his parents expected him home for dinner.

They piled through the side door, throwing off snowcaked gloves, hats, coats, and the damp socks rattling around in their boots. They tumbled down the steps into the rec room; the TV sprang to life, and they nestled into the deep cushioned couches.

"I gotta go to the bathroom."

"Upstairs to the left."

Billy walked up the stairs. The wet, uncomfortable elastic of his sweatpants forced him to shuffle up the stairs with short steps as if a chain was binding his legs together. He stepped out into the reassuring blackness of the hallway, the soft light of the kitchen to his right aglow with the sounds of Frankie's mother preparing food, and to his left a muted blue haze emanated from the otherwise dark living room. He was in the bathroom only for a moment, and he stepped back into the hallway. He stood there for a moment, enjoying the stillness of the house, the noises of activity remote enough to allow him to contemplate them.

He tiptoed into the living room. The television was on, its mahogany casing intricately embroidered, and it crouched in the corner, roaring not with sound but with light, which bathed the room in blue. It was absorbed by the metallic ornaments which hung on the metallic tree. Across from the tree, Frankie's burly father lay in a lounge chair with his feet

up. He was still in his work clothes and he was snoring, head thrown back. The features of his face seemed a foundering ship slowly sinking into the plump expanse of his cheeks.

Billy stopped, his breath drawn inward. He saw it. It was on the mantle, reflected in the mirror as if to prevent any initial disbelief. It had been replanted on a nondescript block of wood, and was flanked either side by pictures of Frankie's several brothers at various dances and proms. They all seemed to be escorting the same girl, a child-woman wrapped in a glittering glovelike dress which revealed more than was intended, and whose mountainous, overarching mass of hair made superfluous the balloons and confetti meant to serve as a backdrop. He was already moving toward it, slipping noiselessly past the sleeping man. He was filled with the hopeless desire which follows hard upon the realization that had he never seen it again he would have been none the worse. Slowly his hand reached upward towards the cup as he raised up onto his tiptoes.

"What you doin' boy?" Billy jumped. Frankie's father was sitting bolt upright in his chair, looking at him. He retracted the footrest, got up, and lumbered towards Billy. Billy shrank back, but the cold fireplace stopped him, and as much as he wished to turn and scramble up the chimney, he knew the fireplace was fake. The father was close now, and he reached over Billy's head (so that Billy winced in spite of himself) and took the trophy down. His face softened as he gazed at the gold plastic.

"I know why someone like you would be jealous and want something like this. Francis told me he got it from his teacher for bein' the hardest worker in class, you know, bringing his grades up. I think it's important to work hard, 'cause that's how you get anywhere in life. He got to stand up in front of everybody and they all clapped for him. The teacher talked to me a while back about his deficiencies, not puttin' forth an effort and so on, so this time I'm kinda eager to see his improvement. Usually I just throw his report card in the trash, 'cause that's usually what's on it. Francis told me some kids was tryin' to take that trophy from him on the way home but he fought 'em, though there was enough of them that they still managed to break it. He came home on the verge of tears so I went right downstairs and fixed it up as best I could. You wasn't one of them, was you?"

"N-no sir."

"I didn't think so. You don't look the type. Francis, he gets a hard time of it at home. His brothers are always messin' with him, and Maggie and I are so busy at the mill we can't do anything about it. I guess I can be a little hard on him too. I wish I was at home more, and I could spend more time with him, throwin' the football and whatnot, but I'm gettin' old and can't do the things I used to. But I got him a bike and one of them Atari things, so I imagine he'll be too busy with them to notice. I'm proud of him, though, real proud. Now don't you go takin' this now."

He placed the trophy back on the mantle, tousled Billy's hair, and walked out of the room, his cheeks billowing with pride. Billy stood quietly for a moment, and then began to make his way across the carpet. Halfway, he turned and looked again at his prize. It seemed to be in motion, fading slowly back into the mantle through the double row of pictures whose reflections continued through the mirror. He felt like he was witnessing a procession, the cup a ceremonial grail moving through the everpresent review of courtiers, whose plastic smiles (as always grasping the significance of nothing) and gaudy dress were outshone by the faceless block of wood and its priceless burden. The vision continued to drift regally away from him; he was in the court of a king, he concluded, and the chalice was a gift to the king. Or maybe it was from the king. His back caught the hard edge of the banister, and the vision dissolved into the warm blue glow of the living room. He turned towards the basement door and went downstairs.

"Frankie, I gotta go home."

"All right, see ya."

The others were glued to the television and didn't bother to echo Frankie. Billy didn't mind, and he pulled on his coat and boots. He sprang up the stairs and out into the night. He walked around Frankie's house to the sidewalk and gazed through the front window into the living room. It flickered still with the soft blue light which Frankie's family would gather around as if it were a hearth. This comforted him, and as he walked down the sidewalk, he thought again about the trophy. Maybe it wasn't a king's to give or a king's to receive; maybe it was still his somehow even though it remained in its proper place on Frankie's mantle. He continued home, wrestling unsuccessfully with the problem as the falling snow caressed his cheeks and drifted peacefully about the haloed streetlamps.

Language and Mind: an Examination of the Phaedo and Other Dialogues of Plato

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Alan Rubenstein

Among the first dilemmas a student of philosophy faces is whether to proceed with the belief that the truth is commensurable with his own intellect. What is the discussion of philosophical topics supposed to achieve? Do we, by making speeches and challenging the ideas of other's speeches, advance ourselves toward any real goal which we can call truth? One might suggest that philosophy is merely a game of words or perhaps a means to some other limited end and that our language has nothing to do with reality except perhaps to name it in a superficial way. This dilemma is clearly a crossroads at which a student must decide what philosophy will mean to him–what will be at stake in his study. In this paper, I will investigate Socrates' position on this question of intelligibility and, as a consequence, explore his ideas on the relationship between language and reality.

Socrates believes in the intelligibility of the world. His way of understanding man's relation to truth represents a defense against the looming threat of skepticism and misology. It is a peculiar kind of defense, however. Belief in the intelligibility of the world is not a conclusion to which one comes from an argument. It is, itself, the foundation of argumentation. In the Phaedo, the intelligibility of the world becomes a central, although often implicit, issue at stake in the discussion. Socrates explains what it really means either to assert or deny that some truth can be gotten at through argumentation. The defense of the notion that our world is intelligible is, in part, the plausibility and attractiveness of the arguments which rest on it as their foundation. Another aspect of its defense is the ways in which it contributes to and stems from a more virtuous lifestyle. The first task of this paper will be to make explicit the implicit issue of intelligibility in the Phaedo and show the ways that Socrates convinces his interlocutors (including us as readers) that believing in intelligibility is permissible as well as beautiful.

The second part of this paper will focus on the difficulties which accompany holding such a position. Socrates mentions Anaxagoras as one of his early influences, but claims that his adherence to intelligibility led him to an extreme position on what could be apprehended by a human mind and an extreme denial of the role of sensible phenomena in causation. This denial forced Anaxagoras into hypocrisy when he tried to explain the specifics of how things come to be and pass away. Socrates' view is that the extreme of Anaxagoras is in need of reconciling with the facts of everyday life, yet this is difficult to accomplish without abandoning intelligibility and once again placing truth in the ever-moving sea of sense-experience.

Socrates manages to accomplish this reconciling, however, by positing a system where words, or 'λογοι', are at the center of the cause of generation and corruption. Unfolding how this can be so will be the goal of the third part of this paper. Language is an activity of the rational intellect and it is an image of the reality that truly *is* to the same extent as are the sensible objects. Part of Socrates' system is an assertion that we, as limited beings, can not commune directly with reality, itself, and thus we must rely on images of that reality. In this way, truth is commensurable with our minds but not limited to what they can encompass. Which images we make use of, however, is the crucial question. Our avenue to truth lies not in the images which are the sensible objects, but in the images which are our language, our speeches, our λογοι, which express them and, at the same time, point to the something universal and eternal. I will make extensive use of the Republic in order to investigate what it means for there to be images of reality which are different in kind.

At the end of this third section of the paper, I will look specifically at the relationship between the λογοι and the forms, or 'ειδη'. This is a necessary task as the forms are obviously crucial to Socrates' idea of what the reality is which language images and also what the truth is at which argumentation aims. In this sub-section, I will refer to the Parmenides, in the hope that by addressing Parmenides' challenges to the young Socrates and his idea of the forms I can find an avenue into understanding the mature Socrates' idea of forms and language. This section on the ειδη will be somewhat more speculative than what proceeds it. What I intend is to give an interpretation of the relationship between the λογοι and the ειδη which will make sense of Socrates' system of an intelligible world articulated through language.

1. The Attractiveness of Intelligibility

Introduction

The explicit issue at stake in the Phaedo is the immortality of the soul. This issue is set in the dramatic context of an account of the last day of Socrates' life. At one point, Socrates says, "I do not think that anyone who heard me now... could say that I am babbling and discussing things that do not concern me." (Phaedo 70b) The issue of whether the soul perishes at the death of the body is, obviously, a critical issue for Socrates and his friends at this moment. There is another issue, though, which is central to the argument in the dialogue and which also fits into the dramatic context. This is the issue

of whether or not the world is intelligible; whether one can get at truth through argumentation. As the interlocutors, especially the Thebans Simmias and Cebes, find problems with Socrates' argument, the implicit question is raised whether any answer to such an important question as immortality can be convincing or comforting. This issue of intelligibility is appropriate to the dramatic events of the dialogue because on it depends the question of whether debating with one's colleagues into the meaning of things is the right activity for a man about to die and, moreover, for any man who wants to live rightly in the ultimate sense. To put it bluntly, if the activity of argumentation is not directed toward a truth which is real in the deepest sense then Socrates has wasted his final hours and the majority of his life. Thus, the Phaedo becomes another defense of the philosophic way of life.

The activity of dialectic rests on the notion that the world is ultimately understandable. If it is not, then all that is left is the activity of the contradictor:

> "You know how those in particular who spend their time studying contradiction in the end believe themselves to have become very wise and that they alone have understood that there is no soundness or reliability in any object or in any argument" (Phaedo 90bc)

Socrates' task in responding to Simmias and Cebes is twofold. He must convince them that their objections do not disprove that the soul is immortal and he must convince all those present that dialectic is not a worthless endeavor because the world is ultimately intelligible to the mind of man. The former task is the more explicit. What I will first demonstrate is that the latter task is implicitly present in the dialogue. In doing this, I will show what it means to Socrates for the truth about things to be ultimately intelligible. Socrates' innovations regarding language, which will be the focus of the succeeding sections of this paper, can be better understood with this meaning as a backdrop.

Simmias and Cebes' Challenge to Intelligibility

Plato uses the multi-leveled nature of the dialogue to present the issue of intelligibility. After Simmias and Cebes raise their objections, Echecrates and Phaedo–the men in the town of Philus discussing Socrates' final hours long after the events occurred–re-enter the dialogue for the first time. The action of the dialogue is moved to one level up –one level closer to the reader's point of view. This happens when Phaedo says,

> "When we heard what they said we were all depressed, as we told each other afterwards. We had been quite convinced by the previous argument and they seemed to confuse us again, and to drive us to doubt not only what had already been said but also what was going to be said, lest we be worthless critics or the subject itself admitted of no certainty." (Phaedo 88c)

Phaedo was present in the jail cell, feeling the anxiety at the prospect of unintelligibility. Echecrates, hearing about the discussion at second hand, feels the same anxiety, as is made clear in his response, "By the gods, Phaedo, you have my sympathy, for as I listen to you now I find myself saying to myself: "What argument shall we trust?"" (Phaedo 88c) Despite his distance in space and time, Echecrates feels this anxiety. We, as readers, feel it as well. By means of this interjection, Plato temporarily removes the walls between the levels of the dialogue. It is appropriate that he should do so at this moment because it is here that the second main issue of the dialogue comes from out of the background to the fore of the debate. As living beings, Socrates' listeners at every level feel the importance of the issue of immortality. As students of philosophy, the same importance exists for every listener in regards to the intelligibility of the world. The two possibilities which Phaedo suggests are (a) that we are worthless critics or (b) that the subject admits of no certainty. Either of these options amounts to a confession of the incommensurability of our intellects with the truth. These two possibilities will resurface as the alternatives to intelligibility which loom over the discussion at all times. What is at stake is the way of life of all those who search for truth through argumentation.

Misology

The interjection of Phaedo's narrative voice allows us to see Socrates' reaction to the anxiety into which his interlocutors have been plunged. Phaedo describes him as "sharply... aware of the effect the discussion had on us." (Phaedo 89a) When Phaedo returns to his recounting of the events in the cell, it is significant that the discussion he takes up is between Socrates and himself. Phaedo is a participant in the jail-cell argument only at this place–only when what is at stake is argumentation, itself. The man who disappears into anonymity as the narrator of the dialogue takes on a real dramatic personae for this discussion only. This is another case of blurring the division between levels of the dialogue in order to examine argumentation directly.

Socrates begins his rebuttal of the Thebans' objections by stating how much is really at stake in them. The following interchange shows where he believes one's priorities should lie:

> "Tomorrow, Phaedo, (Socrates) said, you will probably cut this beautiful hair.
> Likely enough, Socrates, I said.
> Not if you take my advice, he said.
> Why not? said I.
> It is today that I shall cut my hair and you yours, if our argument dies on us, and we cannot revive it." (Phaedo 89bc)

By suggesting that Phaedo cut his beautiful hair, Socrates expresses his belief that the death of the argument is more worthy of mourning than the death of a man. He also suggests that if the argument dies, beauty will somehow be sacrificed with it, implying a close connection between truth and beauty. This is one indication that the issue of what is beautiful has a proper role in developing one's opinion regarding the nature of argument. It is not the rebuttal of any single argument, of course, which should occasion such mourning, but rather the death of argumentation, itself. Simmias and Cebes introduce a state of perplexity by presenting arguments that seem reasonable and convincing. More important than the particulars of the Thebans' objections, the interlocutors are discouraged by the very fact that there seem to be two mutually exclusive

ideas which are both appealing. If things are left in the state of confusion which they introduce with their alternative arguments, it will seem to indicate to all that argumentation is a worthless enterprise and the only 'wisdom' lies in skepticism and distrust.

After promising to fight the objections raised "as long as the daylight lasts," (Phaedo 89c) Socrates introduces this danger of skepticism or 'misology.' Misology arises

"When one who lacks skill in arguments puts his trust in an argument as being true, then shortly afterwards believes it to be false–as sometimes it is and sometimes it is not–and so with another argument and then another." (Phaedo 90b)

This experience, common to all students of truth, forces one into a decision. Either one can become a skeptic, believing that they alone have understood that there is no soundness or reliability in any object or in any argument, or one can maintain their trust in the intelligibility of things and therefore continue to search for truth through argumentation. Socrates tells Phaedo that one is not compelled to accept the first of these alternatives. He explains this when he says,

" If there is any system of argument which is true and sure and can be learned, it would be a sad thing if a man... should hate and revile (arguments) all the rest of his life, ande deprived of the truth and knowledge of reality." (Loeb, Phaedo 90d)'

The possibility of there being a true and sure system of argument, Socrates suggests, should keep one from becoming a misologist. It is because Socrates will not accept the possibility that the world is unintelligible that he tries so fervently to deter his listeners from becoming mere contradictors and not seekers of truth.

Courage, Beauty and the Choice of Intelligibility

Plato does not present his readers with any solid proof upon which Socrates stakes his belief in intelligibility. Instead, he creates events and speeches which suggest that the search for truth is a worthy endeavor because it is beautiful and because it is connected to ethical virtues such as courage. One point at which he suggests the connection between courage and the belief in intelligibility is immediately before Simmias and Cebes make their objections. The Thebans are hesitant to bring up their objections, for which Simmias offers the following reason:

"Both of us have been in difficulty for some time, and each of us has been urging the other to question you because we wanted to hear what you would say, but we hesitated to bother you, lest it be displeasing to you in your present misfortune." (Phaedo 84d)

Simmias is expressing a lack of confidence in Socrates' courage to take up their objections given his present circumstances. This can, of course, be understood as simple politeness to a man who has only hours left to live. However, there is more behind the Thebans' hesitation than Simmias says. These men know that they hold a threat to all of the interlocutors' trust–including their own–in the possibility of a satisfactory answer. They are fearful that their objections may really be devastating to Socrates' argument. Consequently, all the interlocutors would be hard pressed to believe in the productivity of any argument regarding such an important matter as immortality.

However, belief in intelligibility inspires much courage, as Socrates shows them. He tells them that he, like the swans of Apollo, is gladly singing before his death. Socrates' song is his argument and he will not be so fearful as to leave it half-completed because of the threat that any objection would be too strong for the argument to bear. Therefore, he says, "you must speak and ask whatever you want as long as the authorities will allow it." (Phaedo 85b) Simmias responds to this with a statement which shows that he, too, has a tendency toward believing that the world is intelligible and that this is cause for a courageous attitude:

" I believe, as perhaps you do, that precise knowledge on that subject is impossible or extremely difficult in our present life, but that it shows a very poor spirit not to examine thoroughly what is said about it, and to desist before one is exhausted by an all-round investigation." (Phaedo 85bc)

It is no matter that 'precise knowledge' (σαφες ειδεναι) is near impossible on matters like immortality (a position which Socrates also maintains, as I will discuss later). One must have the courage to pursue the matter with his intellect as far he are capable. This courage is a product and a cause of the notion that the truth which is sought is commensurable with our minds.

Despite Simmias' invocation to courage, the interlocutors, including Simmias himself fall into the fearfulness I described earlier when both Thebans put forward their piercing objections. Thus it is necessary for Socrates to, in Phaedo's words, "(recall) us from our flight and defeat and (turn) us around to join him in the examination of their argument." (Phaedo 89a) Courage, again, stems from belief in intelligibility. During the discussion of misology, Socrates gives one more exhortation to the courageous behavior which the search for truth represents. He says,

"We should not allow (μη παριωμεν) into our minds the conviction that argumentation has nothing sound about it; much rather we should believe that it is we who are not yet sound and that we must take courage and be eager to attain soundness." (Phaedo 90e)

The hortatory subjunctive, 'μη παριωμεν' indicates that Socrates is delivering an exhortation to act in a certain way. He is saying 'let us not pass into our mind the hatred of argument.' Given the choice–and it is a choice, not a compulsion–between believing that argumentation is faulty or believing that argumentation is the only avenue to the truth, Socrates indicates that the latter is the choice made by the courageous man and the lover of beauty. This position is consistent with the one which Socrates puts forward in the Meno when he says,

" I would contend at all costs both in word and deed as far as I could that we will be better men, braver and less idle, if we believe that one must search for the things one does not know, rather than if we believe that it isnot possible to find out what we do not know and that we must not look for it."(Meno 86bc)

Here, as well as in the Phaedo, the essential connection between holding that the world is intelligible and leading a virtuous life is made evident.

The view that truth is intelligible to the mind of man is an idea too close to the foundation of all argument to be *proven* in the conventional sense. One would have to use argumentation to validate argument. To understand this difficulty, one only needs to imagine a conversation with a 'true' and uncompromising skeptic. The would-be proponent of the proof for intelligibility will always be accused of ' sophistry' or word-mixing and will never get off the ground unless it is agreed upon, in an axiomatic way, that some sort of truth is accessible through discussion. This axiom (from 'αξιος,' worthy) does not *compel* its acceptance. However, it attracts acceptance with its beauty and its inspiration to lead a courageous intellectual life. Socrates makes the case for accepting this axiom not only by the things he says, but by the very act of spending his last hours in philosophical conversation. For that matter, he makes the case by the way of life he has always led, centered as it was around dialectic. If Socrates' life has an appeal to us and to his listeners, then the axiom of intelligibility will attract acceptance.

II. The difficulty of intelligibility

Introduction

"Thus prepared, Simmias and Cebes, (Socrates) said, I come to deal with your arguments." (Phaedo 91b)

Socrates, as he proceeds to deal with the explicit challenges which Simmias and Cebes have raised, maintains this notion of intelligibility as an accepted axiom from which he will make his counter-arguments. The issue of intelligibility recedes to the background during his rebuttal of Simmias' objection. However, it comes to the fore again when Socrates deals with Cebes'. Cebes has potently challenged Socrates by assenting to much of what he has said but maintaining that immortality has not yet been established from this. This partial agreement makes his objection more plausible to the listeners and therefore more threatening to their sense that an understandable answer can be found. Socrates restates Cebes' objection saying,

"To prove that the soul is strong, that it is divine, that it existed before we were born as men, all this, you say, does not show the soul to be immortal but only long-lasting... indeed, its very entering into a human body was the beginning of its destruction." (Phaedo 95cd)

In order to convince Cebes, Socrates must show him that the soul is not a more durable thing of the same kind as the body, i.e. long lasting,' but that it is something eternal. Socrates does not address Cebes' objection directly at first. He says, "This is no unimportant problem that you raise, Cebes, for it requires a thorough investigation of the cause of generation and destruction" (Phaedo 95e) It is here that Socrates again raises the issue of intelligibility, this time presenting the difficulties and limitations which accompany it.

Natural Science

In this investigation, Socrates gives a brief autobiography of his struggles with causation early in life. The earliest part of this struggle was his interest in natural science' (περι φυσεως ιστοριαν). Socrates describes the fruits of this early experience when he says, "This investigation made me quite blind even to those things which I and others thought that I clearly knew before." (Phaedo 96c) Socrates became disillusioned with natural science because its net effect was to confuse him. Even the simplest problems came to be puzzles. For example, Socrates says,

"I will not even allow myself to say that where one is added to one either the one to which it is added or the one that is added becomes two, or that the one added and the one to which it is added become two because of the addition of the one to the other." (Phaedo 96e)

Socrates' account makes it clear that he became disillusioned with this method of inquiry into nature because it led away from intelligibility, whereas he was convinced that the proper method of explaining generation and corruption should lead toward intelligibility. The axiom of intelligibility forced Socrates to look elsewhere for the final answer to this question of cause.

It is important to understand what this method of inquiry referred to as 'περι φυσεως ιστοριαν' is and why it should lead one to confusion as it did for Socrates. There is an indication of the answer to this in the image Socrates describes of an eclipsing sun. He says,

"I thought that I must be careful to avoid the experience of those who watch (σκοπουμενοι) an eclipse of the sun for some of them ruin their eyes unlessthey watch (σκοπωνται) its reflection in water or some such material. A similar thought crossed my mind, and I feared that my soul would be altogether blinded if I looked (βλεπων) at things with my eyes and tried to grasp them with each of my senses" (Phaedo 99d)

The method of investigating nature that confused Socrates attempts to understand it through the act of perceiving sensible phenomena. The verb 'σκοπεω' has the meaning of to look about' and also 'to contemplate or consider.' (cf. Liddell and Scott) The image gets its power from the ambiguity of looking with the eyes as opposed to looking with the mind. As is the case in many places throughout the dialogues, vision and contemplation, seeing and knowing, are paired in an imagistic way. However, this ambiguity is dropped in the second sentence when the word 'βλεπων'–a looking which is unambiguously with the senses– is used. This word, and generally the image of looking into the sun, suggests why natural science confuses: it looks for truth through instruments of the body, making secondary the role of intellect. A further indication of this is the image of an *eclipse* of the sun, in particular. An eclipsed sun, unlike that which we see day to day, is

obscured in a way that can mislead one to believe it can be looked at without causing damage. Only during an eclipse, when it seems safe to look, could one be blinded. Looking at an eclipse of the sun is analogous to investigating the truth of things by means of the facts of daily life which we perceive with our senses. It does not seem that one is being blinded–i.e. losing their ability to make things intelligible–yet this is what is happening. Any thinker who seeks to challenge the notion that knowledge is perception must convince his challengers that they are deceived. After all, the most commonly held and intuitive' view is that those things which we perceive are the most true things of all. Natural science, the mode of investigation which Socrates shies away from, is blinding to his soul. It leads to un-resolvable confusion.

The question remains, however, why should investigating truth through visible phenomena lead to such confusion? Socrates only gives a few examples of the kind of causes which natural science yielded for him. One of these is the addition of one and one, cited above. Another is the idea of growth being caused by food, for food "adds flesh to flesh and bones to bones." (Phaedo 96d) The difficulty Socrates might have had with these explanations of cause is that they are simply additive. They point out that where there were two things there is now one or where there was one there are now two, but they do not answer the question of why? in the way that a true theory of causation should. Socrates says of the natural scientists' kind of answer to the placement of the earth in the heavens,

"One man surrounds the earth with a vortex to make the heavens keep it in place, another makes the air support it like a wide lid... they believe that they will some time discover a stronger and more immortal Atlas to hold everything together more." (Phaedo 99c)

Looking for answers to such questions in the visual phenomena always simply yields more observations and more questions. No material answer will ever be 'strong and immortal' enough to answer the question, 'why is the Earth held together?' or 'why does food add flesh to flesh?' The type of answer which *is* appropriate to such questions becomes clear in the next section of Socrates' autobiography.

Anaxagoras and Mind

Socrates says that, after renouncing the method of natural science, he developed a new method of his own. His account of this new method begins with a description of his encounter with the theory of Anaxagoras who assigned Mind as the cause of all things. Socrates describes his response to finding this theory by saying, "I was delighted with this cause and it seemed to me good, in a way, that Mind should be the cause of all." (Phaedo 97c) It should not be surprising that Socrates was excited by this idea. In it, one has intelligibility of the world at its purest. If the cause of all things is the working of a rational mind, how could *our* rational intellects not be commensurable with the truth about reality? Here was a suggestion that would not yield endless confusion. Socrates explains, logically, that, "If this were so, the directing Mind would direct everything and arrange each thing in the way that was best." (Phaedo 97c) This is the activity of the rational intellect–to aim at what is best–and therefore, if Mind is the cause of all things, the cause of generation and destruction is reducible to the most advantageous way things can be arranged: I never thought that Anaxagoras, who said that those things were directed by Mind, would bring in any other cause for them than that it was best for them to be as they are." (Phaedo 98a)

Socrates claims, however, that this theory of cause fails in its application. Anaxagoras himself was unable to explain the generation and destruction of things without abandoning Mind and ascribing material causes to them: "The man made no use of Mind, nor gave it any responsibility for the management of things, but mentioned as causes air and ether and water and many other strange things." (Phaedo 98bc) These material causes hearken back to the additive causes of the natural scientists. Socrates gives an example of the difference between what Anaxagoras should have said and what he actually said when he explains cause in respect to his own rational mind. Rather than say that Socrates is in his jail cell because his bones and sinews are arranged in the way that they are, Socrates rightly points out the real cause of his being there:

"For by the dog, I think these sinews and bones could long ago have been in Megara or among the Boeotians, taken there by my belief as to the best course, if I had not thought it more right and honorable to endure whatever penalty the city ordered rather than escape and run away." (Phaedo 98e-99a)

If Anaxagoras really means that Mind directs all things, then Socrates believes he should be able to offer an explanation for their generation and decay, not by reference to ether and air, but by reference to what Mind considers more right and honorable. Anaxagoras' suggestion leads one to hope that the cause of all things can be explained relatively simply based on the principle that Mind on the grand scale functions like mind on the individual level. This hope is the one that Socrates would not have exchanged... "for a fortune." (Phaedo 98b). These hopes are nonetheless dashed, however. Mind may be the cause, but it is by no means simple to sort out the best and most honorable reasons for all the events we experience.

Here, again, the image of the eclipsing sun is instructive. On the one hand, as I discussed above, the image points to the mistake of trying to grasp truth through the senses. The image also points to the futility of trying to comprehend (σκοπεω) the source of all truth. This source of all truth is, in Anaxagoras' system, Mind and, in the metaphor, the sun. Mind may be–even, perhaps, must be–the cause of all things, but it can not be apprehended directly. Recall Simmias' comment about the difficulty, or even impossibility of gaining precise knowledge about a subject like immortality (cf. Phaedo 85c). The Greek there for 'precise knowledge' is σαφες ειδεναι, which can also be rendered 'to see clearly.' To Socrates' thinking as well, it is impossible, or at least only possible for a very few, to see the sun or to understand the ordering Mind clearly. This is, perhaps, why Anaxagoras fails in the application of his system. It does not mean, however,

that a system which makes the truth intelligible to our minds is impossible. Socrates' new method has the task of preserving the intelligibility of Anaxagoras' system without pretending that reality can be apprehended directly. He must describe a way that our minds can remain commensurable with the truth without having the capacity to apprehend it directly.

III. Socrates' Solution to Intelligibility: The φυρω Method' and Language

Mixing Wet and Dry

Socrates introduces his new method of investigation by saying,

"I do not any longer persuade myself that I know why a unit or anything else comes to be, or perishes or exists by the old method of investigation, and I do not accept it, but I have a confused method of my own." (Phaedo 97b)

The words 'confused method' are interpreted from the Greek verb used in this sentence, φυρω. This word has the primary meaning of *"to mix* something *dry with* something *wet*." (Liddell and Scott, author's emphasis). Socrates' system is a mixture of the dry stability of Anaxagoras' Mind with the fluid unpredictability of the visual phenomena with which natural science concerns itself. He accomplishes this mixture by positing language as kind of 'medium' for Mind and visible things. Language becomes for him a new kind of cause of generation and destruction.

To begin to explain how this is so, I return to the image of the eclipsing sun in the Phaedo:

"I feared that my soul would be altogether blinded if I looked at things with my eyes and tried to grasp them with each of my senses. So I thought I must take refuge in words[a] and examine in them the truth about things." (Phaedo 99e)

Taking refuge in words or 'λογοι' means fleeing from the danger of un-resolvable confusion by basing one's understanding of truth on language. Language is, in the sense in which I am using the term, the articulation of the mind's encounter with reality. Socrates, by putting language at the center of his understanding of causation, is putting the human mind into the equation of the natural scientists, and, conversely, he is putting the multitude of phenomena that the natural scientists observe into the intelligence-based system of Anaxagoras. He affirms the existence of the many visible phenomena and returns to them their role in the system of causation. The truth is not attained by the observation of visible phenomena, themselves, but rather by the contemplation and manipulation of their expression in language. Through this expression, the visible phenomena have a role in our understanding of generation and corruption. In harmony with Anaxagoras' system, though, Socrates retains Mind as the primary factor because language is, after all, an activity of the intellect.

Socrates suggests in his image that one can look at the sun without being blinded by looking at its reflection in water or some such material.' This is, first of all, another subtle indication of the mixing, the furw,' he is accomplishing. The sun, representing Mind, is reflected in water, representative of always-moving visible phenomena. It is still the sun that is being seen, indicating that the system is, first and foremost, intelligible. However, it is only capable of being seen in the water, indicating that the facts of everyday life are not without impact on the true system of understanding. They are, in fact, the location' of truth, in that they are what occasion language. In the dialogue Timaeus, the claim is made that the true value of our sight is that it leads to philosophy:

" Sight, then, in my judgment is the cause of the highest benefits to us in that no word of our present discourse about the universe could have been spoken had we never seen stars, Sun and sky." (Timaeus 47a)

Sight occasions language and language is the articulation which points to the truth beyond any visible things, to reality, itself.

Kinds of Images

One misconception Socrates anticipates in putting forth the image of the eclipsing sun is corrected when he says,

"However, perhaps this analogy is inadequate, for I certainly do not admit that one who investigates things by means of words is dealing with images, any more than one who looks at facts." (Phaedo 99e-100a)

Taking the sun to be representative of the truth, language is not an image of this truth *any more* than facts are. The means of investigating reality that is language is no more distant from reality than the means of investigating things that is the use of 'facts'–i.e. the use of sensible phenomena. The words 'any more than' in Socrates' statement are significant as he is not denying the imagistic character of either sensible experience or language. They are both images of pure reality, though language is clearly the one which represents an avenue to truth.

In order to understand why this is so one must consider what the nature and kinds of images are for Socrates. All of the dialogues are filled with images of different kinds which are meant to convey truth to Socrates' interlocutors. The claim made in the Phaedo is that all language is imagistic, not just the part of it which announces itself as an allegory, a metaphor or a myth. Moreover, the claim is made that the sensible phenomena of our daily lives are also images and even images to the same *extent*. Clearly, however, language and visible objects are not images in the same *way*. Other places where Socrates discusses images and their relation to that which they image are in the divided line and cave analogies of the Republic. An excursion into these images will be helpful in order to understand how the λογοι are a refuge from un-resolvable confusion.

In the divided line image of the Republic, the second and third segments of this line correspond to, respectively, the visual objects and the intelligible objects conceived through the use of hypotheses (sometimes referred to as mathematical objects). These segments are equal in length, however, meaning equality in the amount of truth in which they par-

ticipate. The connection between natural science and the second segment of the divided line is clear enough: both occupy themselves with visual phenomena in order to gain understanding. The correlation between the mathematical knowledge and Socrates' investigation through λογοι, however, is not immediately clear. After presenting the image of the eclipse, Socrates says,

"I started in this manner: taking as my hypothesis in each case the theory that seemed to me most compelling, I would consider as true, about cause and everything else, whatever agreed with this, and as untrue whatever did not so agree." (Phaedo 100a)

The description in the Republic of the third segment of the divided line is very similar:

"One part of the soul, using as images the things that were previously imitated, is compelled to investigate on the basis of hypotheses and makes its way not to a beginning but to an end." (Republic 510b)

In both cases, some degree of truth is gained through the use of hypotheses and argumentation.

Both the second and the third segments of the divided line are equal in length and they both stand for affections arising in the soul which are images of reality. Nonetheless, the way in which the visible phenomena are images differs from the way in which language is. The images represented by the second segment are a 'dead-end' in terms of finding truth. This is true, first, because the idea of truth has no real meaning in terms of visible objects considered 'in isolation' (to whatever extent this is possible). Only when visible objects are named and in some way considered through language by a rational mind do they obtain a truth value. In other words, it is intelligible objects, not visible ones, which are either true or false. This is reminiscent of the failure of the mode of explanation of natural scientists. They fail to address the question 'why?' because they speak in terms of visible rather than intelligible objects.

Still, more needs to be said about the difference between noetic images of reality and sensible images. In the analogy of the cave, the visual phenomena are strictly limited to what is perceived inside the cave, while the intelligible objects are those experienced in the fully illumined outside world. The rocks and trees and astronomical bodies in the world outside are the realities and they cast their shadows and are reflected in water in the outside realm. These images are the first level removed from the realities and correspond, I would say, to language and the third segment of the divided line. The man who leaves the cave must occupy himself with these images in order to accustom his eyes to the real world. Inside the cave there are two sets of things which are clearly images of the realities. One of these is described by Socrates when he says, see along this wall human beings carrying all sorts of artifacts, which project above the wall, and statues of men and other animals." (Republic 514c) The other type is the shadows which are cast by these artifacts and statues on the cave wall. One, or perhaps both, of these sets of objects correspond to the visible phenomena and the second segment of the divided line. Both of them differ in significant ways from the images in the intelligible realm.

The artifacts and statues in the cave are similar to the real objects in the world outside the cave in a way that the reflections in water are not. They are three-dimensional, solid things with a kind of being in their own right. In contrast, the reflections in water are more obviously images. However, the artifacts and statues are 'phony.' They are mere copies of real things, separated from their source and separated from the light which illuminates the outside realm. If these two things are taken as corresponding to the second and third segments of the divided line, then it is possible to understand how they can be equal in length, yet different in kind. Language is, indeed, more obviously imagistic than sensible things which have a deceptive real-ness about them. However, language is an inhabitant of the intelligible realm. It retains its kinship to the realities it images in a more connected way. For this reason, the observation of the artifacts in the cave only advances the seeker of truth a small amount, while observation of the images in water trains the eyes for observation of the realities themselves and provides an experience of them, albeit distorted. If, on the other hand, one takes the shadows cast on the wall as indicative of the visible phenomena (these are that which all of the prisoners see and judge) then one gets the idea of a two dimensional, colorless projection of a copied object–again separated from the illuminating sun–as opposed to the kind of colorful, and dimension-retaining reflection one sees in a lake on a sunny day.

The difficult question remains as to how we can say that sensible objects are images to the same extent as words. These objects seem real enough for most people never to question whether there is a reality beyond them. One solution to this question lies in the Timaeus, when Timaeus says,

"Nor must we speak of anything else as having some permanence, among all the things we indicate by the expressions 'this' or 'that,' imagining we are pointing out some definite thing. For they slip away and do not wait to be described as 'that' or 'this'... We should not use these expressions of any of them but 'that which is of a certain quality and has the same sort of quality as it perpetually recurs in the cycle.'" (Timaeus 49e)

Even the most seemingly solid objects around us are only temporarily in the state in which we experience them. To say that a table is a real thing is to ignore that it is a thing in the process of changing into something else. In this way, visible things are images. They are transitory instances which we perceive and with which we interact. On the other hand, to say that the word 'table,' by itself, is a real thing is also absurd. The sound made by the vocal chords or the letters placed next to each other on the page are clearly an image of something beyond themselves. Both of these things being images, however, it is clearly the latter, the words and accounts, which have the capacity to advance the soul toward the truth. By speaking or writing words we can engage in rational discourse. We can create and explore truth.

Language and the Forms

When Socrates finishes with the image of the eclipse, he anticipates that still more needs to be said to the interlocutors to make them understand what his system means. It is at this point that he draws out a connection between the λογοι and the forms, the ειδη. The forms, or things-by-themselves, perform a dual function in his presentation. Socrates says,

"I am going to try to show you the kind of cause with which I have concerned myself. I turn back to those oft-mentioned things and proceed from them. I assume the existence of a Beautiful, itself-by-itself, of a Good and a Great and all the rest. If you grant me these and agree that they exist, I hope to show you the cause as a result, and to find the soul to be immortal." (Phaedo 100b)

Socrates just explained that his new method involves seeking truth through arguments based on hypotheses. On the one hand, the Beautiful, 'itself-by-itself' and the other forms, serve here as an example of hypotheses which, if their consequences are adequately explored, will lead to certain conclusions. One such conclusion, Socrates claims, is the immortality of the soul. On the other hand, however, the forms are themselves the cause which Socrates' autobiography meant to uncover; they underlie the λογοι into which he fled. He goes on to say,

"If there is anything beautiful besides the Beautiful itself, it is beautiful for no other reason than that it shares in that Beautiful and I say so with everything... I no longer understand or recognize those other sophisticated causes, and if someone tells me that a thing is beautiful because it has a bright color or shape or any such thing, I ignore these other reasons–for these all confuse me." (Phaedo 100cd)

Socrates rejected the kind of causes which the natural scientists put forward because they did not adequately address the question, 'why?'. By suggesting this alternative, Socrates is asserting that his 'simple-minded' idea–that beautiful things are beautiful because of the Beautiful, itself–is somehow a more adequate answer. It is an answer which goes beyond finding 'a stronger Atlas' and answers the question in a deeper way. I suggest that the reason it does this is that ascribing the Beautiful, itself, as cause means that the language we use signifies reality in a more direct way than is commonly thought.

Neither the word 'beautiful' nor the description of the color and shape of a beautiful object fully describe the reason that object is beautiful. In this way, they are both images. However, the word points to something universal–to the quality of beauty which adheres in all of the things which are described as beautiful. The description of color and shape confuse Socrates in the same way that the whole method of investigating truth through visible phenomena did. Nothing about the color of an object points to anything universal. The same color may make another object ugly. The word, and the articulation that follows upon it, however, are images which point to the universal. This should remind one of the reflection of the sun in water outside of the cave. The reflection is not the sun–not as clear or as bright–but it points directly to its heavenly source.

How does this answer keep from 'begging the question', however? One might criticize Socrates by saying that he does not answer the question 'why' a certain quality exists by simply referring back to that quality in its universal sense. Here lies the key to Socrates' solution. His suggestion amounts to uniting the universal idea with the particular object through the medium of the intelligence. There exists in the intelligent mind an idea of beauty which applies to many different objects. This idea has an articulation in language even before it is ever spoken. When a certain object is recognized as beautiful, the cause of its beauty is the fact that it is something to which the idea of Beauty is applied and this application is accomplished through language, i.e. by calling the object 'beautiful.'

To put this another way, it makes sense to say that all of the different things which we call beautiful have something in common. This common 'something' is signified by the word 'beautiful.' Socrates is asserting that it is better to refer to that which is common to all beautiful things in order to explain why they are beautiful than to try to find the answer in the particulars of the object. It is for this reason that language can refer back to itself in order to explain causation. It is because of our intelligence that we recognize 'common things,' or universals, and it is by our language that we articulate them. The fact that it seems like Socrates is begging the question leads him to call his method 'simple,' 'naïve,' and 'foolish.' In truth, however, the method removes the divide between objects and universals which mistakenly leads one to expect a more sophisticated' answer. He is able to remove this divide because of his emphasis on the role of language and intelligence in the being of an object.

In one manner of speaking, the forms, such as the Beautiful, itself, are universals. This is how we usually think of them when we relate them to sensible objects. In another manner of speaking, however, the forms are intelligible *realities* of such a nature as to never undergo change. Only they are eternal and immune to the process of becoming and for this reason they are the only things which truly *are*. This is the crucial way in which they are unlike those things Timaeus refuses to grant the status of a 'this' or a 'that.' For this reason, the forms are not images, though we only have discourse with them by articulating their images, in one sense, through speech and observing their images, in another sense, through perception.

In the Parmenides, the aged Parmenides challenges the young Socrates' theory of forms which are separate unto themselves by suggesting that such a hypothesis places an unbreachable divide between the eternal realities and the temporal things. Parmenides tells Socrates, "you have, so to speak, not even touched upon how great an impasse (αποριαν) there is if you try to posit each form as one, somehow distinguishing them from the beings." (Parmenides 133ab) The word 'αποριαν' has a clear spatial connotation. It is formed with the alpha-privative and the word πορος, whose primary meaning is "a means of passing a river" (Liddell and Scott) Besides the explicit meaning of a difficulty which faces Socrates, this word carries with it the implicit meaning of a chasm, or divide, between the elements of the theory of forms: the temporal and the eternal. Parmenides' final objection most clearly makes this chasm manifest. He says,

"The things among us, then, these things which take the forms' names, are themselves related only to themselves, but not to the forms, and they belong only to themselves and not to whatever things are named the same." (Parmenides 133d)

If eternal things are distinguished from the temporal, what intercourse can they possibly have? The young Socrates is unable to answer this objection. I suggest, though, that Socrates at the end of his life has come to a resolution of this problem based on language as a medium of both the eternal and the temporal. The key is to understand language as an image of the true realities that points to those eternal realities from the vantage point of an intelligent mind living in a world of visible phenomena. The eternal and the visible seem hopelessly separated only if one underestimates the faculty of language and thus intelligence. Parmenides suggests that only Knowledge, itself, can know what Truth, itself, is. This may be true in the strictest sense of *knowing*, Socrates would say. However, this does not preclude *our* minds and *our* knowledge from understanding that part of truth that lies within their scope. This understanding begins with pointing to the eternal by means of our words and proceeding to develop our articulation by working from hypotheses to conclusions.

Parmenides, after pointing out the απορια which lies ahead of Socrates makes a concession of sorts regarding the young thinker's idea of the forms:

"And yet, if someone, in turn, Socrates, after focusing on all these problems and others still, shall deny that there are forms of the beings and will not distinguish a certain form of each thing, wherever he turns he'll understand nothing, since he does not allow that there is an ever-same idea for each of the beings. And so he will utterly destroy the power of dialogue." (Parmenides 135bc)

Parmenides is suggesting that the forms are essential to speech and understanding, but nonetheless they do not have the sort of true existence which would convince Parmenides that there exist many things. There is a similarity here between Parmenides' opinion and Anaxagoras'. Where Anaxagoras seems to deny the sensible phenomena a role in causation, Parmenides denies them existence in any sense. If one assigns language its proper role in the generation and destruction of the world, the distinction Parmenides makes between being necessary for dialogue and being truly existent vanishes. If the forms exist in speech and, moreover, are the realities which underlie all our efforts to articulate the being of things, then that is enough existence for Socrates. Our indication of the forms comes through our words, but the forms are by no means *merely* words, nor *merely* necessary for dialogue. The forms have a real causal role in the being of things.

In order to make this last point clear, it is useful to look at one more interchange between Socrates and Parmenides. At one point in their discussion, both men put forth a simile for the forms which expresses the way they are inclined to think about them. The interchange, beginning with Parmenides speaking, reads,

"Although one and the same, then, (the form's) whole will be in many separate beings at the same time, and so would be separated from itself.

Not if it is like a day, (Socrates) said, which, although one and the same is many places at once and is not at all separate from itself...

Socrates, he replied, how nicely you make one and the same thing many places at once! It is if after covering many men with a sail you would say that it is one whole over many." (Parmenides 131b)

Parmenides sees the forms, including their articulation in language, as being like a sail. They are overlaid on top of the reality which actually *is*. For this reason, they can be necessary for discourse but, nonetheless, not real. On the other hand, Socrates, even in this rudimentary stage of his ideas of the forms, believe them to be like a day. They are ever-present in and inseparable from every aspect of reality. As in both the Phaedo and the Republic, sunlight shining on the visible realm is used as an image of truth making intelligible objects intelligible. The sunlight cannot be separated from the objects on which it shines as the λογοι can not be separated from the reality which they articulate.

Conclusions

Language as Cause

I have attempted to articulate in this paper the way in which Socrates develops language as a new way of explaining causation, or a new way of answering the basic question of why?' Before recapitulating the argument for his having done this, the question should be brought to the surface, what does it mean for language to be a cause?' The immediate intuitive reaction to such a statement is to assert that in no way can the objects of reality come into being as a result of our speaking of them. Surely they *are*, in some crucial sense, before our minds or our language enter the picture. Thus, the cause or responsibility (αιτια) for them must be something else.

In order to overcome this initial reaction, one must first try to imagine what it could possibly mean to speak of an object without any mind to observe or encounter it. The only objects, whether sensible or intelligible, that we encounter are ones that are articulated or, at least, demarcated in our minds. From this perspective it is not so absurd to say that the word 'chair' or 'elephant' is the cause of the furniture or the animal I am encountering. Of course, it is not the sound which falls off the tongue or the particular characters written on a page which are important. Something underlies that sound or those characters, however. What it is which underlies our language is not at all crystal clear. It is here that one starts to speak of 'things-in-themselves' or 'essences' These things are only pointed to, or indicated, by our accounts–the more so, the more in-depth the investigation is. Nonetheless, when the participation of the observer is taken into account in the observation of things, it becomes evident that his activity of pointing to universals is crucial to the observed thing's coming to be.

Review of Major Arguments

The first step along the line to understanding language as a kind of cause is to grasp the nature of the proposition that the world is intelligible. If one denies this proposition than one would not be inclined to look to language, an activity of the intellect, for causation in any sense. Language, under this supposition, would have nothing to do with what is real and true because what is real and true is not available in any way to our minds. Plato shows in the Phaedo, however, that to accept the proposition of intelligibility is to recognize it not as a proposition, in the sense of something compound and provable, but as an axiom, something basic and foundational. It is to be accepted not because there is no other alternative, but because it is more beautiful than its alternative. It is the choice made by a courageous thinker who emulates Socrates and his valiant activity in the face of death.

Proceeding with this axiom that the world is intelligible and that dialectic is a fruitful activity, Socrates describes a tension which exists between two ways of developing an understanding of this intelligible world. One way is the way of the natural scientists, who see in sense-experience the only reality which is to be uncovered and explained. Investigation and description of the things we see and hear is meant by them to get to the truth about why things are the way they are. Another way of working toward understanding is the (first) way of Anaxagoras. He sees the workings of a Mind behind the generation and destruction of things but, apparently, does not find any way for that Mind to relate to our day-to-day experiences. Socrates' brilliant image of the eclipsing sun finds its first application in this tension. Both the natural scientist's way and Anaxagoras' way are blinding to the soul. This former because of the inappropriate use of the instruments of the body, the latter because of the over-ambitiousness of the source upon which it sets its mental gaze. More concretely, the natural scientists can only give additive answers, they can only push back the question of 'why?' to less and less proximate material causes. Anaxagoras, on the other hand, treats the source of truth, the Mind, like simply another intelligible object to be examined and understood. Consider the way that the sun, the source of all light and therefore all things being visible, is, itself, not really a visible object. The tension between sense-experience and Mind can be approximated by considering the tension between 'knower' and the thing known. Both must be accounted for, and some medium described, in order for a way of achieving understanding to be satisfactory.

Socrates finds in language the medium he needs. In the words of the image, he takes refuge in the λογοι. Language depends on the diversity of sensible things. It is their expression, occasioned by encountering them. It is the mind, however, that does this encountering. Thus, I have understood language as an articulation of the mind's encounter with reality. One difficulty which might be intuitively present for a listener of Socrates, but must be overcome, is the idea that language is simply' an image. This idea would lead one to dismiss language as something not essentially present in the cause of things. Socrates overcomes this difficulty, in part, by showing that not only is language an image, but so are the sensible phenomena to which we so fervently cling as real. The true realities are outside the cave and not at all simple to commune with directly. Therefore we must have commerce with them through their images. Interpreting the cave and line images of the Republic, I find more credence for the view that language and sensible phenomena are images of reality to the same extent, but in different ways. Language is an image illuminated by the light of the intelligible realm, however, and this, in particular, makes it the more fruitful one to concentrate on in the search for truth.

If the difficulty of language as 'merely' an image is overcome, one can begin to understand its true value in terms of its kinship with the forms, or ειδη. Language is the path which leads us from particulars, e.g. this book in front of me and this beautiful thing, to universals, e.g. book and Beauty. In doing this, it makes for a more satisfying answer than the natural scientists are able to give when they delve deeper and deeper into the specifics of their objects. Still, it does not explain how each thing is ordered in the best way that it can be, as the most perfect type of answer would. It is, after all, a "second best" version of the explanation that Mind as cause (Phaedo 99d). Nonetheless, the power of language is not to be underestimated. While it is expressing particulars, it is pointing to the underlying eternal things which never undergo change. In this way it is a medium between the eternal and the temporal and the fear of Parmenides that these will be hopelessly separated is assuaged.

Final Thoughts

There is one more tension which is present in the dialogues and in this paper which needs to be brought to the surface. This is the tension between intelligibility and mystery. Socrates does believe in the intelligibility of the world and he does believe that our minds are commensurable with the truth. However, his retreat from Anaxagoras' pure reference to Mind and his prolific use of images indicates that this commensurability may be like the kind that one finds between a drop of water and the ocean. The dialectic process is the proper way for us as humans to proceed toward understanding our world but it does not arrive at straightforward answers to every question, no matter how great. It is likely that the question of the immortality of the soul exemplifies this fact. With this in mind, one can better understand why Socrates at times throughout the Phaedo and especially at the end leaves the process of rational argumentation somewhat behind and uses logoi in a different way. I am referring, of course, to the use of myth.

Socrates enters into the myth at the end of the dialogue after Simmias tells him that, although he is convinced by Socrates' account, "In view of the importance of our subject and my low opinion of human weakness, I am bound to have some private misgivings." (Phaedo 107ab) Socrates' first response is to tell Simmias to continue with the dialectic process of working out better hypotheses and their conclusions. After saying this, however, Socrates launches into his μυθος about the nature of the heavens (expressed here as the *true* earth) and the underworld. Socrates must feel that something

more than rational argumentation is necessary for his listeners. He must give them a story which they can "repeat (to themselves) as if it were an incantation" (Phaedo 114d) Why is this necessary, given all that has been said?

One message of the myth which is entirely consonant with the account that proceeds it is that man stands as a kind of middle-term in the proportional relationship between obscurity and clarity of knowledge. We do not live in the murky sea, but neither do we live on the surface of the earth surrounded by the ether. Socrates' recourse to myth may be the natural extension of what I have already said about language being a pointer, in the form of an image, to something eternal and beyond our grasp. When, as Simmias says, "the subject is so important" 'μεγεθους', which can be better translated as 'great') we must use our imaging power to the fullest and create stories to soothe our fears.

The philosophic way of life can extend beyond simply the enjoyment of discussion to a pursuit of moral and spiritual excellence. Much of what the dialogues teach us is how to think about virtue and justice and courage so that we can act in accordance with them. Before this instruction can begin, however, one must deal with the issue of intelligibility. One must put their trust in words and arguments as a guide before they step onto the road with "many forks and crossroads." (Phaedo 108a) Socrates believes in the intelligibility of the world. He lives his life with a true respect for what can be accomplished in arguments and discussions. We are meant to understand that it is as a result of this that the officer of The Eleven who brings news that it is time to drink the poison calls Socrates, "The noblest, the gentlest and the best man who has ever come in here," (Phaedo 116c) and Phaedo concludes his tale with the comment, "Such was the end of our comrade, Echecrates, a man who, we would say, was of all those we have known the best, and also the wisest and the most upright." (Phaedo 118a) The first step on the path to living a life of such nobility is a choice. Socrates offers us a way of viewing the coming into being and passing away of all things based on our power of language to mediate between our minds and what they encounter. We have a choice about whether this way is worth pursuing. There is no better reason to respond affirmatively to this choice than that which Socrates gives when he tells Simmias, "The reward is beautiful and the hope is great." (Phaedo 114c)

Footnotes

1. For this quotation, I used the Loeb translation rather than the Grube. Grube begins the passage, "*When* there is a true and reliable argument..." (my emphasis) The Greek reads, "ει οντος δη τινος αληθους και βεβαιου λογου και δυνατου και κατανοησαι..." For reasons I hope to make clear, I felt that it is crucial to retain the conditional sense of this sentence.

2. The Grube text actually reads: "I thought I must take refuge in discussions and investigate the truth of things by means of words." However, the Greek says simply, "εδοξε δη μοι χρηναι *εις τους λογους* καταφυγοντα εν εκεινοις σκοπειν των οντων την αληθειαν." This translation, therefore, is my own, though it is mostly a combination of Grube's and the Loeb's.

Virgin Mary (Mother of God): Photograph of a Painting

Marianne Thompson

excerpts from: "Paradox and Evolution: Images of the Demands of Modernity"

✸

Matthew Braithwaite

The Reality of Physical Ideas

Now it is clear from history that physical ideas can be deprecated but not destroyed. It's not that we don't *want* to destroy some ideas: if one is trying to un-think a perspective that seems undesirable, there is a powerful temptation simply to try to banish it from language, hoping, perhaps, that thought will follow. There is a sense in which this desire can be achieved: one could plausibly banish "phlogiston" and "flowers of zinc," for example. There are theoretical advances that remove the want we have of these words–or rather, redirect it, for the words are answers to specific phenomena to which we cannot close our eyes. Things still burn, even though we don't use the idea of phlogiston to explain the phenomenon any more–but we could. We cannot remove the utility of a physical idea. We can see this in the fact that banishment from the scientific vocabulary only makes the usage of a word wither and die, but does not at all affect our ability to understand it–that will forever be possible! So one cannot un-think an idea; one must settle for a partial success, that of making the idea less tempting, or less complete. And we do this by introducing another idea that is more revealing.

What is even more interesting is that there can be evolution and change within (if that is the right word) a single concept. We might look at what Wittgenstein says about Moses (I.79) in this connection. He begins by pointing out that "if one says, 'Moses did not exist', this may mean various things"; and he goes on to list what some of them are. What is critical is that the word, Moses, in some way means all these things and in some way means none of them in particular. Certain parts of our idea of Moses can be removed from our understanding while still permitting the word, Moses, to have had a historical bearer. This is what happens, when, for example, we say "Moses was not the man who led the Israelites out of Egypt." Or we could keep using the word even though we hold it not to have had a bearer, as when we say that Moses was a historical fiction. If we were asked to give a definition of Moses we might list a number of characteristics, and say that Moses was their sum–but this would not reflect our use of the word. Nor can we point to any one thing as the *essence* of our use of the word. Wittgenstein puts it thus: "But where are the bounds of the incidental?...I use the name 'N' without a *fixed* meaning. (But that detracts little from its usefulness...)" (I.79) Similarly, in science we might observe the continuity of the word "atom" or "electron" as it comes to be understood differently. (Consider for example the argument over whether "electron" should mean a particle or a unit of charge.) We continued to call atoms atoms, even when they turned out not to be atomic–but the idea that they were the fundamental components of matter remained. And, I suppose, even that has changed.

At some point in history, the live question was, "are there atoms?" When the answer to that was agreed to–and this is inseparable from the experiments that produced that agreement–it became possible to ask about the nature of atoms in a way that was not possible before. And the answers that we give to questions about the nature of atoms can go on changing forever, because we have "decided what an atom is" in the sense that we decide which experiments "show" atoms to us. This fixes the denotation of the word, in a way of speaking, but its sense can change as we learn more about the thing–so to speak–denoted. In the same way, we could now potentially do experiments on light using only invisible frequencies, because we have now decided what experiments and apparatus tell us about the presence and characteristics of light. Wittgenstein's metaphor of a skein of threads is the only way of describing what goes on in this changing.[1] But we can contrast these shiftily-defined objects of physical thinking with the objects of direct observation: in a marginal note Wittgenstein quotes Faraday as saying, "Water is one individual thing–it never changes." To put it another way, a physicist's knowledge of what water is is in one sense identical with anybody else's: water is *that thing there*. In another sense, the physicist has a unique understanding of water, based on his advanced concepts of atoms, and so forth. But as soon as we think that the hypothetical hidden structure of water that is revealed to science is the *same identical thing* as the water we touch and feel, we have com mitted the error that leads us to belief in a hidden reality. We have, one might say, "sublimed our hypotheses"–forgotten their truly hypothetical character.

This suggests another link, which came up much earlier, between physics and Wittgenstein's philosophical ideas. The aim of logic which Wittgenstein criticizes was to produce a logically clear underpinning for all utterance. We might now re-ask the question of how this is different from the task of physics, which seeks a mathematically clear description of all phenomena. To begin with, Wittgenstein points out that logic does not seek to learn anything new about language. Hence, he says, its workings are uninvolved with phenomena. In answering the question "In what sense is logic something sublime?" he comments:

> "For there seemed to pertain to logic a peculiar depth–a universal sig nificance. Logic lay, it seemed, at the bottom of all the sciences.–For logical investigation explores the nature of all things. It seeks to see to the bottom of things and is not meant to concern itself whether what actually happens is this or that.–––It takes its rise, not from an interest in the facts of nature, nor from a need to grasp causal connexions: but from an urge to under stand the basis, or essence, of everything empirical. Not, however, as if to this end we had to hunt out new facts; it is, rather, of the essence of our investigation that we do not seek to learn anything *new* by it. We want to *understand* something that is already in plain view. For *this* is what we seem in some sense not to understand." (I.89)

This is the sharpest possible contrast to physics; but it is interesting that the final suggestion–that we somehow do not understand what is right before us–is common between logic and physics. So let's ask, "in what sense is physics something sublime?" Or on a plainer level, does the physicist really know more about what water is, or only a whole lot more about how it behaves?

We can observe, first, that physics is the exact opposite of logic in its approach: we *do* seek to learn something new in science. Wittgenstein accuses logic of not wanting to look at the world, and hence of thinking that we can know how things are merely through a terrific act of contemplation. But by contrast, physics believes that its advancement is secured only by trying to look *through* the world. As scientists we do believe that the world has hidden but intelligible features, but we also believe that they can be *revealed* through ingenuity–not discovered by thinking. But by revealed, can we mean anything other than, revealed *in the phenomena*; revealed by a clever *experiment* that tricks nature into giving up a secret? We cannot escape the roots of physics in our perception, because even the most formal descriptions of the invisible world must include the *ordinary* senses of some words like length, position, color, pitch, time, motion, and so forth.

So we ought to follow Wittgenstein's thoughts a little further, before we gain too much confidence about the power of physics to tell us about the hidden. By the "subliming of logic," he has in mind something specific:

> "'A proposition is a queer thing!' Here we have in germ the subliming of our whole account of logic. The tendency to assume a pure intermediary between the propositional *signs* and the facts... For our forms of expression prevent us in all sorts of ways from seeing that nothing out of the ordinary is involved, by sending us in pursuit of chimeras." (I.94)

That is, we get into trouble when we become confused in a case where we should not. The suggestion here is that he ought to refuse to see anything mysterious or strange about logic and logical symbols. We are to say, simply, "it is *apparent* what the world does, and *apparent* what the sign does, because our use of the sign, too, is an observable phenomenon the world.–So what more could you want to know?" And this illuminates our search for reality or truth in physics. The tendency to assume an ideal interposed between a propositional sign and the sensible fact it refers to is analogous to assuming a reality that lies between appearances and our attempts at physical laws. We can dismiss reality as the same kind of imagined ideal; we might say, "it is *apparent* what the world does, and apparent what the law prescribes.–So what more could you want to know?"

The analogy between reality and meaning (or signification) is fairly precise, really, and what I mean to suggest is th t we can dismiss them in the same way. We cannot *find* meaning in the phenomena of language. One of the cautions that Wittgenstein makes is that we should avoid introspection if we want to understand language. Instead, we should look only at how others use language, and see what we can say based on that alone. Rhetorically, this suggestion assumes what it is trying to show; namely that language is to be understood by looking at its use. But the similarity to the rhetoric of language-games ends there: the prohibition on looking within is not an appeal to imagination but to our scientific instincts. From a properly cautious point of view, nothing living only within the mind can be considered a *phenomenon*. The way people use words, on the other hand, does admit of phenomenal description. So if we are being scientists, usage is the only material that we have on which to base a theory of language. And the number of theories neither suggested nor supported by usage alone includes: that every word is correlated with a meaning, that the intelligibility of an utterance can be tested according to articulable rules, that all names signify objects, and so forth. And similarly, in the philosophy of science, we would have to say: if you want to understand a physical idea, look at the way it is employed. There is neither necessity, justice, nor indeed any sense in inventing a reality for the idea to describe. The content of the idea is no more nor less than its use in working with phenomena.

In so far as there is a general principle here, it is that the only certainty we can have about phenomenal things is their description.[2] If we describe reality through the use of a coherent group of concepts that are merely formally defined, we still do not overstep the bounds of description. But when we attribute intuitive ideas, or any kind of reality, to these concepts, we have overstepped the bounds of description (in the former case) or sense (in the latter). The only certain statements we can make about physical phenomena are predictions of their behavior, because these are the only statements that can be falsified. Statements about what underlies phenomena have, therefore, the status of rhetoric–again not an insult in diguise. This makes us understand that a sense of the word, reality, that is distinct from the sum of all appearances doesn't really fit into science. The descriptions that physics gives of objects that underlie appearances do indeed transcend phenomena, but they are also hypothetical. We cannot, and can never, be certain of those objects. We need only look back to our examples to see this. We might have a sort of certainty that atoms exist, but our idea of their nature is always changing. And as with the example of ether, we must keep in mind that we have never *seen* an atom. Saying that "there are atoms" is a proposition about use and experiment; and reflects

the fact that we are inclined to look at experiment as a kind of seeing. But we only think we see: how do we "see" that light is a wave, when we see interference phenomena? Well, we see it with our imagination, with our analogic faculty; something on that order. We see, with our mathematical eyes, patterns of dots on a screen that are intelligible as the footprints of the interfering of waves. The wave is the idea that the phenomena produce *in us*. The idea that there is a *real wave* causing the patterns that we see is a statement which must, in our analysis, have the character of a story to which we are led by phenomena. There is no test of its truth. We must, following Wittgenstein, simply say: here the pattern on the wall, there the descriptive equations–and nothing more.

Evolution of Concepts: Intuition and Formalism

Because we are interested in phenomena, the first thing to observe about physical ideas and concepts is their behavior. I mean by this that we ought to regard physical ideas on the biological model. The truth or correctness of a physical idea, as suggested above, can have the grammar of "descriptive"–or, we might add, even of "useful." We might say, on the basis of the preceding, that physical ideas are use-valued rather than truth-valued. Hence, they exhibit the biological characteristic of growth or attenuation according to selective pressures. In part these pressures can be seen as coming from us, in so far as we choose between competing physical accounts of things. But we could also see these pressures as coming from experiment, as for example when interference phenomena force us away from the emission theory of light. But all experimental pressures on our physical ideas are mediated by us in a very real way: witness that doomed concepts have never been without their champions. The separation between our influence and the influence of experiment is thus a very real one, because we can see them conflicting. We are free, then, to examine our own role in the changing of the concepts that we use. We have to look at the question of what we *should* find satisfactory, or coherent, in an account.

One of the ways of stating the impossibility of the metaphysical is that we have an inability to escape our nature. We want to escape language in doing philosophy; we want to escape phenomena in doing physics. These desires are psychologically and formally the same, and there are similar arguments against them. In the Philosophical Investigations, Wittgenstein argues through the inability to construct another language from the one we have. In physics we may point to the ability of an experiment to puncture our pretensions of having described reality accurately. Classical electrodynamics and Newtonian mechanics represent beautiful and simple projections of our intuition onto the world, as Euclidean geometry beautifully captures the projection of our intuition onto a (mostly) formal deductive system. But in both cases we could even have said in advance that they had not the completeness they pretended to. Mechanics made no attempt to give an account of mass. Similarly, electrodynamics incorporates the idea of a wave, a "moving disturbance" or "moving configuration," with wonderful formality but nothing that could be called a justification–save that the formalism agrees with experiment (and of course no other justification should be asked). The idea of a wave is intelligible on the assumption of a medium; and this, in turn, reduces to a mechanical explanation. But having no proof of the medium, we are certainly forced to say that the wave explanation of light is *merely* a formally correct description. Similarly, if we had to account for mass in mechanics, we would be forced to give a merely formal description of how the things to which we attribute mass behave. We do not need to do this, because intuition assumes the role of formal specification. We know how mass behaves in intuition, so we assume we know "what it is." Similarly, we know "what a wave is." This is not to say that electrodynamics and mechanics lack rigor, because it would certainly be possible to replace their intuitive ideas with formal descriptions; as indeed we do for light by describing it with differential equations. But as the fact that we have never *seen* the wave that we think light is suggests, whatever is formal can be no more than formal. Mechanics is a description of how phenomena behave, simply; and the fact that it invokes concepts derived from intuition is irrelevant to its accuracy. However, when it becomes the case that experiment calls the intuitive part of a purely mechanical description of the atom into question, by suggesting that intuitive mechanical concepts simply do not work, then the derivation of mechanics from intuition rather than formalism becomes very important indeed, as a hindering rather than a helping force! That is to say, an intuitive account is very difficult to abandon, because intuitive explanations make us think that we have grasped the "what-ness" of things. But we have already said enough about the grammar of the statement, "light is a wave," to know that this sort of grasp is quite illusory.

So we might say of intuition that although it needn't and shouldn't play any formal part in physics, it plays a powerful psychological part. It is important to the *coherence* of a body of theory–the word we are trying to understand. We should own that the intelligibility of both of the above-mentioned physical theories seems to have much to do with their analogies to the sensible. The wave account of light is not desirable simply because it is descriptive, but because it is also imaginable. Similarly, Rutherford's mechanical description of the atom is no mere formal account, but appeals strongly through sensible analogy. This is in part what is meant by saying that science has a rhetorical component–and of course, it is possible to be deceived about the truth by rhetoric, as the difficulty of abandoning these intuitable theories shows.

Maxwell's essay, Are there Real Analogies in Nature, is I think meant to address this subject among others (it is, as he says, somewhat "diffuse and confused"). But about one thing in it he is clear, and that is the analogical component of so much that we do in physics. Two results of his paper are especially important to us: first, that he points out how broad the reach of analogical thinking is; and second, that he gives us some means of dealing with its tendency to deceive us. The

culmination of the paper is what one might call a solution, albeit a mystical one, to the initial problem that he poses of the relation between the world and the ideas that occur to us about it: "...are we to conclude that these various departments of nature in which analogous laws exist, have a real inter-dependence; or that their relation is only apparent and owing to the necessary conditions of human thought?" This is the question that perplexes us in doing physics.

Maxwell seems to have a few things in common with Wittgenstein in the way he looks at words, in that his idea of analogy suggests Wittgenstein's idea of family resemblance among words. Maxwell presents ideas in a biological way, by showing us the analogies through which they arise in us. His account of *cause*, in keeping with this, is not metaphysical but historical:

> "We cannot, however, think any set of thoughts without conceiving of them as depending on reasons. These reasons, when spoken of with relation to objects, get the name of causes, which are reasons, analogically referred to objects instead of thoughts."

Now the thought that the word "cause," in its employment in physics, is our projection onto the world of the fact that thoughts follow one another according to reasons, is not one that would ordinarily occur to us. But put in this way, the suggestion sounds both plausible and somewhat disquieting; for as Maxwell says later, "cause is a metaphysical word implying something unchangeable and always producing its effect", in contrast to force, which "is a scientific word, signifying something which always meets with opposition \ldots" Looked at in this way, we might wonder if it is right to use the word "cause" in science at all; for Maxwell seems to be suggesting that the term has its origin in the observing subject.

Something like this idea seems to be at the root of the following obscure paragraph, which I take to be an oblique mocking of metaphysicians:

> "This conception of cause [I take it he means the idea of force as a sort of cause], we are informed, has been ascertained to be a notion of invariable sequence. No doubt invariable sequence, if observed, would suggest the notion of cause, just as the end of a poker painted red suggests the notion of heat, but although a cause without its invariable effect is absurd, a cause by its apparent frustration only suggests the notion of an equal and opposite cause."

I believe his suggestion is that *invariable sequence* belongs to observation, whereas cause belongs to the connection of reasons; so that the identification of them is a forced and false one–a bogus attempt to relate metaphysics to observation. The idea of cause could perhaps be prompted by observation, but the circumstances giving rise to the idea are no more identical with the idea itself than the red-painted end of a poker is with heat. And he seems further to be suggesting that invariable sequence is not the observed fact that we carelessly take it to be: striking the earth with a tiny object has no effect that we can see, for example. The idea we have of what happens in this situation arises through analogical reasoning from cases where we see the interactions of force more visibly manifested.

So one question that arises from these worries is that of what sorts of thinking properly belong to physics. The suggestion that "the analogy between reasons, causes, forces, principles, and moral rules, is glaring, but dazzling," is helpful to seeing how great and wide are the dangers of using the wrong sort of analogy in physical thinking. We are inclined, by force of analogy, to lump together what are really separate things under the name of cause, or even of force. But when we are inclined to identify cause and force this leads to a poor and incomplete understanding of nature:

> "But there are other laws of nature which determine the form and action of organic structure. These are founded on the forces of nature, but they seem to do no work except that of direction. Ought they to be called forces? A force does work in proportion to its strength. These *direct* forces to work after a model. They are *moulds*, not forces."

This I take to be a reference to our use of the word, formal cause. But these moulds, as Maxwell calls them, are not phenomenal: he says twice that they merely seem to *use* the visible forces of nature to their ends. Following this we might suggest that physics is interested in what Maxwell calls *events*, which are to be distinguished from *actions* (a term that belongs to the moral realm), as well as from any employment made of these events by formal and final causes–the reality of which, it is important to note, Maxwell does not doubt in the least. Despite this, though, he reminds us:

> "Again, if we know what is at any assigned point of space at any instant of time, we may be said to know all the events of Nature. We cannot conceive any other thing which it would be necessary to know; and, in fact, if any other necessary element does exist, it never enters into any phenomenon so as to make it differ from what it would be on the supposition of space and time being the only necessary elements."

The thought behind the phrase, *we cannot conceive of any other thing which it would be necessary to know*, deserves to be looked at unflinchingly. It is identical to Wittgenstein's suggestion that we should look, and not think. In a sense, once we have observed, we have done all there is to do–assuming, that is, that we are only interested in explaining (in Bohr's sense) the events of nature. And the phrase has, too, some of the same content as the reminder that comes up in quantum physics that all experiments must ultimately express themselves in mechanics. These reminders draw a border between the phenomenal and the hypothetical. It seems to me that one might, following this, suggest that the task of physics is to make rules that describe all the *events* of nature, using whatever means are available or necessary. And looking at the other side of that coin, we must say that physics must be interested in *nothing but* the events.

Now the poverty of this restricted vision is plain throughout Maxwell's paper. And yet it does reflect a certain valuable discipline: for if we allow ourselves to be interested in more than mere events, we run the risk of being misled about the events themselves. Maxwell suggests this in his brief statement about final cause–which is also a natural history of how

a metaphysical concept arises through analogy:

"Perhaps the next most remarkable analogy is between the principle, law, or plan according to which all things are made suitably to what they have to do, and the intention which a man has of making things which will work. The doctrine of final causes, although productive of barrenness in its exclusive form, has certainly been a great help to inquirers into nature; and if we only maintain the existence of the analogy, and allow observation to determine its form, we cannot be led far from the truth."

Now what this seems to be saying is that in doing physics, we ought not to use the doctrine of final cause to determine what we see: we may only apply it to what we find–a prescription that we can hardly violate if we restrict ourselves to seeing only events. And one might say similar things about beauty: we may certainly identify the true and the beautiful, but what this means in doing physics is that we have to find beautiful whatever we discover to be true. The identity is not a permission to allow our sense of beauty to legislate what we believe about nature. For indeed, in so far as the word, nature, represents a hidden reality, it is a confused word. If nature is to have a meaning in physics, it must mean the sum of all phenomena, which simply are, without being beautiful or ugly. And our laws, too, are what they are; their beauty belongs to us, and is also our *choice*. To say, "if the laws are not beautiful they cannot be true" is meaningless, because the grammar of the word true, when applied to a physical law, is identical with that of the word accurate, as suggested above. And the accuracy of the laws has no relation to how they appear to our aesthetic sense. The most that can be said is that if the laws are not beautiful, we will try to improve their beauty. But the phenomena will decide whether we are able to do so. If the phenomena do not permit it, it would be better to revise our idea of the beautiful such that it fits what we have discovered to be true, i.e., accurate (and perhaps this means that physics is now done by a different sort of person than before, owing to the historical change in the sort of beauty that physical theories exhibit). Otherwise history might number us among those who labor against the evidence of experiment, and count us on the same side as those who denied the movement of the earth.

I want to return to the subject of the poverty of this worldview of physics. It is plain from what Maxwell says that the world of physics, the world of events, is not the whole world to our minds. Indeed, establishing this appears to be one of the principal goals of his essay, as we may infer from what appears to be a repudiation of universal mechanism:

"Now the question of the reality of analogies in nature derives most of its interest from its application to the opinion, that the phenomena of nature, being varieties of motion, can only differ in complexity, and therefore the only way of studying nature, is to master the fundamental laws of motion first, and then examine what kinds of complication of these laws must be studied in order to obtain true views of the universe. If this theory be true, we must look for indications of these fundamental laws \ldots among those remarkable products of organic life, the results of cerebration (commonly called 'thinking')."

This passage appears to be not even trying hard to mask amused contempt. We can note in passing that what he says next represents the same problem that Kant called the Third Antinomy, but Maxwell appears to be content with simply saying that the matter is a very confused and indefinite one. And yet there is order in the confusion. When we see an event as an act, we are twice perplexed. First we see mechanics taking up where will left off ("...another set of laws, the operation of which is inflexible once in action, but depends in its beginnings on some act of volition"), as, for example, if I were maliciously to throw a rock at someone. And second we believe that actions have what we call moral consequences, an idea that employs the physical language of cause and effect. But we cannot see these consequences in the world, and so, "we connect the idea of retribution much more with that of [human] *justice* than with that of *cause and effect*." And so we are confused by our having thought of moral consequences in causal terms, on the one hand; and by our tendency to "regard retribution as the result of *interference* with the mechanical order of things, and intended to vindicate the supremacy of the right [moral] order of things." This refers to Maxwell's earlier statement that we find moral laws to be supreme laws in one sense, but contingent laws in another sense, because we do not see them always acting in the world.

Maxwell gives a description of this muddle that is both metaphor and resolution:

"The theory of the consequences of actions is greatly perplexed by the fact that each act sets in motion many trains of machinery, which react on other agents and come into regions of physical and metaphysical chaos from which it is difficult to disentangle them. But if we could place the telescope of theory in proper adjustment, to see not the physical events which form the subordinate foci of the disturbance propagated through the universe, but the moral foci where the true image of the orginal act is reproduced, then we shall recognize the fact, that when we clearly see any moral act, then there appears a moral necessity for the trains of consequences of that act, which are spreading through the world to be concentrated on some focus, so as to give a true and complete image of the act in its moral point of view. All that bystanders see, is the physical act, and some of its immediate physical consequences, but as a partial pencil of light, even when not adapted for distinct vision, may enable us to see an (\em object), and not merely light, so the partial view we have of any act, though far from perfect, may enable us to see it morally as an act, and not merely physically as an event."

This is saying that our state of confusion is inevitable; for we can only see the occasional footfalls of the moral and the voluntary in the world of appearance, just as all sensible objects appear to us only with the help of light. The possibility of being able to see the whole chain of moral consequences of which physical events are the "subordinate foci" is closed off to us because we do not have the means to see it–except with partial and imperfect vision. And this in turn suggests the following idea about analogy in science: the world of events *can* be circumscribed, and so we can exclude analogy from our thinking about it. If we please we can talk about events and only events (whats, wheres, and whens), using the formal language of mathematics. We have complete vision of the whole world of appearances–a statement that would almost be a tautology, were it not for the contrast with our imperfect vision of the world of acts. Physics is thus not the complete understanding of the world, but only a line drawn around what we can sense, considered as mere events, and the question, "what can we say about *that*?" We have no requirement for sensible intuition, aesthetics, or metaphysics in that investigation, because the formal description that we can give of events is complete within itself. In one way this is obvious; the question is entirely of whether it is a useful way to think.

One way in which it might not be is as a concealed insult: if we meant simply to divide statements into physical and non-physical for pejorative purposes, we would not accomplish anything. But this suggestion about how to view physics *is* a useful one, because it permits us to understand physics better. We have a hard time accepting theories that are contrary to our metaphysical preconceptions, to sense intuition, or to our ideas about beauty. But even more do we desire to be free of any impediments in learning about the world: the state we want is best described as perfect and clear receptivity to anything that describes the phenomena. And this is what the circumscription of physics is good for: when we say that we must take seriously any true (agreeing with experiment) theory, we are really just reminding ourselves of a means whereby we can raise our vigilance against non-physical ideas impinging on our physical understanding. Bearing the circumscription of physical ideas in mind makes it easier to say, "I accept the use of non-mechanical ideas, because mechanical description is only a requirement of my intuition." Or, "I accept the use of a probability function without any other justification, because determinism is only a requirement of my metaphysics." Or, "I accept this ugly wave-particle hybrid, because its ugliness is only due to my aesthetics, and its unintelligibility to my weakness." Since physics *can* be circumscribed, we will the more nearly perfect our understanding of it the less we permit the non-mathematical, or the sense-intuitive, to leak in and corrupt the focus that our "telescope of theory" has on the purely mechanical aspect of all phenomenal things.

If we do not employ sense intuition, aesthetic sense, or metaphysical ideas in looking at physical ideas, there is only the mathematical sense left to us. It is a relief to note here the existence of mathematical analogies: without them there would be no procedure at all for us to use! But we might have known this already; because it is only the quantitive part (or one might even say, the quantitative *expression*) of a physical idea that can be tested. To say that in physical thinking we should try to stay within the phenomena is equivalent to saying that we should try to remain within the mathematical in our descriptions; our procedure should be to seek out and accept readily all analogies between nature and the math ematical that we can find–using elegance, metaphysics, or sense intuition as decision principles only where there is a choice to be made between *equally predictive* laws. For indeed, as Maxwell reminds us, the characteristic of an *event* is that there is nothing to be known about it besides what is where at what time; and hence nothing about the objects involved needs a language other than mathematics for its expression.

The question of the perception of a mathematical analogy is identical to the question, implied by Wittgenstein (I.54), of how we tell when a game is being played according to a rule; and it depends on our prior ability to pick an object out from the world. Maxwell's answer to this question, with which he closes his essay, is a mystical one:

"And last of all we have the secondary forms of crystals bursting in upon us, and sparkling in the rigidity of mathematical necessity, and telling us neither of harmony of design, usefulness or moral significance,–nothing but spherical trigonometry and Napier's analogies. It is because we have blindly excluded the lessons of these angular bodies from the domain of human knowledge that we are still in doubt about the great doctrine that the only laws of matter are those which our minds must fabricate, and the only laws of mind are fabricated for it by matter."

And yet his mysticism is highly satisfying in some odd way–I suspect because there is not much more to do about the relation between mathematics, the mind, and the world, beyond simply noting their harmonies and goggling at them. To suggest, as Maxwell does, that the harmony is in fact an identity, is an answer in words; but it is mystical in its import. The only phenomenal statements that we can make, in the end, are that we certainly seem to have a faculty for picking mathematics out of nature; and that nature, in her turn, certainly seems to have a propensity to behave mathematically. The mystical answer to this incomprehensible observation must, I think, be the correct one, because it is the only one possible.

Consider, for example, the way Newton lays out a purely mathematical science of motion before even speaking about phenomena. Does not the mathematics seem a separate thing, to which nature is like? Similarly, we can look at the way the definition of a wave shifts over the history of natural science, perhaps by conjecturing a history along the following lines: The idea of a wave begins life as a disturbance in water. Noting certain features, we generalize to find the idea of a periodic undulation, to which we are capable of giving some degree of mathematical description. Finally we eliminate intuition entirely: our most potent and useful idea of a wave is any function that satisfies a certain differential equation. Does it not seem as though the things we call waves, now, are not sensible but *mathematical* analogies to one another, things that have their essential being and relation in the mathematical formalism? Maxwell seems to suggest something like this, in what seems a good description of the characteristics of our employment of analogy:

"This supposes that although pairs of things may differ widely from each other, the *relation* in the one pair may be the same as in the other. Now, as in a scientific point of view the *relation* is the most important thing to know, a knowledge of the one thing leads us a long way towards a knowledge of the other. If all that we know is relation, and if all the relations of one pair of things correspond to those of another pair, it will be difficult to distinguish the one pair from the other, although not presenting a single point of resemblance, unless we have some difference of relation to something else, whereby to distinguish them. Such mistakes can hardly occur except in mathematical and physical analogies..."

This is consonant with the above suggestions about waves: it seems as though the physical motivation behind a formalism can be lost as the latter takes on a mathematical life of its

own, enriching itself in utility and generality, and becoming the essential aspect of the thing for us. Waves are in some sense real to us as physicists only by their exhibiting the relations prescribed by our formalism. And this is the sort of thing that leads us right into the tenacious jaws of the "reality blunder," because we let the formalism take on a transcendent life.

The possibility of characterizing all physical concepts with mathematical analogies strongly suggests to us that we ought to aim for a completely mathematical understanding of nature; that is, one that is formally specified in its entirety. The desire for formalism in physics should be understood to be identical with the same desire in mathematics, discussed below: when we say that everything in geometry should be formally specified, we do not mean to eliminate intuition. We only mean to distrust it. And by doing this, we are in effect saying that formal or logical certainty is of an entirely different kind from intuitive certainty. They have functional similarities, yes–but they are not comparable. One might say they belong to different language-games. Intuition and inspiration are the only modes of invention and progress that we have–*of course!* No one would have us change the way we do mathematics and physics, even if that were possible. But there is a sinister philosophic intent rooting mathematical formalism, which from the description given so far might seem to be just a harmless waste of someone else's time; and that is the identification of the inconceivable with the contradictory. Maxwell wryly remarks, of our tendency to make analogies, "if [nature] is not a 'book' at all, but a *magazine*, nothing is more foolish than to suppose that one part can throw light on another"; meaning, I gather, that we should train ourselves in total readiness for surprises. As, in mathematics, all statements against non-Euclidean geometry that do not show a contradiction in it are void; so, in physics, should agreement with experiment and *mathematical* coherence be the only principles by which we decide what sorts of descriptions to admit as being possible ones.

This tangled search for physics can be summarized, or rather gathered together, as follows. We stand a better chance of being able to succeed in physical thinking if we follow therein a principle of mathematical thinking; namely, that anything formally possible which appears useful, or interesting, is unworthy of being dismissed. As increasing use of mathematics squeezes sense intuition out of physics, the only intuition that can remain is *mathematical* intuition. We thus become better physical thinkers in proportion as we are good mathematical thinkers, and as we allow our mathematical intuition total freedom in suggesting answers to the questions posed by phenomena. For as we descend deeper into the unseen, it may be that mathematical intuition is the only kind that has the answers. Maxwell's mysticism suggests a final justification for this, in that it is a strong implication of his last paragraph, quoted above, that nature is capable of anything we can think within the right laws of our minds, which are mathematics and logic–because, indeed, these laws are identical with nature's capabilities.

Footnotes

1. Indeed, in I.79 he comments: "The fluctuation of scientific definitions: what to-day counts as an observed concomitant of a phenomenon will to-morrow be used to define it."

2. Recall Wittgenstein's saying, "we must do away with all *explanation*, and description alone must take its place." (I.109)