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Patrick J. Deneen Princeton University, pdeneen@princeton.edu

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InvisibleFoundations: Science,Democracy,andFaithamongthePragmatists

PatrickJ.Deneen PrincetonUniversity

Todayscienceisalmostuniversallyregardedasanallyofdemocracy.Religion – onceviewedbyTocquevilleasthegreatsupportofdem ocratic *mores*,incontrasttothe materialismofthen -contemporaryatheistswhothreatenedtounderminedemocratic commitments –isnowviewedbymanyasantitheticaltotheopennessandprovisionality thatmarksbothscienceanddemocracy.Asframedbyt heneo -pragmatistRichardRorty, religionisa"conversation -stopper,"theverydefinitionofanti -democratic,anti -scientific anti-pragmatism.

Inthisregard,Rortyechoesthesentimentsofhisphilosophichero,JohnDewey.

Longacorefeatureofthep ragmatistagenda,Deweyrepeatedlyinsistedonthe identificationof democracyand science.ForDewey, "science,education, and the democraticcausemeetasone," asheconcludedina 1944 essayentitled "Democratic Faithand Education."

This sentiment could serve as a capstone to his life long belief that science and democracywere largely equivalent in "methodology" in asmuch as bothwere animated by aspiritofin vestigation, constant reconsideration and revision, and a practical orientation towards olv ing discrete problems. More than such methodological similarities, however, for Deweyeach project was imbued with the spiritof religion, now transferred from the Churchestoscientificand democraticactivities. "It is the part of men," Deweywrote in 1908, "to labor persistently and patiently for the clarification and development of the positive creed of life impliciting emocracy and inscience, and to

workforthetransformationofall practicalinstrumentalities of education till they are in harmony with these ideas. "Those "habits of mind" that he saw as essential in this mutually supportive pursuit of science and democracy through education were, above all, "honesty, courage, so briety, and faith." 2

NotwithstandingDewey'slinkingofscienceandde mocracyasobjectsofanew "commonfaith," religionandsciencearefamously, orinfamously, perceivedasdire antagonists, lockedineternal battle for the minds and souls of believers. From antiquity —in which, assome have argued, there was a movemen tfrom muthos to logos—to Galileo's forcedrecantation before the Popein 1634, to the more familiar battles of modernity such as the 1925 Scopes "monkey trial" and contemporary battles over scientificand religious pedagogy, religionand science have be enposed as direand often fatalenemies. ³Religion, based on faith, is regarded as the pure opposite of Science, which restsons kepticism, hypothesis and provisional proof.

However, it has been also long observed that science itself restson a form of faith, a "metaphysical" foundation that presume shuman intelligence to be uniquely capable of discerning that order, and that contains an implicit assumption about the inevitability of progress in knowled geand, ultimately, for human kind generally. Above all, if most implicitly, modernscience in its earliest conception restson the assumption that its findings will be largely benign for human beings, both in its theoretical implications and in its pract ical applications, resulting in the prospectand realization of the "relie forman" sestate. The earliest formulations of the scientific project attest that the heavens them selves intend for mankind to pursue this theoretical and applied scientificenter prise, even if the existence

ofbeliefintheheavensispotentiallyshakenordisplacedintheprocess, sinceheaven ultimatelyintendsimprovementinthehumancondition, liberation from drudgery, and humandominion of nature. ⁵Eventually, scientific fa ith becomes explicitly linked to democratic faith by some prominent thinkers who see a link between the ends of the two toward individual liberation, improvements to human condition that come to resemble the human intervention in accelerating evolution, an dultimately the creation of the "king dom of God," or heaven, one arth.

Oftenframedinthelanguageofmythandinvokingreligiousimageryand theologicallanguage,earlyproponentsofthescientificenterprisesoughttoreformulate theconceptionofthe "religious" awayfromthe Augustinianor Calvinist beliefinhuman depravityand their redeemable nature of earthly domain. Assuch, scientific proponents sought to replace such perceived pessimistic beliefs with more optimistic faithin the prospects for human and natural amelioration by means of human endeavor and investigation, and ultimately the harnessing, manipulation, improvement, and even conquest of nature. Instead of posing this new (or, for some, renewed) enterprise of scientificinquiryas antithetical to religion, many prominent thinkers promoted scientific inquiry as a form of worship, a method of inquiry that sought to divulge God's presence in the world, and ultimately as an endeavor that would yield practical benefits which themselves would permit human ascent toward the status of divinity. This enterprise was viewed as both demanded and sanctioned by God—a practice under take nout of piety rather than apostasy.

6

DavidNoblehaspersuasivelydemonstratedthemillenarianinfluenceinth e developmentofthis "religionoftechnology," beginning with the controversial abbot

JoachimofFioreinthethirteenthcenturyanduncoveringcontinuitiesthrough subsequentcenturies in the thought of such figures as Roger Bacon, Giordano Bruno, FrancisBacon, RobertBoyle, the "Cambridge Platonists," Isaac Newton, and in the more secularizedthoughtoftheFreemasons,KarlMarx,and,inAmerica,insuchthinkersas EdwardBellamy. ⁷Noblecontendsthatcontemporaryscientificprojects, such as space exploration, artificial intelligence, and the rise of genetic engineering, while "masked by asecularyocabulary," areinfactactually "medievalinitsoriginandspirit." ⁸While longstandingreligiousdoctrineheldthathumanitywascreatedintheimag eofGodand that, following Genesis, Godgranted humanity dominion over the earth and its creatures, followingAugustinianinfluencetheseteachingsdidnotmitigatebeliefinthe fundamental imperfection of humanity stemming from the Falland the primaryroleas ⁹Themillenarian "caretaker" amidnaturerather than one who stood apart from nature. tradition, however, departed radically from these teachings, arguing that man's fallen naturewasatemporaryconditionandthatthroughhisowneffortshecoul drecapturenot onlythestateofinnocence, but by means of reading and manipulating the "text" of natureitself,mancouldactuallyachieveaformofdivinity. Are presentative statement is articulatedbyGiordanoBrunoattheendofthesixteenth -century, who stated that such effort,incopyingthecreativeactivitiesofGod,issanctionedandordainedbyGod:

Providencehasdecreedthatmanshouldbeoccupiedinactionbythe handsandincontemplationbytheintellect,butinsuchawaythathemay notcontemplatewithoutactionorworkwithoutcontemplation.[And thus]throughemulationoftheactionsofGodandunderthedirectionof spiritualimpulse[men]sharpenedtheirwits,inventedindustriesand

discoveredart. Andalways, from daytoday, by force of necessity, from the depths of the human mindrosene wand wonderful inventions. By this means, separating themselves more and more from their animal natures by their busyand zealous employment, they climbed near erthedivine being. 10

Themille narianandproto -scientifictradition -onethatincreasinglyunderstood humanactivityasitselfthenecessarycomponenttobringaboutthekingdomofGodon earth -repeatedlyemphasizedthreebeliefsthatconstitutethe" religion of technology": first,thebeliefinprogress;second,theidealofhumanself -transformation; and third, the aspiration of human ascension to godliness. Each of these ends was to be achieved by meansofmasteryof "naturalphilosophy," theforerunner of science. If the st oryofthe Fallhadpreviouslybeenunderstoodtodefinestrictlimitsonhumanaspirationsandto denythepossibilityofhumanperfectibility, millenarian interpretations increasingly understoodthestoryofAdam'stransgressiontoportrayatemporaryco nditionof ignorancethatcouldbereversedbymeansofthedevelopmentofhumanknowledgeand ¹¹Progresswasthus,ineffect,aprocessof applicationsofinventions and discoveries. "rediscovery" of what mankind had lost at its point of origin, but this secondtimenotas anunearnedgiftfromGod'shand,butadivinelysanctionedresultofhumaninquiryinto God'screation.ReflectingthisrenewedconfidenceinhumanperfectibilitywasJohn Milton, who surmised that "when the cycle of universal knowled" gehasbeencompleted, stillthespiritwillberestlessinourdarkimprisonmenthere, and it will rove about until theboundsofcreationitselfnolongerlimitthedivinemagnificenceofitsquest....Truly [man]willseemtohavethestarsunderhiscon trolanddominion,landandseaathis

command,andthewindsandstormssubmissivetohiswill.MotherNatureherselfhas surrenderedtohim.Itisasifsomegodhadabdicatedthegovernmentoftheworldand committeditsjustice,laws,andadministrat iontohimasruler." ¹²

Among the earliest and most celebrated calls for the prospects of near-infinite humanself -improvementwasPicodellaMirandola's1486"OrationontheDignityof Man"whichevincesthistripartitebeliefinprogress,self -transformation and the possibility of humanity ascending to divinity by means of science. Evoking a version of the Prometheus mythas purportedly related by Protagoras in Plato's dialogue Protagoras, Picoatonce "updates" the ancient tale for a Christian audience and transforms the Biblical story of creation as told in Genesis into one in which humanbeing savoid the Fall and further become defined by a very absence of fixed properties.Godcreateshumankindasanafterthought, having fashioned allofexistence b utwithout anycreaturethatcould"pondertheplanofsogreatawork,toloveitsbeauty,andto wonderatits vastness." ¹³Since Hehadnotinitially planned to create mankind, Godhas alreadyexhaustedallofthe"archetypes"andthereexistsnomodel remaininginhis "treasure-houses" upon which to base this new creature. "Allwas now complete; all thingshadbeenassignedtothehighest,themiddle,andthelowestorders."

WhilePico'sportrayalofDivineoversightandlimitationhererunstherisk of blasphemy,hemovestoaffirmGod'slimitlesspowersofcreationbydescribingthe fashioningofacreature *without*fixedqualitiesortalents:

Hethereforetookmanasacreatureofindeterminatenatureand, assigning himaplaceinthemiddleofthe world, addressed himthus: "Neitherfixed abodenoraform that is thin ealone nor any function peculiar to thy self

havewegiventhe, Adam, to the endth at according to thylonging and accordingtothyjudgmentthoumayesthaveandpossesswhatabodeand whatfunctionsthouthyselfdesire. Thenature of all other beings is limited and constrained within the bounds of laws prescribed by Us. Thou, constrained by no limits, in accordance with thin eown free will, in whosehandWehaveplacedthee,shaltor dainforthyselfthelimitsofthy nature. We have set the eat the world's center that thou may est from thencemoreeasilyobservewhateverisintheworld. We have made thee neitherofheavennorofearth, neithermortal norimmortal, so that with freedomofchoiceandwithhonor, as though the maker and molder of thyself,thoumayestfashionthyselfinwhatevershapethoushaltprefer. Thoushalthavethepowertodegenerateintothelowerformsoflife. whicharebrutish. Thoushalthavethepower, o utofthysoul'sjudgment, 15 toberebornintothehigherforms, which are divine.

Becauseofthisuniqueandsingularoriginanddestiny,humansexistata"rankto

beenviednotonlybybrutesbutevenbythestarsandbymindsbeyondthisworld."

CombinedwithhisportrayalofGodaslimitedtocreatingbasedonpre -existing

"archetypes"towhichHecannotadd(thushavingonlyrecoursetothefashioningof

humanswithoutqualities),thisconceptionofhumanityasentirelyself -creatinghintsata

curiousdisplacementandreversalofthedivineandthehuman:God"creates"humanity

tobeself -creating,even"self -transforming,"potentiallygrowinginto"aheavenlybeing"

(ifrational),"anangelandthesonofGod"(ifintellectual),oronethat"made onewith

God…shallsurpassthemall(ifwithdrawn"intothecenterofhisownunity")."

17Godis

constrainedinhiscreationofhumanitybythepriorexistenceofuncreated "archetypes," indicatingacuriouslylimiteddeitywhoneverthelessnegotiatest heselimitsbymeansof thecreationofacreaturethatdoesnotappear,intheend,tobesolimited.IfGod'slimits forcehimtocreatemankindasacreaturewithoutqualities,humanityinturnbecomesa creaturewhocreates,onethatcanevenmakeits elfintoadivinebeing –somethingthat Godcouldnotdo,sincethedivineisitselfuncreated,whereashumansarenotlimitedto thosesameprior "archetypes."

Whilethenecessityandthesepowersofself -creationcomeinitiallyfromGod, they can only b eexercised and realized by humans. Godintends for human being sto makeasmuchofthemselvesastheycan -eventothepointoftransformingthemselves intodivinebeings. Thus, Godsanctions and blesses human attempts at self -perfection. Picomakest hisclearinhiscallforhumanitytoembrace"naturalphilosophy,"the philosophicalinvestigationofnaturalphenomenon. Despiteleaving mankind without qualities, Godgives to humanity the script by means which it can avoid a descent into depravityand insteadattainadivinecondition. Distinguishing alaudable form of "magic"fromaformofdeceptiveconjuring(Picopraisesthe maguswhois"theservant of nature and not a contriver '18), he describes how the magus can be come "ruler and lord"by"call ingforthintothelightasiffromtheirhiding -placesthepowersscattered andsownintheworldbytheloving -kindnessofGod,"andthus"doesnotsomuchwork wondersasdiligentlyserveawonder -workingnature."Thisinvestigator"bringsforth into the open them iracles concealed in the recesses of the world, in the depths of nature, and in the storehouses and the mysteries of God, just as if she herself were their maker;

and,asthefarmerwedstheelmstovines,evendoesthe *magus*wedearthtoheav en,that is,hewedslowerthingstotheendowmentsandpowersofhigherthings."

 $This knowledge is not, however, the result of superficial investigation into the \\natural world. Rather, by under taking to discern God's mysterie shidden throughout the earth and the heavens, finally to "we dear tho heaven," mankind as cends to a god like status.$

Oncewehaveachievedthisbytheartofdiscourseandreasoning,then, inspiredbytheCherubicspirit,usingphilosophythroughthestepsofthe ladder,thatis,of nature,andpenetratingallthingsfromcentertocenter, weshalldescend,withtitanicforcerendingtheunitylikeOsirisintomany parts,andweshallsometimesascend,withtheforceofPhoebuscollecting thepartslikethelimbsofOsirisintoaunit y,until,restingatlastinthe bosomoftheFatherwhoisabovetheladder,weshallbemadeperfect withthefelicityoftheology.

Humanperfectibilityiswithinitsownpower,achievedbymeansof"reading"and interpretingthetextofnaturewherein liehiddenGod'shintsofhowtoachieveakindof divinity.If"theology"isneededtoachievefinalperfection,Picosuggeststhroughout thatthemostpiousformofinquiry —theoneintendedbyGodatthetimeofhumanity's creation—istheeffortto understanddivineintentionthroughthescientificinvestigation ofnature.

Pico'semphasisonGod'shiddenmysteriesandtheroleofhumanityinexposing and exploiting those cluesise choed in Francis Bacon's frequent invocation of Proverbs 25:2, "It is the glory of Godto concealathing: but the honor of kings to sear chout the

matter." While Bacon's work is often cited for its influence in the modern belief in progress – especially the progress achieved by means of ascientificent erprised edicat ed to the "benefit and use of men" — less often perceived are Bacon's accompanying belief in the possibility of human transformation by means of scientificad vancement, and ultimately the prospect of him "similitude" to the status of the Divine. 22 If Bacon is regarded as the progenitor of the secular modern scientific project, it is no less true that he perceived that project's secular aims to be wholly in keeping with divine strictures and ultimately under taken under divine sanction and with an end to the greater glory of God and the ultimate de ification of humanity.

Echoingthebeliefofmanymillenarians,Baconrejectedthesuggestionthat mankind'sfallfromEdenindicatedthathumaninquirywasforbiddenordiscouraged,but inaspiritofpietyconclud edthatsuchinquiryshouldnotbeundertakenasaneffortto displaceGod.Bacondistinguishedbetweenrightfulformofhumandominioninthe earthlyrealmandtheillegitimateattemptbymankindtofreeitselfaltogetherfromGod's commandments. ²³Inqui ryistobelimitedbythisouterboundary,tobeundertakenatall timeswithpietyandobeisancetodivinemajesty. Thus,Baconwrites, "allknowledgeis tobelimitedbyreligion..."

Yetthesestricturesarenotaslimitingastheymightfirstappear. In *Valerius*Terminusor"OftheInterpretationofNature" —anearlyfragmentarywork,believedto

havebeenwrittenin1603inpreparationfor TheAdvancementofLearning —Bacon

arguedthatmankindinEden,liketherebellingangels,hadsoughtto"asc endandbelike

untotheHighest,"andinstructivelyadds,"notGod,butthehighest."

25 Thetransgression

ofLuciferandtheangels,likethetransgressionofAdamandEveinthegardenofEden,

wastoseektobecome *higher*thanGodratherthanseekingto be *like*God.Whilethe attempttogain"knowledgeofgoodandevil"intrudedinto"God'ssecretsand mysteries,"Adam'sdominionovernature *before* theFall –indicatedespeciallybyhis namingoftheanimals –revealedthatinquiryandknowledgewasthe properprovenance ofprelapsarianhumankind. ²⁶Baconconcludesthat,"astothegoodnessofGod,thereis nodangerincontendingoradvancingtowardsasimilitudethereof,asthatwhichisopen andpropoundedtoourimitation." ²⁷

The "limitation" demande dby religion on scientific inquiry is revealed essentially to present no limitation at all. Piety requires thorough human investigation and harnessing of all natural phenomena: "For that nothing parcel of the world is denied to man's inquiry and invent ion..." Heaven and earth do conspire and contribute to the use and benefit of man," Baconins is ted, pointing to a confluence of sacredand secular grounds for the pursuit of knowledge. ²⁹ Divines cripture "invite[s] us to consider and to magnify the great and wonder ful works of God," anack nowledge ment which leads Baconto admonish his readers that "religions hould dearly protect all increase of natural knowledge." ³⁰

Bymeansofproperlypursuingtheadvancementoflearning —notinthemanner of Adamin precipitatingthe Fall byseekingtheknowledge of good and evil, but rather in the manner of Adam *prior* to the Fall —mankind could hope to reverse the consequences of the Fall. Through investigation and artifice mankind could re —achieve what was once its divine inheritance, and by means of inquiry it might restore the prelapsarian condition of plenitude, ease, peace, and even immortality.

31 The pursuit of this right fulform of inquiry could be expected to lead to

are stitution and reinvesting (ingreat part) of mantothes over eighty and power (for when so ever he shall be able to call the creatures by their true names he shall again command them) which he had in his first state of creation. And to speak plainly and clearly, it is a discovery of all operations and possibilities of operations from immortality (if it were possible) to the meanest mechanical practice.

Beyondthosedesirableifstill"vulgar"endsofknowledge —whichinclude"imperialand militaryvirtue"aswellas"powerandcommandment"o verotherhumans —isthemost sublimeandfinalendofknowledge:bymeansoflearning,"manascendethtothe heavens"andachievesthattowhich"man'snaturedothmostaspire,whichis immortalityorcontinuance." ³³

Baconunveilshisconfidenceinhuman masteryoftheuniverse, evenbeyondthat of God, perhapsmost suggestively, if subtly, in hisre -telling and interpretation of the mythof Prometheusin The Wisdomofthe Ancients . Deploying the same tacticas Protagoras and Picodella Mirandola before him, and Percy Bysshe Shelleyafterhim, the Promethean myth provides fertile ground in which to "rediscover" mankind 's powers and restore human optimism of its central place in the natural and even divine order. While retaining enough elements of the tale eto appear faithful to the original myth, Bacon in fact alters several familiar elements in order to permitanint erpretation that is most sympathetic to mankind 's capacity and points to the possibility of human transformation and even exhaltation over the edivine.

"Prometheus,ortheStateofMan(ExplainedofanoverrulingProvidence,andof HumanNature)"isthelongestofBacon'sthirty -oneretellingsofclassicmythsin *The*

Wisdomofthe Ancients . Baconhadcause to wish to call attention to the essay .foritisa subtlycraftedexpositionofhumanity's place in the natural and divine order, and further, anexhortationforhumanitytoimproveitspositionwithinthatorder(thus,tothatextent, itresemblesinmorethansubjectmatterPico's"Oration"). Asintheversions by ProtagorasandPico,BaconrelatesthatPrometheuscreatedhumanityandatsomepoint hestolefirefromthegodsandgaveittohumanity. Atthispoint, however, Bacon departsfromknownversionsofthemyth:mankindrespondst othisgiftwith ingratitude, andarrangesforPrometheustobetriedbyJupiter.Curiously,Jupiterisdelightedwith humanity's efforts to prosecute Prometheus and by their possession of fire, and extends to themperpetualyouth. Humanity foolishly giv esawaythelattergifttoanass, whothen subsequentlygivesittotheraceofserpents. Nevertheless (according to Bacon), Prometheuscontinueshis "unwarrantable practices" (ratherthan, as the classic mythhad it,protectinghumanity)bydeceivingJu piterintochoosinganunworthysacrifice,andfor hisdeceptionheprovokesJupitertofashionapunishmentagainsthumanityintheform of Pandora and abox of curses. Prometheus is also bound in chain stotheside of a mountainwhereavulturedailyco nsumeshisliver, and is released from this punishment 34 only when Her cules sails by upon the ocean, shoots the bird and sets Prome the us free.

Inhisexplanation,Baconvarieshisaccountofthesymbolicmeaningof

Prometheus,butattheoutsethestatesth at"Prometheusclearlyandexpresslysignifies

Providence."³⁵By"providence"BaconseemstosuggestthatPrometheussymbolizes

mankind'sdivinely -ordaineddestiny,therepositoryofGod'splansfortheuniverse(thus,

hewrites,"providenceisimplantedi nthehumanmindinconformitywith,andbythe

directionandthedesignofthegreateroverrulingProvidence"

³⁶).The"principal"ground

forunderstandingPrometheustosignifyProvidenceisbecause"manseemstobethe thinginwhichthewholeworldcent ers,withrespecttofinalcauses"asexplainedat lengthbyBacon:

Sothatifhe[i.e.,mankind]wereaway,allotherthingswouldstrayand fluctuate,withoutendorintention,orbecomeperfectlydisjointed,andout offrame;forallthingsaremadesubs ervienttoman,andhereceivesuse andbenefitfromthemall.Thustherevolutions,places,andperiods,of thecelestialbodies,servehimfordistinguishingtimesandseasons,and fordividingtheworldintodifferentregions;themeteorsaffordhim prognosticationsoftheweather;thewindssailourships,driveourmills, andmoveourmachines;andthevegetablesandanimalsofallkinds eitheraffordusmatterforhousesandhabitations,clothing,food,physic; ortendtoease,ordelight,tosuppo rt,ortorefreshussothateverythingin natureseemsnotmadeforitself.butforman.

Prometheus, *qua* Providence, wouldappeartobeaworthyobjectofhuman gratitudeandpraiseforthisbountyofnaturalprovisionsandhumandominion, butBacon heresurprises with his interpretation of *his own* departure from the traditional tale, in which, as Baconrelates, Prometheus receives instead *ingratitude* from humanity for his gifts. Callingit "aremarkable part of the fable" (which, clearly, it is, in as mu chas Bacon himselffashioned it), here cognizes that "it may seems trangethat the sino fingratitude to acreator and benefactor, as in so he in ous asto include almost all others, should meet with approbation and reward." ³⁸ However, Bacon as serts that the fable teaches its perceptive readers that such in gratitude "proceeds from a most no ble and laudable temper

ofthemind,"namelythatthose"whoarraignandaccusebothnatureandart,andare alwaysfullofcomplaintsagainstthem...areperpetuallystirr eduptofreshindustryand newdiscoveries." ³⁹Bycontrast,thosewhostandinaweofhumanity'splaceinthe universe –andexpressgratitudeforthisposition –areinfactsubjecttothinkthemselves satisfiedwiththeircurrentstate,and"rest,witho utfurtherinquiry."Thislattercondition, Baconavers,shows"littleregardtothedivinenature."

Inhisinterpretation of the preceding passage, Bacon subtly shifts the ground from his initial identification of Prometheus with "Providence" that direc tsmankind -a 41 –tooneinwhichsuch providencethataffordsmen"mindandunderstanding" providence is itself subject to a strenuous and accusatory form of human inquiry that itaffordedinthefirstinstance. Ingratitude only appears at first glancet obeasin:infact, ingratitude – whetherto "acreatorandbenefactor" (whichonlyappears "heinous"), orto "natureandart" (whichispraiseworthy) -inbothcasesiscuriouslysanctionedand ultimatelyrewardedby"thedivinenature."EchoingPico's treatment, Baconsuggests thathumanityisprovidentiallygiventhenecessarytoolsbywhichto"arraignand accuse"Providence, and can expect to be rewarded for these exertions by a higher power -eventoreceivethegiftofimmortality. Humanityhas onlyunsuccessfullypursuedthe possibilityofimmortalityduetoimpatienceandunnecessaryabstraction,butitisnow withinitsreach -havingnowtheexampleoftheancientsbothtoemulateandtoimprove upon– tobecome, like the patient ass, "ausef ulbearerofanewandaccumulateddivine bountytomankind." 42

A sift oconstrain the impious implications of his analysis, Bacon concludes with an interpretation of that section of the mythin which punish mentis inflicted daily upon the section of the mythin which punish mentis inflicted daily upon the section of the mythin which punish mentis inflicted daily upon the section of the section of

Prometheusbyaneagl e, suggesting that this image affords a warning against overweeningandimpiousinquiries."Themeaningseemstobethis,"Baconwrites,"that whenmenarepuffedupwithartsandknowledge, they often try to subdueeven the erthedominionofsenseandreason, whence in evitably divinewisdomandbringitund followsaperpetualandrestlessrendingandtearingofthemind. Asoberandhumble distinctionmust, therefore, bemadebetwixtdivine and humanthings, and betwixt the oraclesofsenseandfaith..." ⁴³Almostunnoticeably,Baconhasreplacedhisinitial interpretationidentifyingPrometheuswith"Providence"withonethatidentifies Prometheus with humanity. Yet, it is a subtle transformation that has in fact been effectedbymeansofthepreceding" explanation" of the need to use the gifts of providencetointerrogateprovidence, and effectively make one's ownnew kind of "providence" by means of those gifts. If humanity, in effect, makes itself into its own longeratoddswithPrometheus,butinstead providential agent, then it now stands no againstZeus -theimplied"higherpower"thatstandsevenaboveProvidence.Bacon's warningseemstobe,lestwetemptthekindofpunishmentvisiteduponPrometheusby Zeus –thatdaily"rendingandtearing" -wemusthumblyacknowledgethedistinction between "divineandhumanthings."

Thatmightconcludemattersbutforthehighlycuriousinterpretivepassagethat has *preceded*thisexplanationofPrometheus'punishmentwhich,intheoriginalfable relatedby Bacon,infact *follows*thedescriptionofthePrometheus'dailytorture.Bacon interpretsthe *freeing*ofPrometheus *before*hisinterpretationofthepunishment. 44Thus, thoughhisexplanation *precedes*thisapparentlyfinalwarningabouttheneedforhuma n piety,infactthepriorinterpretationofHercules'roleinPrometheus'liberationisthe

"final" lessonoftheallegory inspite of its penultimate placement in the interpretation.

As for the role of Hercules, Bacon writes

evenPrometheushadnotthe powertofreehimself,butowedhis deliverancetoanother;fornonaturalinbredforceandfortitudecould proveequaltosuchatask. The power of releasing him came from the utmost confines of the ocean, and from the sun; that is, from Apollo, or knowledge.... Accordingly, Virgil... account[s] him happy who knows the cause of things, and has conquered all his fears, apprehensions, and superstitions. 45

Curiously, Prometheus - who had provided humanity with the capacity to forgehis own inquiries, eventoth epoint of "arraigning" Prometheus, or "Providence" -doesnotnow possesstheabilitiestofreehimself. Hehasnotconquered allofhisfears -fearsthathe hasnothithertoevincedinhiswillingnesstocombatZeus -suggestingthathisfinalfear is hisunwillingnesstopossessthepowerthatwouldforestallhispunishment(or superstitiousfearofpunishment)andmakehisliberationatthehandsofanother unnecessary. Hercules represents the fearless scientistor discoverer -hewho"supports andc onfirmsthehumanmind" -whofinallyliberatesthenowhumanizedPrometheus fromhisfinal "fears, apprehensions and superstitions." The prospect of liberation at the hands of Hercules makes the fear of Zeussuper fluous and apprehension of punishmentnugatory, since, by emulating Hercules, humanity has no fear of any external form of bondagegiventhatitpossessesofallthemeansofself -liberation. The final statement on the significance of Hercules – and hence, of the parable itself -confirmsthath uman $transformation and ascendance to the status of human divinity is the true object of \it transformation and \it trans$

Bacon'steaching:"asif,throughthenarrownessofournature,ortoogreatafragility thereof,wewereabsolutelyincapableofthatfortitudeandconstancytowhic hSeneca finelyalludes,whenhesays: 'Itisanoblething,atoncetoparticipateinthefrailtyof manandthesecurityofagod." ⁴⁶Baconsoughttoremakehumanity,bymeansofthe advancementoflearninganditsresultingaimat"thegloryoftheCre atorandthereliefof man'sestate, "allowinghumanitytoachievetheirduestatus, "notanimalsontheirhind legs,butmortalgods." ⁴⁷

Baconmaybeacuriousandobjectionableimputedbackgroundsourceforthe eventualidentificationbetweenadvancesin scienceanddemocracy,especiallygiventhat Baconwasacommittedmonarchistandfrequentlyrecommendedsecrecyinpolitical matters. 48 YetBaconadvancesargumentsonbehalfofthescientificenterprisethatare easilyassimilatedtodemocraticends,an dindeed,mayevenleadlogicallyand necessarilyinthatdirection –atrajectoryofwhichBacon,inseveralmoments,appeared himselftobewellaware.

Thereis, of course, apotential tension between the scientific enterprise which emphasizes there of expertise and elite knowledge, and democracy's expectation of the basic competence among, and wides pread participation of, the citizenry. Even the most fervent democrats have recognized that informed elites play arole in the cultivation of intelligence and judgment among the populace. John Dewey, for example, readily recognized that "formost men, save the scientific workers, science is a mystery in the handsofinitiates...." ⁴⁹ Modern democracy requires sufficient knowledge of complex issues, requiring not only the means of communication that a dequately disseminate information and knowledge, but a dequately developed individual understanding of

methodsofinquiryandanalysis.ForDewey,modernAmericahadsuccessfullyachieved theformer,butwaswoefu llyinsufficientindevelopmentofthelatter.AnsweringWalter Lippmann'squestioningofthepoliticalcompetencyoftheordinaryperson,Deweycalled forthe"artful"presentationofthelatestadvancesinscientificinquiry,likeningthe successfuldis seminationofknowledgeof"enormousandwidespreadhumanbearing"to enticingformsofliterarypresentation.Bymeansofsuchartisticallyrendered knowledge,Deweybelievedthatthecreationofa"GreatCommunity"waspossible,one composedof"anorga nized,articulatePublic."HereDeweyacknowledgesthecentral rolenotofascientistorinventor,buttodemocracy's"seer,"WaltWhitman.He concludedthatdemocracywouldachieveaconsummationwhen"freesocialinquiryis indissolublyweddedtothe artoffullandmovingcommunication."

InboththeserespectsBaconanticipatesthis "wedding" of scientificinquiry and democracy, particularly by linking themethodofs cientific inquiry to the concomitant amelioration of the human condition, broughta bout by the resultant practical applications and devices that would expand opportunities for leisure and universal communication. In several instances Baconemphasized how his recommended form of scientificinquiry is based upon, and substantively promote s, akindof equality. Denying that the scientific enterprise calls for akindof specialized and elite knowledge, in the Novum Organum Baconasserted that the form of inquiry here commended was universally accessible:

Mymethodofscientificdiscoveryle avesonlyasmallroletosharpness andpowerofwits,butputsallwitsandunderstandingsmoreorlessona level.Forjustasdrawingastraightlineoraperfectcirclesimplybyhand callsforaverysteadyandpracticedhand,butlittleornoskill ifaruleror pairofcompassesisused,soitiswithmymethod.

Baconthussuggestedthathismethodadvancestwoformsofequality —onethatis intrinsictothemethoditself("putsallwitsandunderstandingsmoreorlessonalevel"), andtheother thatistheresultofpracticalapplicationsderivingfromthesuccessful inquiryintonaturalcauses("littleornoskill[isrequired]ifarulerorpairofcompasses isused").

Baconwaskeenlyawareoftheegalitarian, and even democratic, implicatio nsof themethodologyitself. Ashestatedearlyinhiswritings, "howsoevergovernmentshave severalforms, sometimes one governing, sometimes few, sometimes the multitude; yet Democratie, and that prevaile thwhich is mos thestateofknowledgeisevera tagreeable ⁵²Inseekingtoemploythemethodofscientific tothesensesandconceitsofthepeople." inquiry -onethat"putsallwitsandunderstandingsmoreorlessonalevel" -the expectedresultisthediscoveryofnewapplicationsthatlightenthe burdensofhumanity, increaselongevity, and promotes ocial intercourse between citizens and people of varying aboutthefinalaimofthe"Salomon's House," or nations. Writinginthe Vew Atlantis "TheCollegeofSixDays,"Baconwrotethat"theEndofo urFoundationisthe knowledgeofCauses, and these cretmotions of things; and the enlarging of the bounds ⁵³Thediscoveryof"secret ofHumanEmpire,totheeffectingofallthingspossible." motions" and subsequent inventions that improve upon nature's bountyallowsforthe increasedlikelihoodofpracticalhumanequality -suchastheuniversalcapacityoffered bythe"compass,"whenpreviouslyonlyaskilledhandcoulddrawaperfectcircle.Both themethodofscientificinquiry, and its resultant app lications, point to a democratic

trajectorythatwasperceivedevenbyBacon,andbecamereadilyapparenttofull -blown democraticfaithful.

Dewey, for instance, spared no praise for Bacon, calling him "the forer unner of thespiritofmodernlife,"the"re alfounderofmodernthought,"and"theprophetofa pragmaticconceptionofknowledge." ⁵⁴InparticularDeweypraisedthreeaspectsof Bacon'spracticalphilosophy:first, his insistence that "knowledge is power," or that true knowledgeleadstohumanem powermentovernaturalphenomena; second, his "sense of progressastheaimandtestofgenuineknowledge,"thecontinualameliorationofthe humanconditionbymeansofunceasinginvestigationandinterrogationofnature; and third, his insight that ledt otheperfection of the inductive method of experimentation, onethatstressedactivityandtheconstant"invasionoftheunknown"basedonthe -constantdoubt. ⁵⁵In *ThePublicandIts* rejectionofcertaintyandtheembraceofever *Problems*, Deweyarticulat edhowthisapproachtohumanknowledge -onethataimedat practicalameliorationofconditionsaswellasexpandingcirclesofknowledge throughoutthecitizenry -wastheessenceofdemocraticlife.Beyondmeresuffrageor distantoversightovertheac tivityofitsrepresentatives, active and universal inquiry and ameliorationwasthebasisofatruedemocracy. In this sense, Deweyaverred, "the cure fortheailmentsofdemocracyismoredemocracy." ⁵⁶IfBacondidnotseethefull implicationsofhiso wnanalysis,never"discoveredthelandofpromise,"Deweyinsists that "heproclaimed the new goal and by faithhedes criedits features from a far."

OneseesthefinalaimofBaconianscienceinitsoriginalconception —namely, thetransformationofhum anity—continuetobearticulatedamongproponentsof democracy, but often in less overtly religious tones as those employed by Bacon. Indeed,

ironically, due to the intervening history in which religion has been perceived to be more hostile than friendly toward the scientific enterprise, defenders of the scientific faith have advanced claims to human transformation as a prospectin spite of, and antithetical to, traditional religious belief. SRichard Rorty captures the dual religious and antitional religious sense of this belief in the transformative powers of humanity by means of the interlinking of science—as the means of "relieving the human estate"—and democracy:

Inpastagesoftheworld,thingsweresobadthat"areasontobelieve,a wayoftotake theworldbythethroat"washardtogetexceptbylooking toapowernotourselves.Inthosedays,therewaslittlechoicebutto sacrificetheintellectinordertograspholdofthepremisesofpractical syllogisms –premisesconcerningtheafter -deathconsequencesof baptism,pilgrimageorparticipationinholywars.Tobeimaginativeand tobereligious,inthosedarktimes,cametoalmostthesamething –for thisworldwastoowretchedtoliftuptheheart.Butthingsaredifferent now,becauseof humanbeings'gradualsuccessinmakingtheirlives,and theirworld,lesswretched.Nonreligiousformsofromancehave flourished –ifonlyinthoseluckypartsoftheworldwherewealth,leisure, literacy,anddemocracyhaveworkedtogethertoprolong ourlivesandfill ourlibraries. ⁵⁹

ForRorty,theopportunitiesaffordedbythesecontemporaryadvances —onesthathe frequentlyandgratefullyattributestoBacon'sproto -pragmaticargumentsinfavorof "knowledgeaspower" ⁶⁰ –allownowforustobe"c arriedbeyondpresentlyused

language."⁶¹Humanitytransformsitselfbymeansofnewusesandemploymentof language,accordingtoRorty'sadmonitionof''liberalirony."

Foralltheconfidenceintheprospectofdemocraticconsummationandhuman transformationaffordedbythemodernscientificenterpriseasexpressedbysuch optimisticthinkersasDeweyandRorty,therehaspersistedthemisgivingthatthe scientificprojectmaynotbeasseamlesslysupportiveofdemocracy'saimsasmightbe hopedbythe mostfaithfuldevotees.Oneonlyneedsconsiderthosesocialscientistsof theearlytwentieth -century –suchas1934'sA.P.S.A.PresidentWalterShepard,whose scientificconclusionspromptedhimtocallforathoroughreconsiderationandrevisionof theprevailing"democraticfaith" –toperceivethesourceofcontinuedmisgivingsabout therelationshipbetweenthescientificenterpriseanddemocracy. Totheextentthateach restsonakindoffaithinabetterfuture,however,itisnotsurprisingtof indtestamentsof faiththatendorse,promote,andevenproselytizeonbehalfofastrengthenedfaithinthe sharedaimsofscienceanddemocracy.

Onenoteworthydocumentthataffirmsafirmconnectionbetweendemocracyand theendsofscience(asagains tthemoresuspectformsofreligiousfaith)isthe

ProceedingsofaconferenceheldinNewYorkCityinMay,1943,entitled TheScientific SpiritandDemocraticFaith .64Organizedinparttocombatthethreatposedbythe "closedsociety"offascism,asw ellastorepudiateperceivedauthoritarianleaningsof religiousorganizationswithinliberaldemocraticsocieties,theconferencegathered togetherbothprominentdemocratictheorists —suchasHoraceM.Kallen —aswellas practicingscientistsofdiffe rentstripes,allwithacommonambitiontoargueonbehalfof "anessentialinterrelation"betweenscienceanddemocracy.

documentistheextenttowhichthetensionthattheconferencesoughtimplicitlytodispel

-thefearth atthescientificprojectanddemocracymaynotbealtogethercompatible

enterprises -wasinfact deepened by acurious disconnection between the vision of the

conference's democratic theorists and its scientists. One might suspect that the

conference's participants became anxious as the conference unfolded; yet, a mid the

shared optimismover the strong linkage of science and democracy, there was an absence

of reflection upon the implications of the proceedings, and no self -conscious notes of

caution during the conference.

Infusedwiththespiritofpragmatism —oneoftheorganizersexplicitlystatesthat theparticipantswere "radicaldemocrats" inthespiritofEmersonandbelongedtothe

AmericanphilosophictraditionofWilliamJamesandJohnDewey —thepapersofthe firsthalfofthevolumestronglyasserttheessentialconnectionbetweenthefreedomof inquiryrequiredbyscienceandtheconditionofopenandrangingfreedomthatdefines democratic politics at large.

66 EchoingDewey, as well as the more distante choest hat Dewey attributed to Bacon, theorganizers set for the everal guiding principles of the conference, including the following:

- Thescientificspiritisinessencethemodernsearchfortruth;
- Thedemocraticfaithisinessencethebel iefthathumanresourcesmay becomeadequateforhumanneedswhereverfreedomofinquiryexists andcooperativetechniquesaredeveloped
- Thescientificspiritisdependentuponthedemocraticfaithinthesense thatsciencecannotdevelopintoaninstrumen tforhumanwelfare exceptinanatmosphereoffreedom.

Sciencerequiresdemocracyinordertofullyengageinthesearchfortruthwithout obstructionfromauthoritariansources; democracyrequiresscience to the extent that citizens must be afforded eve ryopportunity formaterial advancement, as well as equipped with the tools of discernment provided by scientific inquiry, ultimately with an aim to making the mcapable of thinking and interacting by employing the same methodological approach as scientists. Thus, another principle affirmed by the conference holds that "when the democratic faith becomes practice the resulting process is one in which all policy -making is an affair of participation. Policies which need to be 'lived out,' decisions which seek to represent the experience of the people, must be derived from the participating knowledge and experience of the people."

HoraceM.Kallenechoestheseprinciplesinhisspiritedattackon authoritarianismandadefenseofthescientificenterpriseand itsessentialconnectionto thedemocraticfaith.Likedemocracy,sciencethrivesonfreeinquiryandimpliesthe equalityofallreasonableparticipants:

Thesciencesarepreeminentlythefieldsoffreethought.Noidea,no
hypothesis,notechniquetha ttheyconsiderisadmittedtoaprivileged
status.Noneisexemptfromthecompetitionofalternatives.Noneis
deniedthecooperationofitscompetitorsinthetestsofitsvalidity.None
entersthefieldasatruthrevealed,self -evident,beyondthe challengeof
doubt,beyondtheproofsofinquiry.

ForKallen,asforDewey,thephrases"scientificspirit"and"democraticfaith"overlapto thepointofbeingindistinguishable:both"conveyanidenticalattitudeindifferentbut interactingundertaki ngsofthehumanenterprise." ⁷⁰Fromtheanti -foundational,

pragmaticpointofview, all certainties — whether in natural sciences or politics — are in fact merely apparent, and must be subject to revision and potential rejection by unceasing in quiry and investigation. All beliefs are provisional, and "faiths" that maintain certain ties are to be exposed and dismissed as forms of "spiritual fascism." The laten's certain tyon the progressive nature of uncertainty derives from his democratic faith, the belief that openinquiry in the political and scientific real ms will be for ever mutually supportive in improving humanity's condition, and that all democratic citizens can be brought to alevel of sufficients ophistication and interest to employ the methods of science in their own formulations of public policy.

Thisbeliefwasfullysharedbythepracticingscientistswhoparticipatedinthe conference, severalofwhomstronglyendorsedthis "democraticfaith" and who viewed the full flourishing of science as aff or ding the opportunity to move humanity to a condition that would justify this initial faith in their universal capacities. On escientist Alfred Mirsky, an Associate Member of the Rockefeller Institute for Medical Research distinguished between "those people who do not have the democratic faith" and thus who shared "avery low opinion of humannature" (he requoting, as an example, Alexander Hamilton), and those people "who do have the democratic faith" made possible by a "more optimistic point of view towards humannature."

Todemonstratethatthismore"optimistic"faithinhumanityiswarranted,Mirsky launchedintoalengthyanalogydrawnfromhiscloseexperiencewithlaboratoryrats.

Henotedthatratswhichareill -treated -keptindirtycage sandnotfedorhandled sufficiently -arewildanduncontrollable.Bycontrast,thoseratsthatarekeptcleanand well-fedaremildandgentle."Petting"andencouraginglaboratoryratsbecome

essof"gentling." ⁷³Tofurther accustomedtotheir"caretakers"isessentialinthisproc demonstratehispoint, hedescribed that ill -treatedratsdiedwithhighfrequencywiththe removal of the parathyroid gland, whereas "gentled" rats survived the operation at a muchhigherrates. Mirsky concluded that this comparisonrevealedthecentral importanceofconditioningandpointedtoitspromiseintherealmofgenetic experimentation. Inhisperoration, hedrewan explicit comparison between the more docilemannerandbetterphysicalhealthofwell -treatedrats tohumanbeings, calling for humanstobetreatedinasimilarmanner:"Ithinkweknowenoughtosaythatifman weretreated the way these rats have been in the laboratory, then... there are good groundsforthedemocraticfaith; inotherwords, for the faiththattherearesomegood potentialities in ordinary human beings." ⁷⁴While one can hardly gain say the benefits of greaterhealth –particularlynecessaryforlaboratoryanimalsinordertosurvive experimental surgery (apoint which gives pause when Mirskyopinesthat"manshould bestudiedinlaboratoriesmuchmorethanheis") -onewondersif"gentling"isthe highestdemocratic virtue that science can offer to humanity, and whether those purported "democratic" virtues of unceasing inquiry and par ticipation –emphasizedinthevolume byKallen –areaidedbytheexperimentalsupportof"responsible scientistswhocount themselvesamongthedemocratic faithful.

Mirsky's vision of science that provides the means of transforming humans into more suitable democratic citizensis not acurious exception among the scientific participants at the conference, but a view shared by several others (all specially selected for the occasion), including Richard M. Brickner, an Associate Professor of Clinical Neurology at the College of Physicians and Surgeons. Brickner described his discovery

asapracticingpsychoanalystthatnumerousapparently"normal"patientshave
extraordinarily"primitive"qualities,including"deathwishesandhatredsandurgesto
aggression."⁷⁵ Psychotherapybringsthesehiddenpathologiestolight,and,while
Bricknerdidnotcontendthattheseaggressionscanbealleviated,hearguedthatthe
awarenessoftheirexistencetherebyalertspeopletotheimperativetoavoidactingupon
themEchoingthesentimentsofAlbertMirsky,Bricknerstatedthat"itdoesseemto
clearthingsuptoknowwhatisbotheringyouisthatyouarethesameasalionoradog
oranungentleableratinsomeways." Heconcluded:"Peoplegetbetter,theygethap pier,
whentheyhavebeenthroughsuchacourseofeducation."

AgainechoingMirsky,Bricknerarguedthatresponsiblescientistscanoffertheir expertisetoimprovedemocraticconditions.Specifically,Bricknerproposedtoprevent theonsetofadolesce ntdisillusionmentbyforestallingtheinitialimplantationofillusions inyoungchildren.Heinsistedthatheandotherscientistsshould"teachsomeofthe principleswefindusefulinadultpsychotherapytochildrenasasortofprophylactic psychotherapy." AsMirskysuggested,wildratscannotbeeasily"gentled," but laboratoryrats,bredincaptivity,andtreatedproperly,canbeconditionedtobegentleif onebeginsfromthepointofbirth. Similarly, "wild" humanscanonly with difficulty be "gentled" by means of extensive psychiatric intervention; better to avoid this eventuality by beginning gentling treatment from a very young age. As Mirsky argued, "genetically, [the gentled at] is quite a different animal. His inherent germ plasmor what tever you care to callitis different from that of the [wild] rats, and it really is impossible to gentle his variety of rat."

Theseproposed "democratic" applications of science appear to be along way fromBacon'sbeliefthatscienceallowedthereali zationoftheprouddeclarationthat humansare "notanimalsontheirhindlegs,butmortalgods." Yet,iftheseexpressions ofdemocraticscienceappeartoreducehumanitytothelevelof"mere"animals laboratoryrats –itsaimisultimatelyconsiste ntwithBacon'sbeliefthatpurely material amelioration, by means of inquiry into purely naturalphenomenon, wastheroutetoa newformofdivination(afterall, Mirskyand Bricknereach speak of the "gentled" ratas asignalimprovementoveritsnatural ly"wild"alternative,andMirskypointstothe possibilityofgeneticimprovementofthespecies). The linkage of this aim to a rarified democratic faithmakes explicit the attempt to universalize this outcome for all citizens, tomakecommonthetransfo rmationofimperfectcreaturesinto -inRorty'swords -"a moreevolvedformofhumanity,"madepossiblebythe"principlemeans"of democracy.⁷⁹

PerilousFaith

Suchthinkersarebothkeenlyawareofthedangersof 'faith,' ontheonehand – particularly areligiousfaith – and, ontheotherhand, the political pitfalls of faithlessness.

Faithis both dangerous lyabsolutist in the oneguise (especially religious faith), and regarded as are quirement in order to maintain belief in a fully democratic future (a "democratic faith"). The "democratic faith ful," however, are strikingly unwilling to consider the potential dangers of their own "absolutism" even as they exhibit fierce suspiciona bout any other "absolutist" claims, especially any forms of "absolutist" as t' faith

inthedivinethatmay,infact,offermoreresourcesfortheresistanceofhubrisandthe possibilityoftruehumilitythanthat"democraticfaith"whichtheyembrace.

Particularlybecauseof"progressivist"assumptionsthatunderliepragmatic belief inthe "democratic faith" — assumptions about the positive results of technological developmentsthatareunderstoodtoincreasehumanpossibilitiesofcommunicationand "intelligence," ranging from Dewey's faithinthe promise of the locomotive an d telegraphtoBenjaminR.Barber'sfaithinthepromiseoftheincipientinternet -the "democratic faithful" are often keenly unaware of "unintended consequences" that may, andoftendo,accompanythese"developments." ⁸⁰Such"unintendedconsequences"ma underminewhatarearguablynecessaryfeaturesofdemocracy(suchasthecivictrustthat maybeunderminedasaresultofthe "advances" intransportation and communication, an effectoftenattributedtotheanomiclifestylethathasresultedfromanau tomobileand internetculture),ormayneglectthenecessaryconditionsofadecenthumanlifelivedin concert, rather than incompetition, with nature.

Oneseesevidenceofsuchoverconfidenceinthemethodologyofscience
throughoutDewey'swork.Not inghisindebtednesstoFrancisBacon,Deweywrotethat
"scientificlawsdonotlieonthesurfaceofnature.Theyarehidden,andmustbewrested
fromnaturebyanactiveandelaboratetechniqueofinquiry."

81Thejobofthemodern,
andespeciallymodern science –arealmofinquirythatextendstothehumansciences
(suchaspoliticalscience)aswellastothenaturalsciences
—istoextractthesecretsof
naturebywhatevermeanspossible,evenifthesemethodsattimesevokeominous
overtonesanddis turbingconsequences.AgainechoingBacon,Deweyrevealedthe
severitywithwhichthemodernscientistmustapproachhistask:

[he]mustforcetheapparentfactsofnatureintoformsdifferenttothosein whichtheyfamiliarlypresentthemselves; and thus makethemtell the truthabout themselves, astorturemay compelanunwilling witness to reveal what he has been concealing.

Becausetechnologyisseenaswhollyintheserviceofdemocraticends,oneoftenseesin

Dewey'sworkablitheunwillingnessto acknowledgethewaystechnologiesmayinfact

serveendsthatare,inthefirstinstance,anti -democratic,andbeyond,hostiletohuman

andnaturalecology.ItisatleastcuriousthatDeweyshouldhaveputsomuchfaithin

thecompatibilityofscientific progressanddemocracy -havinglivedthroughdecadesin

whichAmericansocialsciencedemonstratedhow"science"couldberenderedaltogether

hostiletodemocratic"faith" -andfinallyironicinasmuchasitwouldbeDewey'sown

faithtowhichthesocia lscientistswouldappealasawayoflimitingtheimplicationsof

theirscience. 83

Moreover,reflectedintheembraceofinfinitelyrevisable "warrantedassertions" andoverweeningconfidenceintheexperimentalapproachtoallquestionsofpublic policy isablitheoversightoftheformsofirreplaceablenaturalandhumancoststhat such "experimentation" mayanddoesentail. One can reasonably stipulate that a significant portion of "experimentation" is done to day in order to relieve humanity and the globale cology of the negative consequences of previous experiments — some among which, once implemented as a remedy, can be reasonably expected to have yet unforeseen negative consequences — just as projects that are speculatively being under taken to "relieve the human estate" will in all likelihood themselves result in further unforeseen negative consequences in one domain even as they ameliorate the human

conditioninanother. ⁸⁴Becauseallsetbacksareinfactconstructivefromanexperimental viewpointandallconsequencesthatresultfromprogressallowforfurtherimprovement, intheworldviewofthedemocraticfaithfulthereislittleornoawarenessofhumanand naturalimplicationsofnegativecosts,thelimitationsimposedby"pathdependency,"an d theintractablenessoftragedy. The "democraticfaithful" evinceanunwillingness, or inability,toseenegativeconsequencesofassumptionsthatunderlietheembraceof material and moral "progress" aspart of the democratic faith.

Thisreflectsawi derinabilitytoacknowledgethepresenceoftragedyembedded indemocraticoverconfidence —anacknowledgementthatcanmakeavoidanceoftragic consequencesmorelikely. ⁸⁵RichardRorty,forone,speaksofmodernbeliefinreligion and "truth" asaform of "poetry," yetisstrikinglyincapableofdiscerningthecautionary lessonsfromevenpoetrythatheotherwiseembraces. For example, echoing sentiments in Emerson's "American Scholar" address, Rortycontrast sthetired metaphysical philosophyof Europe with the "new metaphysic" of democracy in the New World:

JustasMarkTwainwasconvincedthateverythingbadinEuropeanlife andsocietycouldbecorrectedbyadoptingAmericanattitudesand customswhichisConnecticutYankeebroughttoKingArthur'sC ourt,so Deweywasconvincedthateverythingthatwaswrongwithtraditional Europeanphilosophywastheresultofclingingtoaworldpicturewhich arosewithin,andmettheneedsof,aninegalitariansociety.

Thisis, to say the least, a surprising unde rstanding of Twain's novel from a professor of Comparative Literature at Stanford University. While it is true that Hank Morgan, the "Yankee," skewers aristocratical religious traditions in medieval England, by the end

ofthenovelheprovestobemore brutalandmurderousthantheknightsheridicules.

UsingthetechnologiesoftheGatlinggun,modernexplosives,andelectricitygenerated fromcoal,hesucceedsinkillingthirty -thousandofArthur'sknights,andintheprocess defeatshimselfashean dhisbandofmodernistalliessuccumbtothepestilencethatthe piledcorpsescreate. Twain's novelhardlystandsasamoralitytaleaboutthecorrupt evilsofEuropeopposedtothedecenciesofAmerica,butrather -inadditiontoderiding theinequali tiesofEnglisharistocraticsociety -evenmorefiercelycondemnsthesmug superiorityofAmericanoptimismthatrefusestoseethewaysthatitsowndemocratic faithbothoverlooks,andmayitselfcontain,seedsofinescapablehumantragedyand cruelty. Inlightofthisoversight,Rorty'ssympathyforan"Americanizedhumanity'is allthemorealarming.

"DemocraticFaith" appropriatelyreflectsaversionofwhatphilosopherMichael
Oakeshottcalled "ThePoliticsofFaith" —aformofpolitical "faith" notableforthe
"absenceofdoubt" aboutitself, anunscrupulousbelief "intheredemptionofmankindin
historyandbyhumaneffort "aimedatthe "perfectionofmankind" and informed by a
kindof "cosmicoptimism." **8*Oakeshottcontrasted this formofpoli tics with "the
Politics of Scepticism, "apolitics conducted under the assumption that humankind is not
capable of its own perfection, one notable for "prudent diffidence" rather than "radical
doubt," one he sitant about the claims of political rule and war yof despotism created in
the name of progressor "the people."

WhatisstrikinginOakeshott'sformulationistheextenttowhichthosewho maintainthe"PoliticsofFaith"almostunanimouslyattack"faith"initsreligiousform (suchasMachiavellian dBacon –or,byextension,DeweyandRorty),whereasthose

whomOakeshottidentifiesasmaintaining"thePoliticsofScepticism"includereligiously "faithful"thinkerssuchasAugustine,Pascal,andTocqueville. ⁹⁰Whereasapragmatic formoffaith,notab ly"democraticfaith,"securesbeliefinaneverimprovingfuture,the "politicsofskepticism"isreinforcedbytheinitialembraceoffaithinredemptionbeyond thewhollyhumanorpoliticalthatisinturnaccompaniedbyinsistenceuponhumilityand circumspection.Democracymay,intheend,requirefaithinsomeform,butitremains contestablewhetherthe"democraticfaith"ofpragmatismisfinallytheformoffaiththat bestservesthecauseandprospectsofdemocracy.

Notes

¹JohnDewey, "TheDemocraticFaithandEducation," in *PhilosophyofEducation* (*ProblemsofMen*) (Totowa, NJ: Littlefield, Adams & Co., 1975[1944]), 33.

²Dewey, "ReligionandOurSchools," 168.

³WilhelmNestle, *VomMythoszumLogos* (NewYork:ArnoPre ss,1978[1942]).Cf.F. M.Cornford, *FromReligiontoPhilosophy:AStudyintheOriginsofWesternSpeculation* (Princeton:PrincetonUniversityPress,1991[1912]),whofindsfargreaterinterdependence betweentheancientreligionandphilosophy.

⁴See especiallyE.A.Burtt, *TheMetaphysicalFoundationsofModernScience* (Garden City,NY:Doubleday&Company,Inc.,1954).

⁵FrancisBaconwrotethat"alittleorsuperficialknowledgeof[natural]philosophymay inclinethemindofmantoatheism,buta furtherproceedingthereindothbringthemindback againtoreligion."Bacon, *TheAdvancementofLearning* (NewYork:ModernLibrary,2001),9 10.

⁶The "religiosity" of the early proponents of the scientific enterprise is explored at greaterandmoreexh austivelengthbyanumberofstudies, allofwhichhavebeen of great assistanceinelaboratingonthis" method "ofrealizing" democratic faith, "although none of these authorsthemselvesdrawthishistoricalorintellectualconnection. Among themosthe lpfulhave beenNormanCohn, ThePursuitoftheMillennium:RevolutionaryMillenariansandMystical AnarchistsoftheMiddleAges (NewYork:OxfordUniversityPress,1970);AmosFunkenstein, Theology and the Scientific Imagination from the Middle Agesto*theSeventeenthCentury* (Princeton:PrincetonUniversityPress,1986);EugeneM.Klaaren, *ReligiousOriginsofModern* Science: Beliefin Creation in Seventeenth - Century Thought (Grand Rapids, MI: Eerdman's PublishingCo.,1977);DavidF.Noble, TheReligio nofTechnology:TheDivinityofManandthe SpiritofInvention (NewYork:Knopf,1998);ErnestLeeTuveson, MillenniumandUtopia:A StudyintheBackgroundoftheIdeaofProgress (Berkeley, CA: University of California Press, 1949); Charles Webster, The Great Instauration: Science, Medicine and Reform, 1626 (London:Duckworth, 1975).

⁷Noble, *TheReligionofTechnology* ,3 -100.

⁸Noble, *TheReligionofTechnology* ,104,9.

⁹SeeR.G.Collingwood, *TheIdeaofNature* (Oxford:Clarendon,1945).

¹⁰Giord anoBruno, "The Expulsion of the Triumphant Beast," quoted in Noble, The Religion of Technology, 39-40. Bruno's suggestion that humanity comes to know the mind of Godbymeans of "emulation of the actions of God" is within the "maker's knowledge tradition " that culminates in the thought of Francis Bacon. See Antonio Pérez -Ramos, "Bacon's Forms and the Maker's Knowledge Tradition," in The Cambridge Companion to Bacon, ed. Markku Peltonen (New York: Cambridge University Press, 1996), 99 -120, and Pérez -Ramos, Francis Bacon's Idea of Science and the Maker's Knowledge Tradition (New York: Oxford University Press, 1988).

¹¹CharlesWebster, *TheGreatInstauration* ,esp.8,15 -16,100-3,324-335,516;Klaaren, *TheReligiousOriginsofModernScience* ,85-126;Noble , *TheReligionofTechnology* ,43-87.

¹²JohnMilton, "Prolusions," in *CompletepoemsandMajor* Proseed.MerrittY.Hughes (Indianapolis:BobbsMerrill,1957),625.

¹³PicodellaMirandola, "OrationontheDignityofMan," in *TheRenaissancePhilosophy ofMan*, ed.ErnstCassirer,PaulOskarKristeller,andJohnHermanRandallJr.(Chicago: UniversityofChicagoPress,1948),224.

¹⁴PicodellaMirandola, "OrationontheDignityofMan," 224.

¹⁵PicodellaMirandola, "OrationontheDignityofMan," 224 -5.

¹⁶ PicodellaMirandola, "OrationontheDignityofMan," 223.

¹⁷PicodellaMirandola, "OrationontheDignityofMan,"225.

¹⁸PicodellaMirandola, "OrationontheDignityofMan,"248. Thefirstaphorismof FrancisBacon's *NovumOrganum* similarlycallsman "theservantandinterpreterofNature";in thethirdaphorismhefurtherstates, "wecanonlycommandNaturebyobeyingher."Francis Bacon, *NovumOrganum*, trans. PeterUrbachandJohnGibson(Chicago:OpenCourt, 1994),43.

¹⁹PicodellaMirandola, "Ora tionontheDignityofMan," 248 -9.

²⁰PicodellaMirandola, "OrationontheDignityofMan," 230.

²¹Webster, *TheGreatInstauration*, 341. Thecitationistobefound, for examplein FrancisBacon, *TheAdvancementofLearning*, 41.

²²FrancisBacon, *TheAdva ncementofLearning* ,36.

²³Bacon, *TheAdvancementofLearning* ,6;39.

²⁴Bacon, *ValeriusTerminus*, "*OftheInterpretationofNature* ,"in *TheWorksofFrancis Bacon*,ed.JamesSpedding,RobertLeslieEllisandDouglasDenonHeath,v.3(London: Longmans&Co .,1870),218.

²⁵Bacon, *ValeriusTerminus* ,217.Theconjectureofits1603compositionisjustifiedin anintroductorynoteonpp.207 -8.

²⁶Bacon, ValeriusTerminus, 217.

²⁷Bacon, ValeriusTerminus ,218.

²⁸Bacon, *TheAdvancementofLearning* ,7.

²⁹Bacon, *TheAdvancementofLearning* ,37.

³⁰Bacon, ValeriusTerminus, 221.

³¹PerezZagorinalsoexploresBacon's fascination with the possibility of prolonging life and even overcoming death, by means of reversing the original Fall, in *Francis Bacon* (Princeton: Princeton University Press, 1998), 44 -51.

³²Bacon, Valerius Terminus ,223.

³³Bacon, *TheAdvancementofLearning* ,56;58;60.Baconisherecarefultosuggestthat by "heavens" hemeans the contemplation of outerspace, and "immortality" is that sortachieved by lasting achievements, such as the epics of Homer (60 -1). Nevertheless, the invocation of the language of "ascent," "heaven," and "immortality" —herecontrasted to "vulgar" ends of knowledge —unmistakably echoes arguments such as those by Pico, Bruno, and Baconhimself, that mankinds hould see kultimately to "reinstate" his former state of immortal and even quasi divine innocence prior to the Fall.

³⁴Bacon, "Prometheus, or the State of Man," in *Lord Bacon's Essays* (Boston: Little, Brown & Co.), 391 - 394.

³⁵Bacon, "Prometheus," 394.

³⁶Bacon, "Prometheus," 395.

³⁷Bacon, "Prometheus," 395.

³⁸Bacon, "Prometheus," 397.

³⁹Bacon, "Prometheus," 397,398.

⁴⁰Bacon, "Prometheus," 398.

⁴¹Bacon, "Prometheus," 395.

⁴²Bacon, "Prometheus," 400. Baconwas confident that mankind hadreached a stage at which it could overcome pasterrors and achievenewand transformative forms of power and dominion by means of the advancement of knowledge:

ThisisathingwhichIcannottellwhetherImaysoplainlyspeakastruly conceive,thatasallknowledgeappearethtobeaplantof God'sownplanting,soitmayseemthespreadingandflourishingoratleastthe bearingandfructifyingofthispant,byaprovidenceofGod,naynotonlybya generalprovidencebutbyaspecialprophec v,wasappointedtothisautumnof

theworld:fortomyunderstandingitisnotviolenttotheletter,andsafenow aftertheevent,sotointerpretthatplaceintheprophecyofDanielwhere speakingofthelattertimesitissaid, *Manyshallpasstoand fro,andscience shallbeincreased*; asiftheopeningoftheworldbynavigationandcommerce andfurtherdiscoveryshouldmeetinonetimeorage."

Bacon, Valerius Terminus, 221.

⁴³Bacon, "Prometheus," 405.

⁴⁴Baconcallsattentiontothiscuriousdisp lacementbyexplainingthathesoughtnot"to breaktheconnectionofthings,"andthus"designedlyomittedthelastcrimeofPrometheus" ("Prometheus,"404).

⁴⁵Bacon, "Prometheus," 403 -4.

⁴⁶Bacon, "Prometheus," 404.

⁴⁷Bacon, "RefutationofPhilosophies," in *ThePhilosophyofFrancisBacon* ,ed. BenjaminFarrington(Chicago:UniversityofChicagoPress,1964),106.ThomasHobbes —who servedforatimeasBacon'spersonalsecretary —usedthephrase"MortallGod''todescribehis "Leviathan."ThomasHobbes, *Leviathan*,ed.RichardTuck(NewYork:CambridgeUniversity Press,1991),ch.17,sec.87,p.120.

48MarkuuPeltonenhasarguedinterestinglythatBaconshouldbeunderstoodas belongingtotherepublicantraditionduetohisfrequentrelianceonthetho ughtofMachiavelli andhisinfluenceonJamesHarrington,in"Bacon'sPoliticalPhilosophy,"in *TheCambridge Companionto* Bacon,ed.MarkkuPeltonen(NewYork:CambridgeUniversityPress,1996),283 310.However,ZagorinrightlynotesthatBacon'sresem blancetorepublicanismstopswellshort ofendorsingpopularrule,andexploresatgreaterlengthhiscommitmenttomonarchyand politicalsecrecy,in *FrancisBacon* ,147- 74.OnBacon'sinsistenceonthenecessityofsecrecyin governmentaffairs,see,fo rinstance, *TheAdvancementofLearning* ,208- 211.

⁴⁹JohnDewey, *ThePublicanditsProblems* (Athens,OH:SwallowPress,1985[1927]), 164.

⁵⁰Dewey, *ThePublicanditsProblems* ,"183,184.Thus,likeWhitman,Dewey recommendedtheroleofthepoetasfin alproselytizerofdemocracy,thoughhistextwouldbe considerablymore"scientific"thanWhitmanlikelysupposed.

⁵¹Bacon, *NovumOrganum*, I.61, p.66. Seealso Zagorin, *FrancisBacon*, 85.

⁵²Bacon, ValeriusTerminus, 227.

⁵³Bacon, *NewAtlantis*, ed.Jerry Weinberger(Wheeling,IL:HarlanDavidson,1989),71.

⁵⁴JohnDewey, *ReconstructioninPhilosophy* (Boston:BeaconPress,1957[1920]),28,

38.

⁵⁵Dewey, *ReconstructioninPhilosophy* ,28-38.Baconarticulatedtheneedfordoubt (thoughnotskepticism)ina felicitousphrasein *TheAdvancementofLearning* :"ifamanwill beginwithcertainties,heshallendindoubts;butifhewillbecontenttobeginwithdoubts,he shallendincertainties"(35).

⁵⁶Dewey, *ThePublicandItsProblems* ,146;cf.p.144.

⁵⁷D ewey, *ReconstructioninPhilosophy* ,28.

⁵⁸Onecanonlysurveythevastandexpandingrecentliteratureonthehuman implicationsofthegenomeprojecttoseethisisthecase.Onamoresanguineprojectionof humantransformation,seeLeeM.Silver, *RemakingEden:CloningandBeyondinaBraveNew World*(NewYork:AvonBooks,1997).Foracriticismoftheimplicationsofthegenomeproject onbothreligiousandseculargrounds,seeFrancisFukuyama, *OurPosthumanFuture: ConsequencesoftheBiotechnology Revolution*(NewYork:Farar,StraussandGiroux,2002),and PeterA.Lawler, *AliensinAmerica* (Wilmington,DE:ISIBooks,2002);seealsoDavidNoble, *TheReligionofScience* ,103-228.

⁵⁹RichardRorty, "ReligiousFaith,IntellectualResponsibilityandRom ance," in *PhilosophyandSocialHope* (NewYork:PenguinBooks,1999),162.

⁶⁰See,forexample,Rorty,"AWorldWithoutSubstancesorEssences,"in *Philosophy andSocialHope*,50;and"Heidegger,ContingencyandPragmatism"in *EssaysonHeideggerand Others:PhilosophicalPapersVolume2* (NewYork:CambridgeUniversityPress,1991),27.

⁶¹Rorty, "Religious Faith, Intellectual Responsibility and Romance," 161.

⁶²Rorty, *Contingency, Irony and Solidarity* (New York: Cambridge University Press, 1989), esp.73 -95. For a criticism of Rorty's belief in "self" - creation "that points out the ways that language is not easily thrown of for wholly transformed in the manner that Rorty suggests, see Sheldon S. Wolin, "Democracy in the Discourse of Postmodernism," *Social Research* 57 (Spring, 1990), 21 - 26.

⁶³ForaninsightfulreflectiononBacon'sownscientificandpoliticalfaith,andits continuediflesssanguineadherenceincontemporarytimes,seeHowardB.White'selegant study, *PeaceAmongtheWillows:ThePoliticalPh ilosophyofFrancisBacon* (TheHague: MartinusNijhoff,1968),esp.ch.1("PoliticalFaithandUtopianThought").SeealsoJerry Weinberger, *Science,Faith,andPolitics:FrancisBaconandtheUtopianRootsoftheModern Age* (Ithaca:CornellUniversityP ress,1985).

⁶⁴ *The Scientific Spirit and Democratic Faith* (New York: King's Crown Press, 1944).

⁶⁵EdwardC.Lindeman, "Introduction," The Scientific Spirit and Democratic Faith ,ix

⁶⁶Lindeman, "Introduction," xi.

⁶⁷Lindeman, "Introduction," xi.

⁶⁸Lindema n, "Introduction," xi.

⁶⁹HoraceM.Kallen, "FreedomandAuthoritarianisminReligion," in *TheScientificSpirit andDemocraticFaith* 3.

⁷⁰Kallen, "FreedomandAuthoritarianisminReligion," 3.

⁷¹Kallen, "Freedomand Authoritarianismin Religion," 10; see alsop. 6. In this context, Kallenis discussing several works by then prominent Catholic thinkers, and comparing the arguments to those of Hitlerin *Mein Kampf* (7 - 10).

⁷²AlfredMirsky, "TheDemocraticResponsibilitiesofScience," in *TheScientificSpiri t andDemocraticFaith*, 58.

⁷³Mirsky, "TheDemocraticResponsibilities of Science," 59.

⁷⁴Mirsky, "TheDemocraticResponsibilitiesofScience," 60,61.

⁷⁵RichardM.Brickner, "TheDemocraticResponsibilitiesofScience," *TheScientific SpiritandDemocrati cFaith*, 63.

⁷⁶Brickner, "TheDemocraticResponsibilitiesofScience," 63.

⁷⁷Brickner, "TheDemocraticResponsibilities of Science," 64.

⁷⁸Mirsky, "TheDemocraticResponsibilities of Science," 60.

⁷⁹Rorty, *AchievingOurCountry* ,142,n.12.

⁸⁰Forexamples of confidence invarious technologies for democraticends, see John Dewey, *ACommonFaith*, 49; Benjamin R. Barber, *StrongDemocracy: Participatory Politics for aNewAge* (Berkeley: University of California Press, 1984), 273 -276.

Whilefewthinkershavet heunbridledenthusiasmofMarshallMcLuhaninthe1960's, onediscernsthatthe"democraticfaith"listsclosertohissideofhisoptimismthanonthesideof cautionaryrestraint:

Ournewelectrictechnologythatextendsoursensesandnervesinagloba l embracehaslargeimplicationsforthefutureoflanguage. Electrictechnology doesnotneedwordsanymorethanthedigital computerneeds numbers. Electricity points the way to an extension of the process of consciousness itself, on a worldscale, an dwithout any verbalization what so ever.... The computer, in short, promise sbytechnology a Pentacostal condition of universal understanding

andunity. Then extlogical stepwould seem to be, not to translate, but to by languages in favor of ageneral cosmic consciousness which might be very like the collective unconsciousness dream to fby Bergson. The condition of "weightlessness," that biologists say promises a physical immortality, may be paralleled by the condition of speechlessness that could confer per petuity of collective harmony and peace.

MarshallMcLuhan, *UnderstandingMedia:TheExtensionsofMan* (NewYork:McGrawHill, 1964),80.

McLuhan'sinvocationof"cosmicconsciousness"alertsonetotherelationshipofhis ambitionstothoseof WaltWhitman'sfriendandbiographer,RichardBurke,whosebook Cosmic Consciousnessarguedthathumans(includingWhitman,alongwithsuchfiguresasChrist, Buddha,andEmerson)wereundergoinganevolutioninwhichconsciousnesswasbecoming universallyperceptibleandshared.Burke'sbook,inturn,wasacentralinspirationtoEdward Bellamy's1899novel LookingBackwards whichportrayedautopianAmericanfutureaided,in significantpart,bytechnologicaladvancessuchasadevicethatresemblesthe modernradio.

81 Dewey, ReconstructioninPhilosophy (NewYork:NewAmericanLibrary,1950)

⁸¹Dewey, *ReconstructioninPhilosophy* (NewYork:NewAmericanLibrary,1950 [1920]),46

⁸²Dewey, *ReconstructioninPhilosophy*, 48; emphasismine.

⁸³Indeed,DavidFotthasnotedtheincoherenceofDewey'sfaithinthescientificmethod itself:"when[Dewey]saysheiswillingtoputhisfaithinsciencetothetest,hementionsan experimentaltest.Ifscienceistotestscience,heisobviouslybeggingthequestion."DavidFott, *JohnDewey:America'sPhilosopherofDemocracy* (Lanham,MD: Rowman&Littlefield,1998), 148.SeealsothediscussionofthepracticalpoliticalfailingsofDewey'spragmatisminJohn PatrickDiggins, *ThePromiseofPragmatism* (Chicago:UniversityofChicagoPress,1994),chs. 4-6.

⁸⁴Thisistruenotonlyinthew orldofscientificexperimentation, butthe political experimentation and application as well. Consider an example from current affairs: contemporaryadvocatesfor "reform" to the campaign finance system almost always over look the factthatcurrentabuses aretheresultofprevious, much -celebratedreformsthatwerethemselves reformsofprevious reforms. Recognizing this fact should not permit an overconfidence in people's ability to predict unintended consequences. Nevertheless, a "skeptical" evetowar d experimentalskepticismcanmakeonecognizant,inthefirstinstance,ofthelikelihoodof in escapable costs that will likely result, and thereby make initial contemplation of such costs bothpossibleandobligatory. For example, see Henry Jones Ford's remarkablyprescientpredictions of 1909 about the likely unintended negative consequences resulting from the introduction of the directprimary. Henry Jones Ford, "The Direct Primary," NorthAmericanReview 190(July, 1909):189 -205.Forathoughtful and sobering assessment of the current reforme ffort, see DavidS.Broder, "NowtheUnintendedConsequences," WashingtonPost (February15,2002), A33.

Itisnecessarytonote, of course, this and other efforts at democratic reform takeplace withintheco ntextofalarger"experiment"inself -governance,theConstitutionalsystemdevised bytheFoundersin1787.WhilethereiswidespreaddisagreementoverwhethertheConstitution isinessence"democratic," whether it contains internal inconsistencies, or whetheritcontainsan inherently"anti -democratic"coreisthesubjectofprofounddebate.Forargumentsfortheanti democraticinclinationsoftheConstitution,seeSheldonS.Wolin, ThePresenceofthePast: (Baltimore: The Johns Hopkins University Press, 1989). EssaysontheStateandtheConstitution esp.chs.5and10,andWilsonCareyMcWilliams,"DemocracyandtheCitizen:Community, Dignity, and the Crisis of Contemporary Politics in America," in **HowDemocraticisthe** Constitution?,ed.RobertA .GoldwinandWilliamA.Schambra(Washington,D.C.:American EnterpriseInstitute, 1980). For arguments that emphasize the Constitution's formalism and its

limitationsonmajoritarianism,andthusseeitasimportantly,butnotthoroughly,democratic,s ee (ontheliberal/left)ChristopherL.Eisgruber, *ConstitutionalSelf -Government*(Cambridge,MA: HarvardUniversityPress,2001),and(ontheliberal/right),HarveyC.MansfieldJr., *America's ConstitutionalSoul* (Baltimore:TheJohnsHopkinsUniversityP ress,1991).Boththese argumentsreflectanunderlyingagreementthattheConstitutionalsystemestablishessignificant limitationsonwidespreadcivicparticipation,andthus,byextension,limitstheplausibilityofthe realizationofthe"tranformativ e"democraticpolityfondlywishedbythe"democraticfaithful."

Foraninsightfulessaythatsuggeststhelimitedunderstandingof"experiment"afforded bytheAmericanConstitutionalorderandhistoricalexperience,seeWilfredM.McClay,"Is Americaan Experiment?"in *VitalRemnants:America'sFoundingandtheWesternTradition*,ed. GaryL.GreggII(Wilmington,DE:ISIBooks,199):1 -32.

**Sophocles' Praiseof Manandthe Conflictsofthe Antigone," in Sophocles (Edited by Thomas Woodard, Englewood Cliffs, N.J., 1966).

⁸⁶RichardRorty, "TruthWithoutCorresponde ncetoReality," in *PhilosophyandSocial Hope*,29.

⁸⁷RichardRorty, "ReligiousFaith,IntellectualResponsibilityandRomance," in *PhilosophyandSocialHope*,163.Seealso"JusticeasLargerLoyalty," in *Cosmopolitics: ThinkingandFeelingBeyondtheNa tion*,ed.PhengCheahandBruceRobbins(Minneapolis: UniversityofMinnesotaPress,1998),esp.56 -7.

⁸⁸MichaelOakeshott, *ThePoliticsofFaithandthePoliticsofScepticism* (NewHaven: YaleUniversityPress,1996),26,55,23.Oakeshottattributest heoriginsofthe"politicsoffaith" toFrancisBacon(52 -7),muchasDeweyrecognizesBacon'sformativeinfluenceinhisown thoughtin *ReconstructioninPhilosophy*, andRortyasafundamentalsourcein,amongother places, *ConsequencesofPragmatism(Es says:1972-1980)*(Minneapolis:Universityof MinnesotaPress,1982),xvii.

⁸⁹Oakeshott, *ThePoliticsofFaithandthePoliticsofScepticism* ,30 -38.Oakeshottrefers brieflytoacontemporaryfaithindemocracyasoneformof"thepoliticsoffaith,"thou ghhedoes notconsideritsparticularmanifestationorimplicationsatanylength(pp.130 -2).

⁹⁰Oakeshottcomposesan"ill -assortedgallery"ofthe"politicallyskeptical,"whichin additiontoincludingthelikesofAugustineandPascal,alsoincludesS pinoza,Hobbes,Bentham andtheFederalists.Oakeshott, *ThePoliticsofFaithandthePoliticsofScepticism* ,80- 1,129.