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Faculty Forum President's Letter

by G. Jan Wilms

Welcome back for a new year at Union University. This century will turn with your teaching, scholarship, and service making Union the best it can be.

One way to improve the quality of the academic life at this university is to participate in the Faculty Forum, which serves as an advisory body to the administration. Our purpose, according to the Constitution of the Faculty Forum, is "to provide a means for the faculty to express its interest and concerns to the greater faculty and to the Provost, and to make recommendations about issues affecting Union University." The forum is the one place where faculty members can voice their opinions candidly; when we speak as one voice, that voice is a loud and strong voice clearly heard.

Your officers for this academic year (1999-2000)—Jan Wilms, President; Bev Pray, Vice President; David Thomas, Secretary; and Roger Stanley and Janice Wood, *JUFF* editors—are committed to serving as your voice to the administration. Please let us know of your concerns, and accept this as an invitation to participate actively in this year's Faculty Forum.

I hope you enjoy this year's edition of the *Journal of the Union University Faculty Forum (JUFF).* The forum is proud to have *JUFF* as a means of sharing scholarship among the faculty. This is *your* journal; please contact the editors if you would like your contributions to be considered for the next volume.

Dedicated to Dr. James Alex Baggett

University Professor Emeritus of History and Political Science
and
Dean of the College of Arts and Sciences

For his multiple contributions to these pages as a scholar and professor, and for his support of *JUFF* from the perspective of an administrator, this issue is dedicated to James Baggett. We look forward much to his history of Union University.

A Word From the Editors

On behalf of my co-editor Janice Wood, I bid you dip into and out of the half dozen full-length pieces here, according to factors of time, matters of personal taste, and areas of expertise. Surely a pair of contributions from professional librarians (with a philosophical and literary bent respectively), a pair of scientifically cogent articles, and a final pair of offerings from professors of English will produce something graspable and of interest to all lovers of words and readers of *JUFF*.

Whether debating the ancient/classical view of women or facing gender and textual issues in the later medieval world, work by John Jaeger and Gavin Richardson challenges readers of both sexes. Similarly, one need not have children to enjoy Melissa Moore's reflections on "kiddie lit." or hold advanced literary degrees to get something out of Barbara McMillin's accessible yet scholarly take on two twentieth century prose masters. Finally, both Wayne Wofford's "exposé" of local environmental shenanigans and Randy Johnston's more technical but compelling essay on chemistry demonstrate the cutting edge in scientific research.

I thank the folks in College Services generally—and more specifically the proofreading and technical acumen of Marjorie Richard—for easing our lives as editors again this year. For funding, we continue to acknowledge the office of the Provost.

—RS

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Lost in Time: An Analysis of Narrative Technique in "The Garden of Forking Paths" and "A Rose for Emily"

by Barbara McMillin

Allow me to begin with a riddle. There is never enough of me, yet one doesn't want too much of me on one's hands. Sometimes I fly; sometimes I creep. I'm often wasted, but many people are obsessive about saving me. Some believe I have the gift of healing. What am I? The answer, of course, is time. The preceding is a simple riddle about a complex entity. Our everyday discourse is replete with what Stephen Albert, the ill-fated Sinologist in Jorge Luis Borges' "The Garden of Forking Paths," calls "inept metaphors and obvious periphrases" which illustrate at once our ability to describe time and our inability to define it. Yes, time is short, fleeting, precious, but what is time?

Webster recognizes time as "the measured or measurable period during which an action, process, or condition exists or continues," or "a continuum which lacks spatial dimensions and in which events succeed one another from past through present to future." In *Principles of Human Knowledge*, philosopher George Berkeley defines time as "the succession of ideas in my mind, which flows uniformly, and is participated by all beings" (qtd. in Borges, *Labyrinths* 221). For David Hume, time is a "succession of indivisible moments" (qtd. in Borges, *Labyrinths* 221). Sharing an emphasis on continuity or succession, these definitions all prove unacceptable to Latin American author Jorge Luis Borges, who in "A New Refutation of Time" denies "the existence of one single time, in which all things are linked as in a chain" (222). Borges' concept of time closely resembles that of Ts'ui Pen, the illustrious ancestor of Dr. Yu Tsun, the Chinese English professor serving as a German spy in "The Garden of Forking Paths." As Stephen Albert explains to Tsun, his ancestor believed in "an infinite series of times, in a growing, dizzying net of divergent, convergent, and parallel times. This network of times which approached one another, forked, broke off, or were unaware of one another for centuries, embraces *all* possibilities of time" (137).

Like his Latin American counterpart, American master storyteller William Faulkner also rejects the standard view that time is a "succession of moments with a clear distinction between past, present, and future" (qtd. in Llewellyn 498). As Dara Llewellyn argues, Faulkner "contradicts the generally accepted premise" that time is "unidirectional," restricted only to forward movement (501-02). Faulkner's rejection of unilateral chronology is demonstrated cogently in the overall narrative structure of *The Sound and the Fury,* specifically in the passages about Quentin's breaking his watch. Capturing Quentin's stream of consciousness, Faulkner writes: "Constant speculation regarding the position of mechanical hands on an arbitrary dial which is a symptom of mind-function. Excrement Father said like sweating" (94). In his analysis of Faulkner's concept of clock time, Jean-Paul Sartre recognizes the Mississippian's goal of abandoning an "invented measure" which, in essence, "is not a measure of anything" (88). Having dismissed clock time as artificial and stifling, Faulkner prefers to interpret time as the submersion of the present in the past. As Jean Pouillon explains in "Time and Destiny in Faulkner," "what is lived in the present is what was lived in the past." For Faulkner, "the past is

. . . a constant pressure upon the present, the pressure of what has been on what is" (80). Furthermore, as Sartre adds, there is no future; nothing exists beyond the present time (88).

Having established each writer's unconventional philosophy of time, we may now turn from theory to practice. How do these writers communicate their unorthodox theories about time to audiences so thoroughly indoctrinated in the concepts of past, present, and future?

Faulkner's conviction that real time involves the submersion of the present in the past is a belief shared by one of his most well-known residents of Jefferson, Miss Emily Grierson of "A Rose for Emily." Miss Emily, like her creator, has no respect for clock time; her disrespect places her in sharp contrast with her fellow citizens, most of whom--the narrator included--display our usual obsession with time, day, and date. For example, it is the narrator, a citizen of Jefferson, who informs us that Miss Emily's taxes were remitted in 1894 (the only date mentioned in the story). Having established this reference point, the narrator goes on to confirm the new generation's penchant for monitoring clock time by carefully noting the time span during which Emily refuses to acknowledge the tax notice. We learn that the notice was mailed "on the first of the year," but with the coming of February there was no reply (425). One week after Miss Emily receives a formal letter from the board of aldermen, the mayor is compelled to contact the recalcitrant Emily personally. When the tax notice is returned with no comment, a deputation from the board visits the Grierson home, where they encounter "a small, fat woman in black, with a thin gold chain descending to her waist and vanishing into her belt, leaning on an ebony cane with a tarnished gold head" (425). Significantly, she carries a timepiece; however, having vanished, this "invisible watch," as Faulkner later describes it, illustrates efforts on Miss Emily's part to deny the conventional march of time (426). For the last of the Griersons, time does exist—after all, she is wearing the watch—but the standard form of time measurement, indicated by the rotation of two hands, is shrouded in the blackness of Miss Emily's robes. In contrast, prior to Miss Emily's adamant "I have no taxes in Jefferson," the aldermen hear only their spokesman's stumbling plea and the deafening sound of "the invisible watch ticking at the end of the gold chain" (426).

The citizenry's obsession with time-keeping extends beyond their dismay over Emily's failure to observe their tax deadline. Following the development of a horrible stench surrounding the Grierson homeplace, the town leaders, particularly Judge Stevens, debate how much time to grant a lady before accusing her "to her face of smelling bad" (427). After her father's death, the ladies of Jefferson intend to follow tradition and visit the home "the day after his death" (427). When Homer Barron appears on the scene, the entire town reacts in shock and dismay as the number of Sunday afternoon buggy rides escalates and Emily's reputation deteriorates. This predilection for marking the days and hours continues as the Jeffersonians ponder first why Homer stays so long after the streets are finished and then why, having left, he postpones his return. Even the much-desired visit of the kinsfolk from Alabama merits concern--simply because of the length of their stay! The narrator's own words, however, best convey Faulkner's fictional community's fixation on clock time:

> Daily, monthly, yearly we watched the Negro grow grayer and more stooped, going in and out with the market basket. Each December we sent her a tax notice, which would be returned by the post office a week later, unclaimed. Now and then we would see her

> in one of the downstairs windows--she had evidently shut up the top floor of the house--like the carven torso of an idol in a niche looking or not looking at us, we could never tell which. Thus she passed from generation to generation--dear, inescapable, impervious, tranquil, and perverse. (430)

It is only with the discovery of Homer Barron's decayed body in the upstairs bedroom accompanied by "a long strand of iron-gray hair" that her neighbors come to understand the depth of her perversity (431). Significantly, it is not murder or necrophilia that unnerves the people of Jefferson; on the contrary, what leaves community and reader alike speechless is the amount of *time* which passes between Miss Emily's poisoning of Homer and her subsequent visits to the bridal chamber. How many years, or even decades, pass between Homer's fateful wedding night and Miss Emily's last pilgrimage to the shrine of her would-be lover? To the Jefferson community, premeditated murder is apparently less criminal than a willful violation of the social code which prohibits any cruel or unusual attitude toward the passage of time.

While the passage of time intrigues and mystifies the townspeople, Miss Emily herself is unscathed by the rumble of time's winged chariot. As noted earlier, she refuses to acknowledge deadlines set by town bureaucrats; later we learn that she prohibits postal workers from fastening metal numbers above her door to facilitate free mail delivery, believing perhaps that spatial definition leads to temporal definition. In other words, a house bearing numbers is a house identifiable within a sequence of houses, and sequencing is a process associated with conventional definitions of time. To tolerate a street address would be to accept a concept which contradicts her philosophy of time-keeping. Emily does not confuse time "with its mathematical progression" (431); for her there are no arbitrary limits, no calendars or stopwatches reminding her that at the appointed day or hour time is up. For Miss Emily there is no socially allotted time span for processing the death of her father; however, her community believes that three days is sufficient time for anyone to come to terms with death and, consequently, is on the verge of resorting "to law and force" when she breaks down and allows the burial (427). This event certainly foreshadows her relationship with the now-dead Homer Barron. We as readers may be shocked to learn that Emily Grierson has maintained and frequented a bridal chamber housing the body of her dead lover for as many as forty years, but for Emily--for someone who does not acknowledge the categories of past, present, and future--there is no real cause for concern. After all, if one takes away the socially-imposed burden of acceptable time frames, then one takes away the complementary burdens of guilt and responsibility. In short, Miss Emily finds freedom from time.

Clearly, in Emily Grierson Faulkner has found a character who embodies an unconventional view of time; this unorthodox view is underscored by the total dismantling of chronological order within the story's narrative structure. According to Gene M. Moore, critics have proposed as many as eight different chronologies in as many attempts to standardize the telling of Emily's tale (195). That so many have proposed distinct renderings of the chronology of "A Rose for Emily" would no doubt please a writer who believed that true time cannot be reduced to neat, distinctive categories.

Like Faulkner, Jorge Luis Borges creates in "The Garden of Forking Paths" a cast composed of individuals who are either committed to the traditional concept of time or who function

somehow beyond time's constraints. In the beginning, Borges shifts the narrative voice from an unknown reader of Liddell Hart's *History of World War I* to Dr. Yu Tsun, a character who would feel right at home in the time-obsessed town of Jefferson. A spy for Germany who has been discovered by English spy Captain Richard Madden, Yu Tsun prepares to flee his English apartment to avoid arrest or murder at the hands of his nemesis. Prior to departing, he surveys the contents of his pockets. There keeping company with his revolver, some "incriminating useless keys," and a letter which he resolves to destroy but doesn't is an "American watch" (2115). Significantly, a timepiece rests alongside an instrument of death and the evidence which will ensure Yu Tsun's demise, suggesting perhaps that orthodox timekeeping can likewise be deadly.

Aware that Madden "could call at [his] door any moment" (2116), Yu Tsun makes his way anxiously to the train station, monitoring the time as he goes. As the train pulls away, he catches a glimpse of his pursuer running "in vain to the end of the platform" (2116). Believing that the "forty minutes" which now separate him from Madden have won for him the first encounter, Yu Tsun passes into a state of "almost abject felicity" (2116). When he arrives at Stephen Albert's home and sits down to converse, his view of his host is overshadowed by a "tall circular clock" at Albert's back (2118). Throughout their conversation, he constantly monitors his time and is ready to gun down Albert the instant he sees Madden approaching along the garden path. With Albert's death, Yu Tsun succeeds in conveying to Berlin the "secret name of the city they must attack"--that city, of course, being none other than Albert (2121). In killing Albert, Yu Tsun beats the deadline--the arrival of Madden-- and pens his story from the confines of a jail cell as he awaits execution for murder. In essence, Yu Tsun has killed in order to be on time.

In contrast to his murderer, Sinologist Stephen Albert, having deciphered the mystery of Ts'ui Pen's *The Garden of Forking Paths,* functions without the constraints which bind Yu Tsun. He sits with "his back to the window" and to the "tall circular clock," thus shutting out both the march of time and the inevitable appearance of Madden. His nonchalance results from his having unraveled the mystery surrounding Ts'ui Pen's plans to write a novel and construct a labyrinth.

As he explains to his visitor, the novel and the labyrinth prove to be one and the same endeavor:

> "The garden of forking paths" was the chaotic novel; the phrase "the various futures (not to all)" suggested to me the forking in time, not in space. A broad rereading of the work confirmed the theory. In all fictional works, each time a man is confronted with several alternatives, he chooses one and eliminates the others; in the fiction of Ts'ui Pen, he chooses—simultaneously—all of them. *He creates*, in this way, diverse futures, diverse times which themselves also proliferate and fork. Here, then, is the explanation of the novel's contradictions. (2119-2120)

Despite being grateful to Albert for enlightening him regarding the mystery of his ancestor, Yu Tsun still does not hesitate to pull the trigger. Significantly, Albert dies convinced that "time forks perpetually toward innumerable futures" (2121); in another, perhaps it is he who survives. Such an attitude prevails only in those who have broken free from the bondage of traditional time

measurement.

Jorge Luis Borges' "The Garden of Forking Paths" and William Faulkner's "A Rose for Emily" are short stories in which time disintegrates. Each writer has crafted a tale wherein the accepted boundaries of clock and calendar time are dissolved, forcing characters and readers alike to form a new method of ordering history. Emily Grierson refuses to acknowledge the "progress" occurring in Jefferson, namely the house numbering system, and, more substantively, the existence of a new generation of town authorities. Following the disappearance of Homer Barron, she and her manservant Tobe seem to exist outside of time, or perhaps in defiance of it. Contributing to this dissolution of time is Faulkner's convoluted narrative strategy, which effectively hinders the reader's attempts to easily sequence the events of Miss Emily's pathetic life. Unlike Faulkner's strategy, Borges disintegrates time by eliminating the lines between past and present. Instead of a teleological view of history, which interprets events as a series of distinct cause and effect relationships, Borges sees not a past and a present reality but multiple concurrent realities. For Ts'ui Pen and Stephen Albert, these multiple realities meld into a labyrinth of opportunities and discoveries. Like Faulkner, Borges relies upon a narrative technique which obliterates orthodox time-keeping.

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Ultrafast Ring Closure Energetics and Dynamics of Cyclopentadienyl Manganese Tricarbonyl Derivatives

by Randy F. Johnston

Abstract

Ring closure following flash photolysis in alkane solvents has been detected for several complexes in the series $(\eta^5\text{–}C_5H_4R)Mn(CO)_3$ where R = $COCH_3$ (**1**), $COCH_2SCH_3$ (**2**), $CO(CH_2)_2SCH_3$ (**3**), $COCH_2OCH_3$ (**4**), $(CH_2)_2CO_2CH_3$ (**5**), $CH_2CO_2CH_3$ (**6**). In each case where ring closure occurs, a metal CO is ultimately substituted by the side chain functional group. Photoacoustic calorimetry studies reveal that ring closures occur with rate constants faster than 10^7 s^{-1} or between $10^6 - 10^7$ s^{-1}, or in some cases the ring closure is biphasic with rate constants in both ranges. The enthalpies of CO dissociation followed by ring closure for **2** and **3** are the same (12 kcal/mol) and more favorable than those for **4–6** (25–15 kcal/mol). Studies of **1–3** by transient ps to μs infrared spectroscopy confirm biphasic dynamics for **2** and **3**: ring closure occurs immediately ($k > 5 \times 10^9$ s^{-1}) and at slower rates ($k = 10^8 - 10^6$ s^{-1}). We propose that some ring closure occurs before solvent coordination and that the remaining ring closure is much slower resulting in the displacement of solvent. The relationships of the rates and energetics of ring closure to structure and quantum yields are discussed.

Introduction

The yields of products generated from photolytic fragments can be dependent on geminate recombination or interactions with the solvent,[1,2] which often occur faster than diffusion–controlled processes.[3] In such cases efforts to change quantum yields require intervention at very short time scales. We recently succeeded in dramatically improving the quantum yields for the ligand substitution of $(C_5H_4R)Mn(CO)_3$ complexes where side chains could effectively trap the coordinatively–unsaturated metal center (Scheme 1).[4] In particular, unit quantum yields for ring closure were observed in at least two cases, and require that CO recombination does not occur. The latter process has been reported to have a lifetime on the order of 300 fs for other metal carbonyls.[3] Assuming cage recombination of CO occurs, this suggests that ring closure must occur in less than 300 fs, a lifetime much shorter than those typically reported for closure of 5–6 membered rings.[5,6] Given this assumption, it was not clear why unit quantum yields were obtained in some cases and not the others. To better understand how the side–chain structure effects the quantum yield for substitution we have investigated the dynamics and energetics of ring closure of $(C_5H_4R)Mn(CO)_3$ [R = $COCH_3$ (**1**), $COCH_2SCH_3$ (**2**), $CO(CH_2)_2SCH_3$ (**3**), $COCH_2OCH_3$ (**4**), $(CH_2)_2CO_2CH_3$ (**5**), $CH_2CO_2CH_3$ (**6**)] by using photoacoustic calorimetry (PAC) and transient infrared spectroscopy. Time resolved studies of $CpMn(CO)_3$ have bee reported previously, but only one study has examined ring closure of CpMn type complexes.[7] In this later study, the quantum yields for ring closure were only 0.6 and independent chain length.

Experimental Section

Photoacoustic Calorimetry.

The apparatus and methods have been described previously.[8,9,10] A solution in a flow cell, irradiated with a laser pulse, produces an acoustic wave that is detected as a signal from an ultrasonic transducer clamped to the cell. Ferrocene was used in reference solutions to provide an instrument limited signal (*ca.* 0.1 μs) and deposits all light energy as heat.[8,11] Samples signals were deconvoluted with the ferrocene signal by using MQP or Sound Analysis 3000 by Quantum Northwest. The deconvolution software expresses the amplitude of the sample heat decays as a fraction (ϕ) of the heat deposited by the reference solution. One or two heat decays were detected in each case. The amplitude of the first heat decay (ϕ_1) corresponds to those processes with lifetimes (τ_1) much faster than the transducer response. Heat decays for these processes cannot be resolved from each other. The amplitude of the second heat decay (ϕ_2) corresponds to processes evolving heat with lifetimes (τ_2) comparable to the transducer response. The heat evolved per mole of absorbed photons (Δ) and rate constants were calculated from eq 1–3 where $E_{h\nu}$ is the photon energy (kcal/mol) and Φ is the net quantum yield for product formation (CO substitution by added Lewis base or side-chain substituent). The quantum yields have been reported previously.[4] The quantum yield may also correspond to the quantum yield for formation of an intermediate if the intermediate is quantitatively converted to product.[4] Each ϕ is determined by how much each process is completed during the corresponding time scale. Thus the total heat (and quantum yield) of a specific process can be assigned to Δ_1 only if the process is completed faster than the time scale of the transducer. Likewise the assignment of the total heat (and quantum yield) of a process to Δ_2 can be made only if the process is completed on the same time scale of the transducer. Under these circumstances $\Delta = \Delta H$, the enthalpy of the process (kcal/mol. Without knowledge of the yield of a process during each time scale the heat of that process may not be calculated explicitly from ϕ_1 or ϕ_2. On the other hand, if one or more processes begin during the measurement of ϕ_1 and they are completed during the measurement of ϕ_2 then the overall heat may be calculated from eq 1–2. An additional requirement for this latter case is that all intermediates lead to a final product(s) for which the quantum yield(s) of formation is known (an analytical proof is provided in the **Supporting Information**).

$$\Delta_1 = E_{h\nu}(1 - \phi_1)/\Phi \quad (1)$$

$$\Delta_2 = - E_{h\nu}\phi_2/\Phi \quad (2)$$

$$1/\tau_2 = k_0 + k_2[L] \quad (3)$$

In a typical experiment, **1** (5.9 mg, 24 μmol) was dissolved in 50 mL of heptane in a glove box. This solution (31.8 mL) was diluted to 200 mL with heptane to make a 0.1 OD (optical density) at 337 nm. The dilute solution was cannulated into a calibrated helium–purged reservoir with triethylphosphate (740 μL, 4.4 mmol) to a final volume of 50 mL. The maximum laser energy was 20 μJ/pulse at 337 nm. The laser was pulsed at one Hz, and PAC signals were not used if pulse energies varied more than 1 μJ from an average value. Sample solutions were passed through a flow cell so that exposed solution would not be irradiated by a subsequent pulse. Signals from 1 or 0.1 Mhz transducers were averaged for 16–32 shots. The values of ϕ_1, ϕ_2, and τ_2 did not change when the pulse energy was decreased by three–fold. Lewis base concentrations were varied by at least ten–fold. All measurements were conducted at room temperature. The error limits of heat amplitudes and rate constants from PAC studies are reported as 1σ.

Transient Infrared Spectroscopy.

Ultrafast infrared spectroscopy was performed using the NIST picosecond apparatus described in detail earlier.[12] Modifications to the pulse compressed, regeneratively amplified (20 Hz), synchronously pumped, dual dye (R6G, DCM) laser system were made for broadband, multichannel probing and transient detection using an InSb 256x256 infrared array camera system.[13] Time delays (ps–ns) were obtained with a computer–controlled optical delay stage, and UV excitation was performed at 289 nm (doubled R6G laser, 2 ps instrument resolution). All measurements were made using a flowing 1 mm path–length cell with CaF_2 windows, and solute concentrations in *n*–hexane (Fisher Optima grade without any further purification or degassing) were varied (typically 2–4 mM) to yield UV optical densities near 1.0. Transient difference spectra spanning approximately 100 cm^{-1} centered around 1960 cm^{-1} were obtained by iteratively collecting probe and reference spectra with the pump on and off (4000 total laser shots) and then averaging up to five difference spectra to produce a final averaged spectrum at each time delay. Kinetic data and transient lifetimes were obtained by fitting peak intensities as a function of time delay for spectral bands that did not overlap with other IR bands. The error limits of rate constants from transient infrared studies are reported as 1σ or 10%, whichever is greater.

An electronically delayed, Q–switched excitation laser (5 ns, 266 nm, 250 μJ at 20 Hz) was employed for >5 ns time domain measurements. This laser was synchronized to the ps probe laser and array detection systems with a digital delay generator (Stanford Research Systems 535) which provided output triggers for the lamp, Q–switch and InSb array controller. These pulses were synchronously delayed (up to *ca.* 25 ms) from the ps laser system master clock (20 Hz TTL count–down signals obtained from the 41 MHz acousto–optic RF oscillator). Pump–probe delay timing was adjusted by monitoring a fast photodiode which measured pump and visible probe scatter from the sample cell front window. In this fashion, pump–probe time delays could be selected spanning ns to μs (probe arrival before or after pump), and jitter between the pump and probe pulses was determined to be less than 1 ns. While this approach is somewhat unconventional, the method provides ps to ms time–delayed transient mid–IR spectra with mOD sensitivity, covering over 100 cm^{-1} in about 10 minutes (*ca.* 4000 laser shots).

Experiments were performed at 290 nm and 330 nm by using both a monochromator-filtered 150 Xe arc lamp and second harmonic pulses from the tunable picosecond dye laser. When the total energy absorbed by **2** in n-hexane was normalized for these different wavelengths, nearly identical product formation and parent loss was observed in static difference FTIR measurements. These results imply that in this spectral region the transient IR and PAC measurements are insensitive to excitation wavelength and nonlinear photolysis effects are not significant.

Molecular Mechanics.

The conformational energies of **2** and **3** were optimized by using CAChe. Dihedral angles were incremented every 15 degrees while the potential energy of the whole molecule was optimized. Conformations about two bonds were examined for **2**: the bond between the first ethanoyl carbon and the cyclopentadienyl ring carbon and the bond between the first and second carbons of the ethanoyl group. Conformations about three bonds were examined for **3**: the bond between the first propanoyl carbon and the cyclopentadienyl ring, the bond between the first and second propanoyl carbons, and the bond between the second and third propanoyl carbons.

Results

Our studies began with PAC experiments of **1** where the displacement of CO by solvent could be observed without ring closure. At THT concentrations below 0.04 M, only a single heat decay (ϕ_1) was detected following photolysis of **1**, and the amplitude of ϕ_1 was independent of THT concentration. The value reported in Table 1 for **1** and THT is an average obtained from these low concentration data. At higher THT concentrations a second heat decay (ϕ_2) was detected, and the corresponding rate constant increased with increasing THT concentration (Figure 1). Furthermore, the amplitudes of ϕ_1 and ϕ_2 were dependent on the THT concentration although the sum of the amplitudes was not (Figure 2). The ϕ_2 value reported for **1** in Table 1 was obtained by subtracting the ϕ_1 value for [THT] less than 0.04 M from the averaged sums of ϕ_1 and ϕ_2 for higher [THT] (*i. e.*, from those experiments where ϕ_2 could be detected). The ϕ_1 and ϕ_2 values reported in Table 1 are the same, within experimental error, as those obtained by extrapolating the plots in Figure 1 to zero THT concentration. Results like those observed in Figures 1 and 2 were also obtained for **1** with THF and $OP(OEt)_3$, and the corresponding ϕ_1 and ϕ_2 were likewise calculated and reported in Table 1. At higher concentrations of $OP(OEt)_3$, saturation was observed in the kinetic data, so the rate constant was obtained at lower concentrations of $OP(OEt)_3$ where the data were linear. Two heat decays were observed for **3–6** but not **2** where only a fast heat decay was detected (ϕ_1).

Transient IR experiments reveal that photolysis of **1** with 0.36 M THT in *n*–hexane produces transient and product bands. The photolysis results in a partial bleach of the 1961 and 1952 cm^{-1} bands for **1**, and the amplitude of the bleach did not change during the remainder of the experiment. Two bands (**1A**) appear at 1907 and 1969 cm^{-1} within the first 200 ps after excitation.[14] These bands decay with the same rate as two new absorption bands (**1B**) grow at 1946 and 1885 cm^{-1}. The **1B** bands are stable indefinitely (monitored up to 10 μs delay). Similar results were observed following photolysis of **2** or **3** in the absence of THT, except that partial appearance of the product bands was also observed within 200 ps. For example, as shown in Figure 3, upon photolysis of **2**, there is a bleach (peaks below baseline) of parent bands at 1962 and 1953 cm^{-1} and the immediate appearance of bands at 1968, 1958, 1906 and 1898 cm^{-1}. The 1968 and 1906 cm^{-1} band intensities (**2A**) decay as the 1958 and 1898 cm^{-1} band intensities (**2B**) grow. At μs time delays when the 1906 cm^{-1} band of **2A** has disappeared, the intensity of the 1898 cm^{-1} band of **2B** is equal to the sum of the intensities of the 1898 and 1906 cm^{-1} bands at earlier delays. No other CO stretch IR bands are observed in this frequency range. The spectra and intensities of analogous bands for **1** and **3** behaved similarly. All spectral and kinetic data derived from transient spectra are summarized in Table 2.

Molecular mechanics calculations show that there is a considerable barrier (*ca.* 6 Kcal/mol) to the rotation about the bond between the carbonyl carbon of the side chain and the cyclopentadienyl ring for both **2** and **3**. Thus the side chain carbonyls stay in the plane of the cyclopentadienyl ring. Only half of the conformations are discussed and displayed in Scheme 2 since an identical set of conformations occur when the side chain carbonyls are rotated 180°. Two conformations of nearly equal energy were found for **2** where the thiomethyl group is above or below the plane of the ring. Four conformations of nearly equal energy were found for **3**, and only one of these conformations has the thiomethyl group in the proximity of the metal center.

Discussion

The results indicate that **2–6** undergo ring closure following photolysis, and in some cases, if not all, ring closure is biphasic. First, following CO dissociation there is an immediate ring closure that competes with solvent coordination. Second, the fraction of compound that has not immediately ring–closed subsequently closes by displacing the solvent. Before discussing the basis for these conclusions we begin with an examination the results for **1** where ring closure was not observed.

The IR results indicate that photolysis of **1** initially dissociates CO and solvent is coordinated followed by THT displacement of coordinated solvent (Scheme 3). Thus the 1907 and 1969 cm^{-1} bands of **1A** (which decay) are assigned to $(\eta^5\text{–}C_5H_4COCH_3)Mn(CO)_2$(hexane) by a comparison with the bands observed for $(C_5H_5)Mn(CO)_2$(heptane) (1895 and 1964 cm^{-1}),[15] and the 1946 and 1885 cm^{-1} bands of **1B** (which grow) are assigned to $(\eta^5\text{–}C_5H_4COCH_3)Mn(CO)_2$(THT) based on spectra of genuine product (**see Supporting Information**). The assignments of ϕ_1 and ϕ_2 for photolysis of **1** are more complicated.

The changes in ϕ_1 and ϕ_2 for **1** with the concentration of THT are unusual. Typically, ϕ_1 and ϕ_2 are independent of the Lewis base concentration, and we can assign CO replacement by solvent to ϕ_1 and solvent replacement by added Lewis base to ϕ_2.[10] If this were the case for **1** and THT then the rate of reaction should change with THT concentration but not the extent of reaction since THT was always in large excess of the **1A** formed after each laser shot. The unusual behavior of ϕ_1 and ϕ_2 cannot be attributed to a change in the solution properties (in particular thermal expansion or polarity) for two reasons. First, the concentration THT in the reference solution was the same as for each sample solution. As a result, the physical properties of the two solutions are the same, so deconvolution should only reveal acoustic amplitude and temporal differences due to the reactions following photolysis. Second, a change in the solvent properties would change ϕ_1 and ϕ_2 in the same direction not opposite directions.

We surmise that ϕ_1 and ϕ_2 are not independent of each other since the sum of ϕ_1 and ϕ_2 is constant in Figure 2 as the THT concentration changes. This suggests that the same overall reaction occurs at each THT concentration, which is confirmed by the conversion of **1** to **1B** observed by transient IR experiments. The changes in ϕ_1 and ϕ_2 appear to be the result of the high concentrations of added Lewis base since the behavior was also observed for THF and $OP(OEt)_3$. The behavior of ϕ_1 and ϕ_2 is unlikely to be due to an immediate formation of an Mn–S bond in the solvent cage (which might occur at high THT concentration) since product formation was not observed in the 200 ps IR experiments. On the other hand, we cannot rule out the possibility that a THT methylene binds immediately and rearrangement to sulfur occurs on a slower time scale, yet if this were the case, it is difficult to explain why some Mn–S bond formation does not also immediately occur. An alternative explanation may be that a weak complex forms between **1A** and THT (Scheme 3, step 2),[16] which is consistent with the observed saturation at high THT concentration. We propose that, in addition to the displacement of CO by solvent, an interaction between **1A** and THT contributes to ϕ_1 at higher THT concentrations. If a fraction of **1A** complexes THT faster than the transducer time scale at high THT concentration then heat from this process should contribute to ϕ_1. This leaves less free **1A** to react at slower times, and the contribution of **1A** reaction with THT to ϕ_2 is less at high THT concentrations. Since the absolute change for both ϕ_1 and ϕ_2 is 0.1 we can estimate that the enthalpy of the complex formation is about 10 kcal/mol.

At a sufficiently low concentration of THT (0.04 M) with **1** the observed values for ϕ_1 and ϕ_2 are the same as those extrapolated to zero THT concentration. For these conditions, the ϕ_1 value is assigned only to solvent substitution of CO (Scheme 3, **1** to **1A**). Similarly, the ϕ_2 value is assigned to the THT substitution of solvent (Scheme 3, **1A** to **1B**).[17] This follows from the fact that the sum of ϕ_1 and ϕ_2 is constant at THT concentrations above 0.04 M and accounts for the overall conversion of **1** to **1B**. Thus subtracting ϕ_1 obtained at [THT] less than 0.04 M from the sum of ϕ_1 and ϕ_2 for [THT] obtained at greater than 0.04 M should yield a ϕ_2 (the value reported in Table 1) that corresponds only to the conversion of **1A** to **1B**. The Δ_2 calculated from this ϕ_2 is exothermic; a result that is expected for a process where the bond formed (Mn–S) is stronger than the bond broken (Mn–heptane). Finally, this assignment of ϕ_2 is consistent with (a) the dependence of the observed rate constant for ϕ_2 on THT concentration (Figure 1), (b) the change in ϕ_2 with Lewis base structure (Table 1) and (c) the similar rate constants for ϕ_2 and for the decay and growth of **1A** and **1B** IR bands, respectively (Table 2).[18]

The constant value for the sum of ϕ_1 and ϕ_2 also indicates that the quantum yield for the overall reaction must be constant (see eq 1 and 2). At high THT concentration, occasionally THT might be expected to be in the solvent cage and react with the metal center immediately following UV photolysis. If this were the case, we would have expected the quantum yield to have increased with THT concentration. Thus the invariance of the quantum yield at the highest THT concentrations used suggests that THT does not react with the metal center prior to solvent coordination. This conclusion is confirmed by the absence of product IR bands at a 200 ps time delay (measured at 0.36 M THT).

The bimolecular rate constants for the reactions of **1A** are the slowest that have been reported for alkane solvent displacement. For example, the reaction of $(C_5H_5)Mn(CO)_2$(heptane) with THF ($4.4 \pm 0.4 \times 10^6$ $M^{-1}s^{-1}$)[19] is an order of magnitude faster than the reaction of **1A** with THF. Similarly, the rate constants for THF reaction with $W(CO)_5$(heptane) and $Mo(CO)_5$(heptane) is, respectively, one and two orders of magnitude larger.[20] The energetic data ($\Delta_1 + \Delta_2$) also indicate that the magnitude of Mn–L bond energies are in the order of CO > THT > $OP(OEt)_3$ > THF > heptane.

The IR experiments for **2** demonstrate that following CO dissociation solvent–coordinated and ring–closed complexes are both formed in less than 200 ps after photolysis of **2** and that the solvent coordinated complex is converted into the ring-closed complex in about 30 ns (Scheme 4). These conclusions are based on the assignments of **2A** bands at 1906 and 1968 cm^{-1} to $(\eta^5\text{–}C_5H_4COCH_2SCH_3)Mn(CO)_2$(hexane) (by analogy to the assignments for **1A**) and the **2B** bands at 1958 and 1898 cm^{-1} to $(\eta^6\text{–}C_5H_4COCH_2SCH_3)Mn(CO)_2$ (by comparison with spectra of genuine product).[21] On the ns time scale, the **2A** bands decay to the same extent that those for **2B** bands increase. Since no other bands appear we conclude that the ring closure of **2A** displaces solvent to form **2B**. The constant total intensity of the **2A** (1898 cm^{-1}) and **2B** (1906 cm^{-1}) bands implies that the peak extinction coefficients for these bands are the same. In general, the band intensities were used to calculate the ratio of product to transient species at a 200 ps delay yielding 0:1 for **1**, 1:1 for **2**, and 1:3 for **3** (see Table 2).

The total heat ($\Delta_1 + \Delta_2$) released after photolysis of **2** is the same as that for **1** reacting with THT (within experimental error) suggesting that the same overall reaction (substitution of CO by S) occurs in both PAC experiments. Since no ϕ_2 is detected for **2** and all the heat was released in a single decay (ϕ_1) we further conclude that the ring closure for **2** is much faster than the

response of the PAC experiment ($k > 10^7\ s^{-1}$) a conclusion consistent with the fast rate of **2B** formation observed in the IR experiments.

The results for **3** are very similar to those for **2**. The **3A** bands at 1907 and 1968 cm^{-1} are assigned to (η^5–$C_5H_4CO\ CH_2CH_2SCH_3$)$Mn(CO)_2$(hexane) by analogy to assignments for **1A** and **2A** (Scheme 4). The **3B** bands at 1958 and 1895 cm^{-1} are assigned to (η^6–$C_5H_4COCH_2CH_2S$-CH_3)$Mn(CO)_2$ by comparison with spectra of genuine product.[21] The conversion of **3A** to **3B** is about 10 times slower than the conversion of **2A** to **2B**. This is expected since the activation entropy will be greater for closing the larger ring, which has more degrees of freedom.

Two heat decays are observed after photolysis of **3** with Δ_1 and Δ_2 values between those reported for **1** and **2**. On the other hand, the sum of the enthalpies is the same as those observed for **1** and **2** suggesting that the overall reaction is the same for **1**, **2** and **3**. The transient IR spectra at long time delays demonstrate that this reaction is CO substitution by S in each case. Since transient IR spectra indicate that **3** is converted to**3A** and **3B** within 200 ps and this is faster than the resolution of our PAC experiments, some ring closure must contribute to ϕ_1 (**3A** to **3B**) in addition to the contribution of CO substitution by solvent (**3** to **3A**). Consistent with this assignment of ϕ_1 the corresponding Δ_1 for **3** is more exothermic than the Δ_1 for **1** (since some Mn–S bonds have already formed for **3**) but is less exothermic than the Δ_1 for **2** (since replacement of Mn–solvent by Mn–S is not complete for **3**). The rate constant for ϕ_2 is comparable to those assigned to the decay and growth of the IR bands of **3A** and **3B**, respectively. We therefore assign this ϕ_2 to the ring closure that didn't occur during the measurement of ϕ_1. Consistent with this assignment, the Δ_2 calculated from this ϕ_2 is less exothermic than that reported in Table 1 for **1**. Thus we can determine the heat of the overall reaction (**3** to **3B**) but not the heat of each reaction step (**3** to **3A** or **3A** to **3B**).

The constant values for the enthalpies of CO substitution with THT for **1** and via ring closure for **2** and **3** is not surprising considering the same type of bonds are broken and formed in each case. This comparison suggests that there is little ring strain in **2** or **3** contrary to conclusions based on spectroscopic studies.[21] The constant enthalpy also indicates that the contribution to the photoacoustic signal from the molecular volume changes during the reactions are similar for the three reactions. The reaction of **1** is an intermolecular reaction and is fundamentally different than the intramolecular reactions for **2** and **3**, and the reaction volume changes should be different. Since these differences do not significantly change the calculated overall enthalpies we conclude that the molecular volume changes make a minor contribution to the photoacoustic signal compared to that from thermal expansion. This conclusion is further supported by results for ligand substitution with $Mo(CO)_6$ where reaction volumes were shown to have an insignificant contribution to the photoacoustic signal.[22]

Conformational analysis based on molecular mechanics calculations indicates that the distribution of products 200 ps after photolysis of **2** and **3** is determined by the preferred conformations. The thiomethyl group for **2** is near the metal center 50% of the time while the thiomethyl group for **3** is near the metal center 25% of the time. This corresponds with the intensity distribution observed by transient IR (see Table 2). These results suggest that once the CO dissociates from the parent species, the metal center immediately reacts with whatever is available.

Heretofore we have assumed that the lower quantum yield for **3** compared to **2** was due to CO recombination for **3**. If this were the case the above conformational analysis does not account for nearly 20% of **3** that is reformed. In other words, assuming every photon leads to CO dissociation the distribution following photolysis would actually be 1:3:1 for **3**:**3A**:**3B**. If on

the other hand no geminate recombination occurs, the conformational analysis is entirely consistent with the transient IR results. This would require that the lower quantum yield for **3** be due to excited state deactivation. While the structures of **2** and **3** are quite similar the proximity of sulfur to the metal center and/or the cyclopentadienyl ring in **2** may perturb the electronic structure sufficiently to make deactivation of the excited too slow to compete with CO dissociation.

Once solvent coordination occurs, displacement of solvent by CO is slow and is governed largely by the rate of solvent dissociation.[23] Thus solvent coordination forces CO to diffuse out of the solvent cage. The displacement of solvent by CO must now compete with the "slow ring closure". Even if all of the complex were photolyzed the concentration of CO would be no more than 4 mM, and the first–order rate constant will only be about 10^3 s^{-1}. This cannot compete with the slow (10^6 s^{-1}) ring closure of **3**. Even if CO reenters the solvent cage for a secondary geminate recombination it is still destined to diffuse away.[24] We conclude that non–geminate recombination of CO cannot compete with ring closure of **2** or **3**.

Examination of PAC data for **4** suggests that the quantum yield we previously reported for 4 may be in error and should be investigated further. Two results for **4** are inconsistent with those of the other complexes. First, the structure of **4** is similar to **1** and **3** yet the quantum yield for **4** is different. Second, and more significant, the Δ_1 for **4** is much more endothermic than the Δ_1 for **1**. Ring closure, if it occurs, would make Δ_1 for **4** more exothermic than for **1** not less. If no ring closure occurs for **4**, Δ_1 should be the same for **1** since the Mn–CO bond and Mn–solvent bonds strengths should be the similar in both cases. Indeed, if we assume the quantum yield for **4** is the same as it is for **1** and **3** then the Δ_1 for **4** is the same as it is for **1** (see second entry for 4 in Table 1). With this assumption, the results suggest that no ring closure occurs for **4** during the first heat decay, or if it does, the enthalpy of ring closure is the same as for solvent coordination. The latter possibility is inconsistent with the exothermic second heat decay observed for **4** and for **1** with THF. We conclude that the lower limit of the quantum yield for **4** is 0.82.

The second heat decay for **4** is most likely due to ring closure by analogy to the results for **2** and **3**. This ring closure is slower than that for **2** even though the number of ring atoms in each case is the same. The shorter bond lengths associated with oxygen versus sulfur probably results in a ring strain that increases the barrier to ring closure.

By analogy to the other complexes, ring closure is expected to be biphasic for **5** and **6.** Indeed a second heat decay is observed in each case. The overall enthalpy ($\Delta_1 + \Delta_2$) for **5** is the same as for **6** and suggests that the overall reaction is the same. We assign this reaction to CO dissociation followed by ring closure. The difference in Δ_1 (and Δ_2) for the two complexes is most likely due to different extents of ring closed product and solvent coordinated intermediate forming immediately after CO dissociation. The overall enthalpies for **5** and **6** may be expected to be similar since both complexes have an ester function on the side chain. On the other hand, the enthalpies for **5** and **6** are less exothermic than those for **2–3**. This is consistent with the results for **1** with THT and THF, which show that the Mn–S bond is stronger than the analogous Mn–O bond.

Summary

Results of PAC, transient IR and molecular mechanics studies indicate that ring closure following photolysis of (η^5–C_5H_4R)$Mn(CO)_3$ complexes can be extremely fast; in addition, the ring closures can occur via two pathways of distinct time scales. The first pathway is an ultrafast

ring closure following CO dissociation that occurs prior to solvent coordination. The second pathway is a ns–μs ring closure that displaces coordinated solvent. Rapid ring closure following photolysis is determined by favorable side–chain conformations.

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(18) In additional PAC experiments for **3** in *n*-hexane we obtained $k = (1.26 \pm 0.14) \times 10^6$ s^{-1}. Although the PAC and IR experiments were done in different solvents this apparently is only responsible for a minor change in the rate. Differences in rates obtained by PAC and IR experiments are attributed to the fact that IR experiments were not air free.

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(24) For further discussion of the fate of caged CO see reference 8.

Table 1. PAC Data for Photolysis of $(\eta^5\text{–}C_5H_4R)Mn(CO)_3$ in Heptane

complex **n**	Φ[a]	ϕ_1	ϕ_2	Δ_1	Δ_2	$10^{-6}k$[b]
				kcal/mol		
1 (+ THT)[c]	0.82	0.714±0.007	0.196±0.011	29.6 1.9	-20.3±1.7	2.3±0.1
1 (+ THF)[c]	0.82	0.714±0.019	0.091±0.048	29.6 2.7	-9.4±5.0	0.20±0.04
1 + $OP(OEt)_3$[c]		0.703±0.015	0.159±0.023	30.7 2.4	-16.4±2.6	5.3±2.8
2	1.00	0.862±0.030	[d]	11.7±2.6	[d]	[d]
3	0.82	0.785±0.014	0.098±0.007	22.2±2.0	-10.0±1.0	1.14±0.10[e]
4	0.64	0.718±0.014	0.044±0.006	37.4±3.5	-5.8±0.9	0.97±0.13[e]
4	(0.82)[f]			29.2±2.3	-4.6±0.7	
5	1.05	0.718±0.013	0.081±0.010	22.8±1.7	-6.5±0.9	4.6±0.5[e]
6	0.94[g]	0.782±0.010	0.016±0.006	19.7±1.4	-1.4±0.5	0.8±0.4[e]

[a]from reference 4, [b]units are M^{-1} s^{-1} unless otherwise noted, [c]ϕ values are extrapolated to zero Lewis base concentration, see **Results**; [THT] = 0–0.7 M, [THF] = 0.01–4.2 M $[OP(OEt)_3]$ = 0–0.5 M [d]not detected, [e]units are s^{-1}, [f]see Discussion, [g]total yield for all photoproducts, see reference 4

Table 2. Transient IR following Photolysis of $(C_5H_4R)Mn(CO)_3$ in *n*–hexane

	IR after 266 nm photolysis[a]				200 ps	$10^{-6}k_{obs}$ s^{-1}	
complex **n**	**nA**		**nB**		**[nB]/[nA]**	**nA**	**nB**
1[b]	1907	1969	1946	1885	0	2.3±0.6	2.7±0.7
2	1906	1968	1958	1898	1	29±10	[c]
3	1907	1968	1958	1895	0.3	3.8±0.8	4.3±1.6

[a](± 3 cm^{-1}), underlined bands were used for kinetic analysis, **A** is the transient and **B** is the product, see Schemes 3 and 4, [b]0.36 M THT, [c]not determined

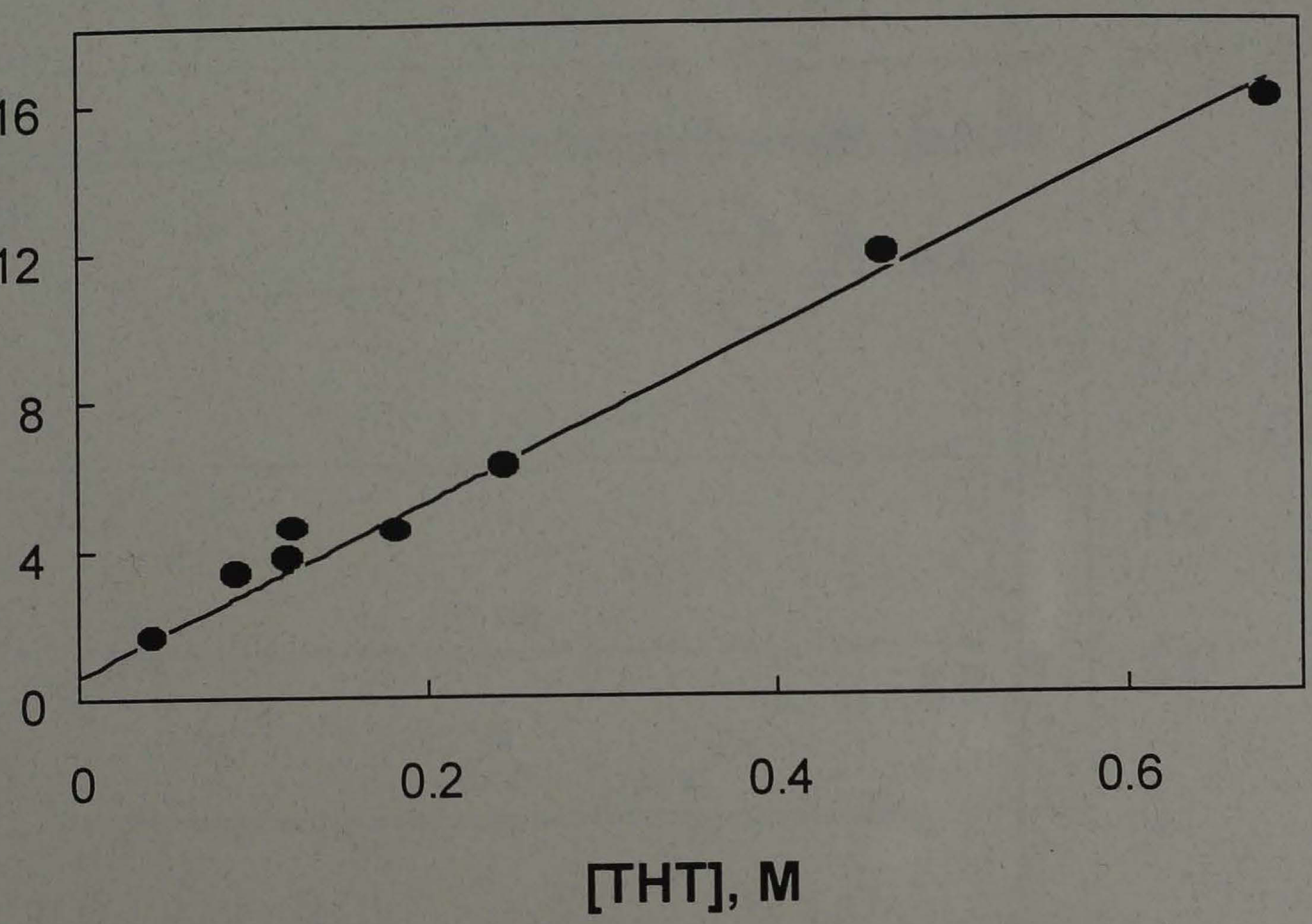


Figure 1. Plot of k_{obs} ($1/\tau_2$) versus [THT] for the second heat decay following photolysis of **1** with THT.

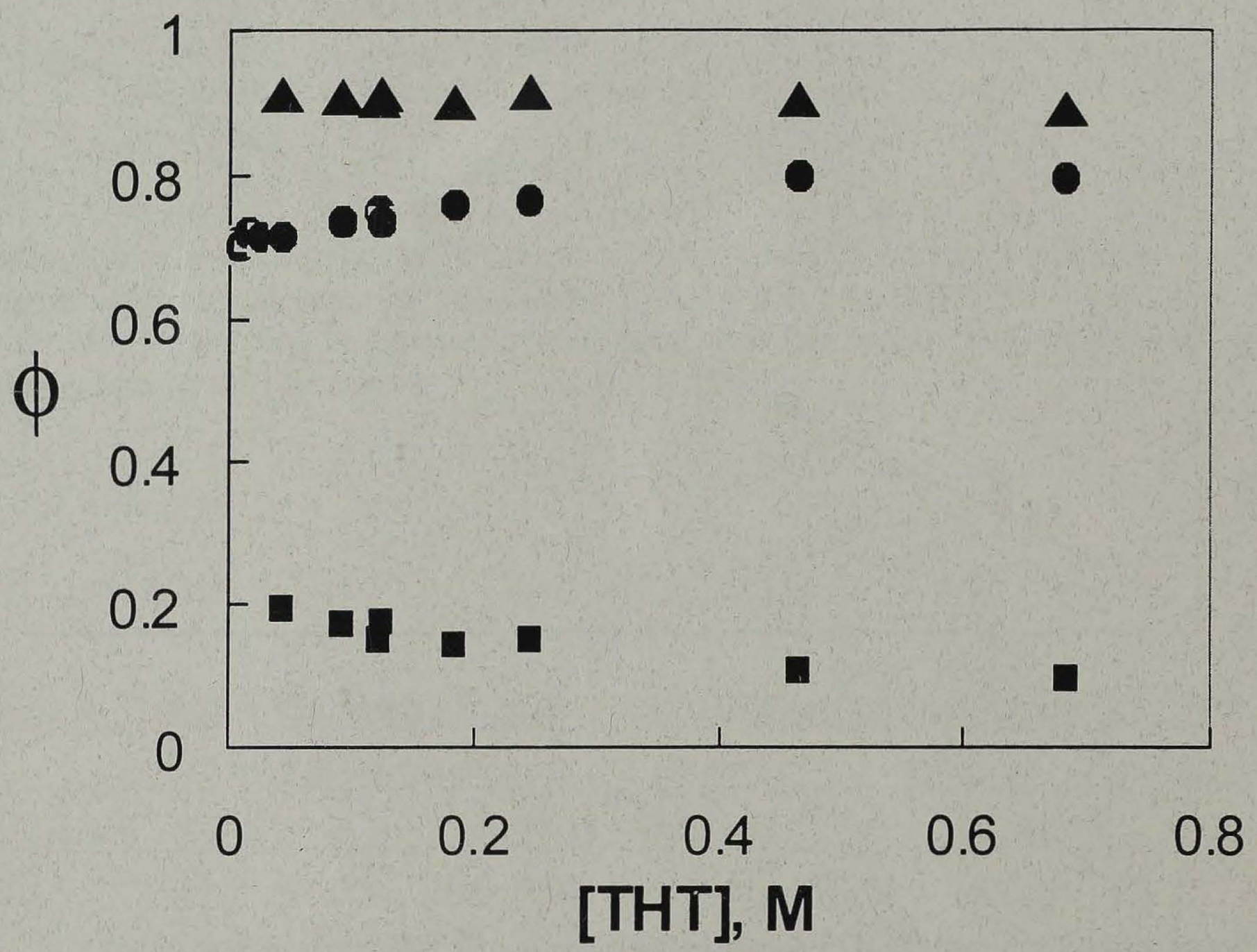


Figure 2. Heat amplitudes plotted versus THT concentration for photolysis of **1**, ▲ = $\phi_1 + \phi_2$, ● = ϕ_1, ■ = ϕ_2. The standard error is 0.03 or less, and the data markers are approximately the size of the error bars.

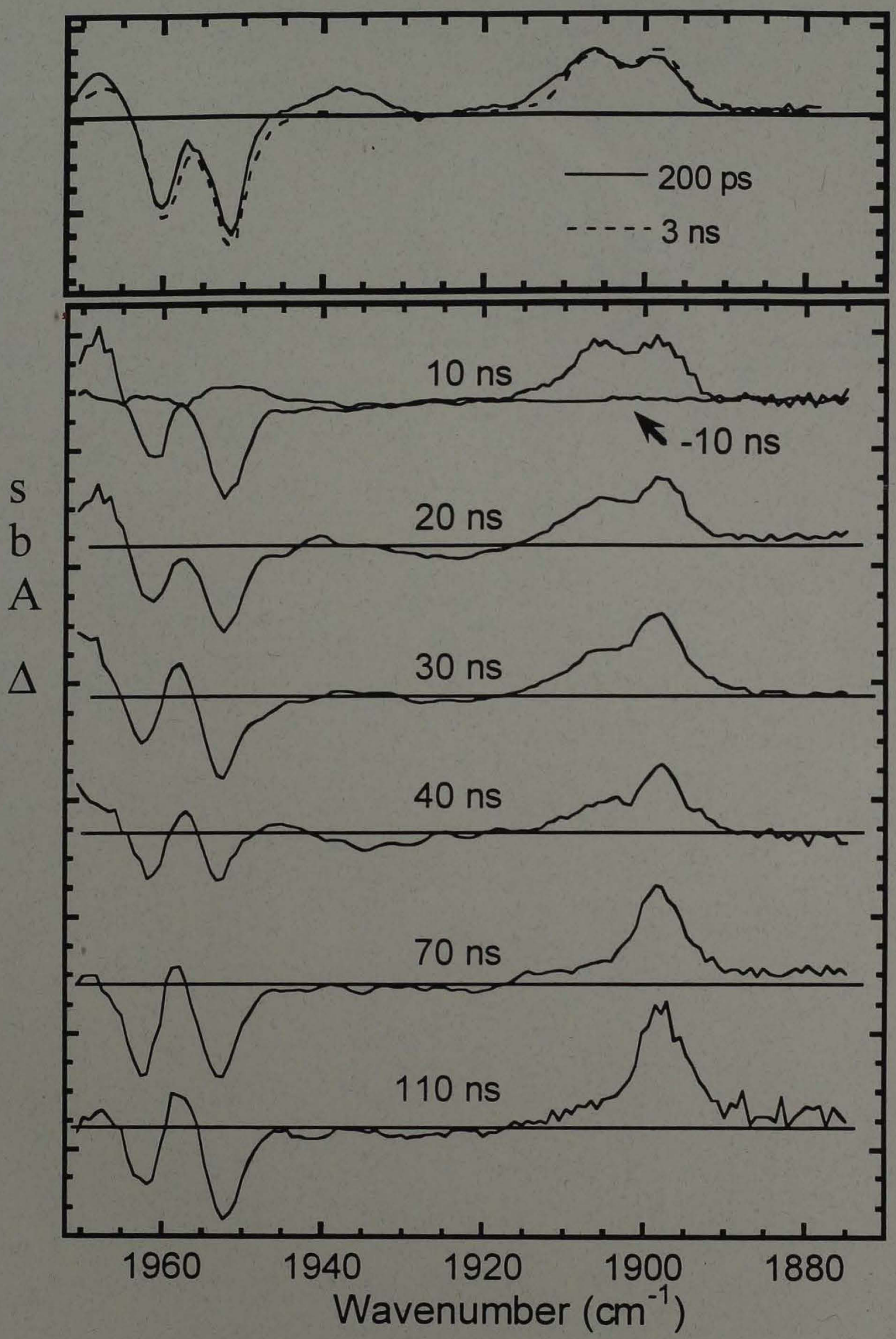
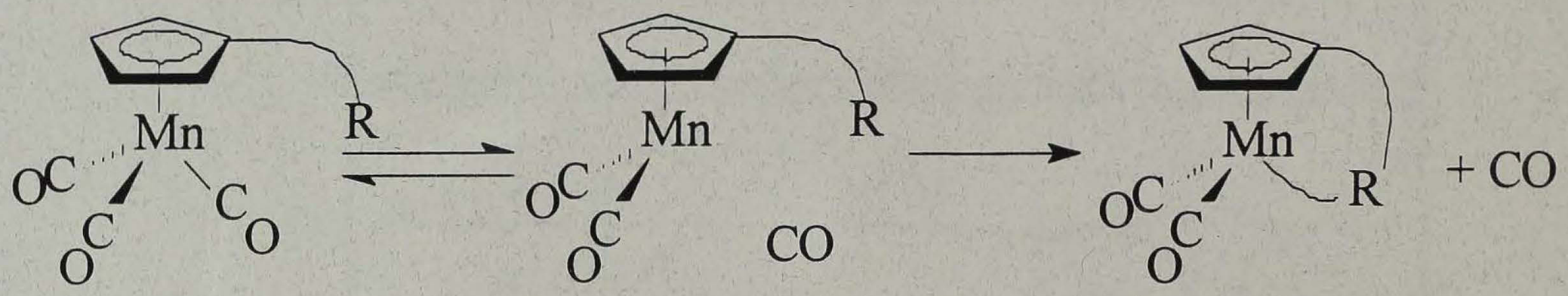
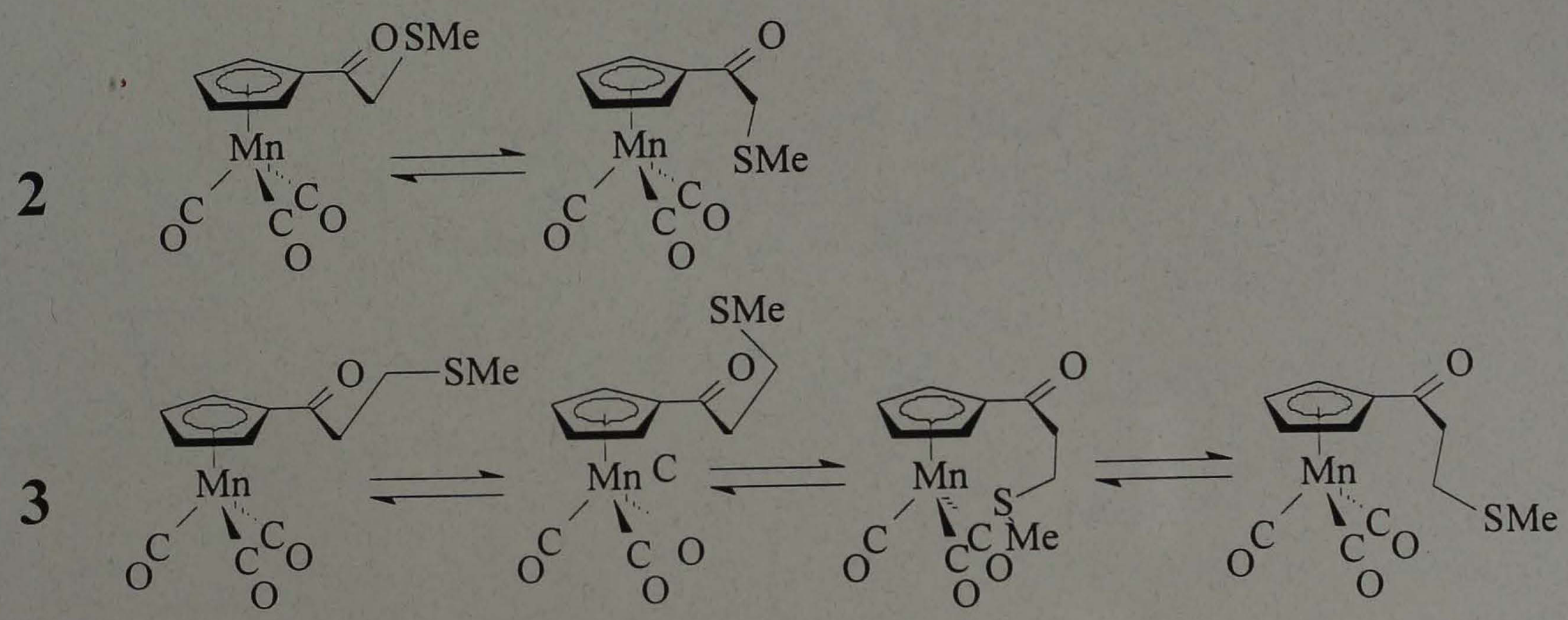


Figure 3. Transient Infrared Spectra of **2** in Hexane.

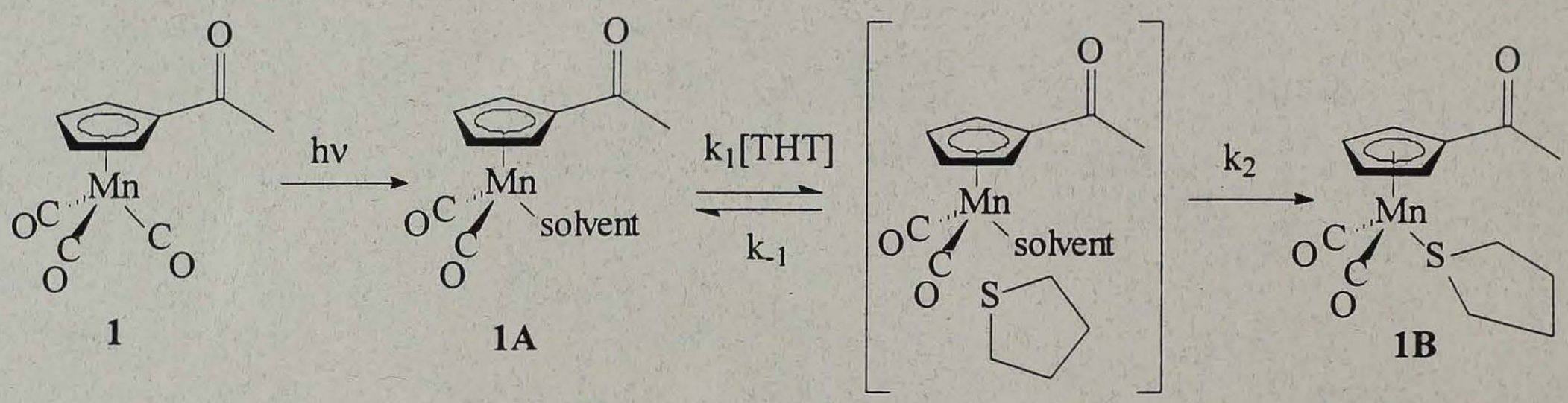
Scheme 1



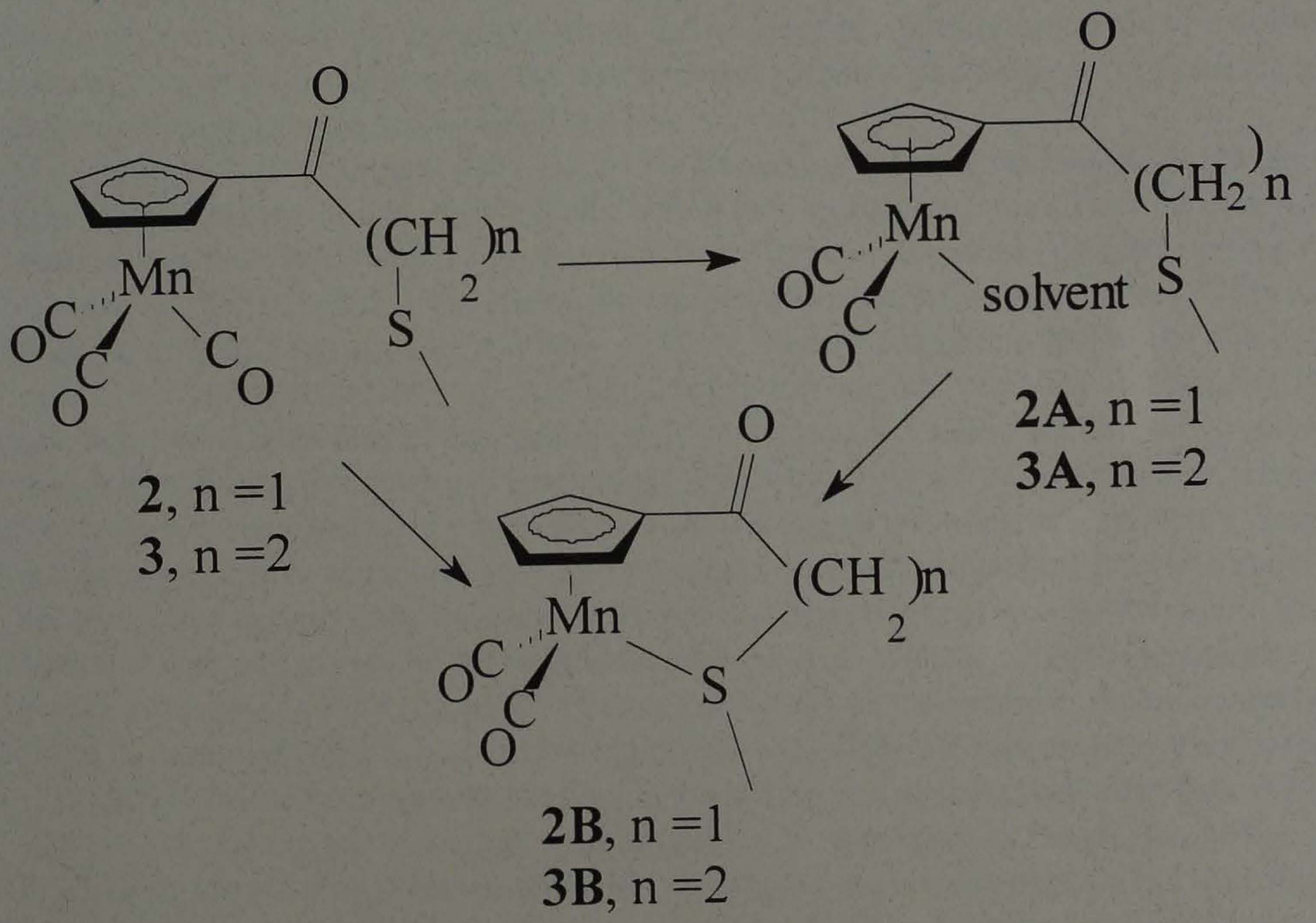
Scheme 2



Scheme 3



Scheme 4



Changes, Changes:
The Transition from Preaching to Pleasure in American Children's Books, 1680-1880

By Melissa Moore

Enter any library or bookstore, go to the children's section, and you will find a variety of topics addressed in the books located there, from Barney and Blue's Clues for the video generation, to more serious titles for young adults on peer pressure and the danger of gangs. The modern day parent or librarian takes this for granted, yet the literary historian, upon reflection, will realize what a drastic change has taken place in the last three hundred years. Some writers use their books to educate American young people, such as Lois Lowry's 1994 Newbery award-winner *The Giver*, a novel concerned with the Holocaust, or the critically acclaimed nonfiction biographies of Russell Freedman. However, the majority of contemporary children's authors are primarily concerned with touching the emotions and problems of children today, building their self-esteem and using books as bibliotherapy.

In contrast, the Puritans' main purpose in teaching children to read was to enable them to read their Bibles and become saved adults, part of the elect congregation. Their concern was "the state of the child's soul," and they pursued it "with high seriousness and unrelenting vigor" (Sloane 14). Those Puritans who wrote for children also often wrote for adults, with the same goal: "to awaken, to evangelize" (Sloane 13). The earliest writing composed by Americans specifically aimed at children reflected very clearly this purpose. From the 1680s to the 1880s (the time period addressed in this paper), literature written in America for children evolved from this narrow, Puritanical emphasis upon salvation to a broad variety of themes deemed acceptable for children to read, including informational and educational materials, success stories, moralistic and domestic fiction, and even satire. This transition mirrored the changing beliefs in America about children, religion, and the purpose for reading, and paved the way for twentieth-century historical fiction in series like the "American Girls," which reflect a distinctly American viewpoint and way of life; the popular fantasy series of Lloyd Alexander, Susan Cooper, and Brian Jacques; and realistic fiction covering divorce and AIDS, teenage pregnancy and suicide.

When the Puritans came to America in the 1600s, they brought with them their Bibles, as well as a few collections of English sermons and works like *Pilgrim's Progress* and *Foxe's Book of Martyrs*. The printing press was brought over as well, and began operation in Cambridge, Massachusetts, early in 1639. The first book to be produced in America for children was a catechism, John Cotton's *Spiritual Milk for Boston Babes in Either England*, printed in 1656 by Samuel Green. This book was a London import and so does not merit our critical attention regarding what *Americans* wrote for their own children, yet it does reveal the Puritan intention of converting their children as early as possible. Puritan doctrines, such as the total depravity of man and a literal hell, required all parents who loved their children to see "the taint of Adam's sin in every infant" and to attempt to restrain that "inborn depravity . . . by ceaseless education" (MacLeod 102). Many parents believed that the chief goal of child rearing was "inculcating virtue," and this could be accomplished by taking "advantage of every didactic opportunity to

"city" was the indoctrination of the next generation. Nonetheless, the readers of Janeway and Mather, as they grew up, began to realize these "instructions might be as effectively conveyed in entertaining biographical form as in other forms," and it was only a brief step further to fictionalized accounts of moral and upright children.

Coexistent with *A Token for Children* was the *New England Primer*. Primers originated in England during the fourteenth century from the Bible, which was "considered the only proper reading matter for young people" (McCulloch 34). Primers were originally used as tools of religious instruction, and "every page was filled with pious thoughts; every sentence was intended to teach some religious truth" (Livermore 56). Eventually, *The New England Primer* also took on an educational role and included items such as an alphabet and a syllabarium to aid children learning to read.

It is unclear exactly when the first copy of *The New England Primer* was published by Benjamin Harris in America, possibly as early as 1683, but certainly by 1690. Called the "Little Bible of New England," it was used heavily for over a hundred years by school children throughout New England, and it was also the first book of American origin to find current use abroad (Haviland and Coughlan 20). One critic claims that *The New England Primer* was the "most universally studied school-book that has ever been used in America" (Earle 128); given the truth of that statement, it is easy to understand the impact that its teachings had on an entire century of schoolchildren. Contemporary scholars would agree that the best way to convince an entire generation of the truth of a belief is to teach it consistently in every school. The *Primer* was used constantly not only in school, but also at home and in church, so "the people could not help but be saturated with its doctrines, and no book save the Bible did more to form New England character" (Johnson 99). *The New England Primer* soon became an "institution," found in every home in New England and the neighboring colonies (Johnson 72), and in the two hundred years following its publication an estimated eight million copies were sold (Jennerich 220).

The New England Primer was small enough to fit in a child's hand. It began with a page devoted to the alphabet, sometimes in two or three types of print. This was followed by a Syllabarium, or as it was titled in the *Primer*, "Easy Syllables for Children." Next were lists of words composed of these syllables, varying in length from one to six syllables. The words chosen for the Syllabarium, such as 'a-bo-mi-na-ti-on,' 'hu-mi-li-ty,' and 'for-ni-ca-ti-on,' clearly reflected the Puritan influence and were intended to instruct the child in doctrine.

The rest of the book was a miscellaneous compendium of religious and moral verse and prose, including passages from the Bible and *The Westminster Assembly's Shorter Catechism*, which Cotton Mather referred to as "a little watering pot to shed good lessons" (quoted in Johnson 96). Mather encouraged schoolmasters to "set sentences from [the *Catechism*] to be copied by their pupils" (Johnson 97). Also included were prayers, the Apostles Creed, and Dr. Isaac Watts' "Cradle Hymn" (McCulloch 36).

The New England Primer also broke new ground in its inclusion of a picture alphabet of twenty-four tiny pictures, each of which was accompanied by a two or three line rhyme for the letter which the picture was to represent. The most famous of these rhymes was the first, for "A": "In Adam's Fall We sinned all." This rhyme stayed the same throughout all new editions, although most of the others changed to fit the times. For example, an early edition of the *Primer* used "Christ crucified, For Sinners Died" for the letter "C," while a mid-eighteenth-century

edition read "The Cat doth play, and after slay." Again, for the letter "F," the early edition read "The Judgment made Felix afraid," while the later version used "The Idle Fool Is whipt at school."

By studying the material included in *The New England Primer*, one can see a gradual move away from the Puritan mindset to a more light-hearted and child-centered focus. Early on, the avowed purpose of the *Primer* was to "teach children spelling, the true Protestant religion, and the follies and dangers of espousing Catholicism" (Jennerich 220). The recurring theme, the most important human need depicted, was that of "the need for eternal salvation" (Lystad 41). Over time, though, while the moral flavor of the *Primer* did not disappear, it was diluted and purged of the continual calls for conversion and warnings against hell. It paved the way for the McGuffey Eclectic Readers to appear in the 1830s with a more literary bent and a less theological tone.

Hornbooks had also played a role in the classroom. The hornbooks were made of a paddle-shaped piece of wood with a handle, and the written elements were secured on both sides of the hornbook under a piece of horn pounded flat to protect the paper. It contained an alphabet, a syllabarium, and typically the Lord's Prayer, without the additional Catechism and other reading material present in *The New England Primer* (MacDonald, *Literature* 53). It was the "earliest lesson-book made for children to use themselves" (Folmsbee 1), and its purpose was not so much indoctrination as helping children learn to read.

When papermaking and publishing became less costly, the hornbooks were replaced by *The New England Primer*, chapbooks and battledores. The chapbooks were not actually written for children, but they were appropriated by them, probably attracted by the crude woodcuts and illustrations (MacDonald, *Literature* 107). The classic example of a chapbook story is "Babes in the Woods," which portrayed the abandonment and death of two small children by their greedy uncles. Once again, the theme of death appears in the literature that colonial children were reading. One critic argues that the frequent mention and portrayal of death in the literature actually hardened the children to death, and the "idea of final dissolution . . . must not have had much effect upon the average school child" (Carpenter 27).

In America, chapbooks were nicknamed "toybooks," a reflection of their light-hearted vein and fictionalized writing. They also incorporated what contemporary critics might term "local-color" and employed clearly Americanized settings, often using "narratives regarding captivities, hardships, and life among the Indians. . . .[They were] the forerunners of the modern day Western adventure tale" (McCulloch 16). Small paperbound volumes which sold for pennies, the chapbooks were "affordable by the common folk and . . . written at approximately their reading level," so their influence was widespread (McCulloch 9). The chapbooks disappeared around the time of the Revolutionary War, in part because they were superseded by the newspaper, "a more timely method of teaching history and awareness" (McCulloch 16). The battledores appeared around 1770, replacing the hornbooks and the primers. They added illustrations to the typical primer and were an "obvious concession to children's desire for pleasure while learning" (MacDonald, *Literature* 65). Battledores were not nearly as widespread, but they do reflect a growing trend toward illustration and entertainment and a movement away from overt preachiness.

With the beginning of the nineteenth century came a dramatic increase in the quantity and quality of the materials being produced for children. In England, John Newbery's publishing of

quality children's literature paved the way for new ideas and approaches to reading material for children in America. John Locke's theory of education, as expounded in *Some Thoughts Concerning Education* (1693), was widely read in the American colonies. Locke argued for a less religious and more rational approach to child rearing and childhood. He maintained that children needed "real play, and that entertainment and amusement were perfectly valid as child rearing concepts" (MacDonald, *Literature* 9). Extending this theory to literature opened the door to the acceptability of literature having entertainment as well as educational value. This change, which stressed the importance of "industry and wisdom," promoted a gentler, more "worldly view of life--one which humanely permitted the child a certain amount of legitimate pleasure en route to his heavenly home" (Kiefer 2).

To put it another way, writers for children in America were now free to let their children grow up, ministering to the needs of others around them instead of dying martyr's deaths (Avery, *Pattern* 112). The focus shifted slowly but surely towards an awareness of good works. Children in the stories began to "pay attention to the social needs of others, particularly others within the family group" (Lystad 230). A growing sense of responsibility for others was coupled with respectability, good manners, propriety, moderation, learning, and law and order (Bingham and Scholt 81). By precept and example, the children appearing in the books of the nineteenth century showed a natural interest in learning history, science, and geography; demonstrated how to overcome adverse circumstances; modeled moral behavior; encouraged an awareness of and response to domestic needs; and even indulged in the heretofore forbidden satire on Puritan principles. Within these stories there often emerged a distinct literature for American children as well.

The McGuffey Eclectic Readers picked up where *The New England Primer* had left off, and were rewarded accordingly. In the early 1830s, Truman & Smith, a group of publishers of children's books in Cincinnati, wanted to produce a series of textbooks for use out West. They initially approached Catharine Beecher (Harriet Beecher Stowe's sister), but when she declined they spoke with a local elementary school teacher, William Holmes McGuffey, about the project. McGuffey agreed to compile the series, and the First Reader was published in 1836. Readers at levels Second through Sixth, as well as a Primer and a Speller, followed over the next twenty years. The McGuffey Eclectic Readers became well-known and accepted, in part due to the aggressive marketing and skillful promotion of the publisher (Lindberg xxi). A critical part of this marketing plan was the use of the word "eclectic" in the title, which showed the "breadth of the educational theory" behind the Readers (Lukens 272). "Eclectic" also portrayed the series as "a 'system' that was based on common sense--one that in a typically American way melded the best ideas from all possible educational worlds" (Lindberg xxi).

Fortunately, McGuffey had worked with children long enough to know what worked (and what did not), and the result was a series of readers which, in place of the common lists of words for spelling aloud, went straight from the alphabet to short sentences: "He introduced shorter paragraphs and more illustrations into his texts and kept the books quite short, . . . quoting Scripture even less frequently than Webster's ['Blueback' speller] had" (Murray 32). While McGuffey wrote a great deal of the material in the Readers, he did not hesitate to solicit writing from well-known moralists of the day and did include some more literary pieces by authors such as Mark Twain, Nathaniel Hawthorne, and Henry Wadsworth Longfellow (Lukens 271). All of

these modifications served to attract the pupil to the Readers. Between the time of their original publication and 1920, there were about 122 million copies of the McGuffey texts issued (Carpenter 85). Even though from a modern standpoint the series exhibits heavy-handed didacticism, hypocrisy, and rigid viewpoints, the McGuffey Readers certainly "filled the need of the time" (Lukens 274) and "played a major role in establishing the moral, social, and literary values of several generations" (Lindberg xxii). *The New England Primer* had been so focused on the innate sinful nature of human beings and their need for redemption that McGuffey's depiction of "a God of benevolence who might even be one's friend" in the stories he included was a refreshing sign of hope and optimism (Lukens 275).

Children who wanted to learn were not limited to their schoolbooks, however. Several years before the McGuffey Readers appeared, Samuel Griswold Goodrich had begun writing for children under the pseudonym Peter Parley. Eventually writing over one hundred and fifty books, Goodrich was convinced that "children by nature loved truth and did not need to be fed with fiction" (Townsend 33). As a child, Goodrich had been frightened by fairy tales and generally considered the stories, such as "Little Red Riding-Hood," to be real-life accounts. The adult Goodrich believed fairy tales to be nothing more than "lies that were told to children at an impressionable age" (MacDonald, "Goodrich" 192). Thus the prolific writer for children was vehemently opposed to anything "fanciful or imaginative" (Jordan 67). After visiting the British writer Hannah More, he was inspired to imitate More's style; only his books would be American stories for American children.

Yet, Goodrich knew that in order for children to read the books, they would have to find them entertaining, so he created the character of Peter Parley, "an elderly, gouty old man," to be his storyteller (MacDonald, "Goodrich" 193). Parley's stories were of his own adventures as a younger person, and through Parley's narration Goodrich gave the child facts about geography, history, social customs, and certain national figures. In the first book of the series, *The Tales of Peter Parley about America*, Parley begins by introducing himself: "Here I am. My name is Peter Parley. I am an old man. I am very grey and lame. But I have seen a great many things, and had a great many adventures in my time, and I love to talk about them" (5). This is accompanied by an illustration (as so many of his stories are) in an attempt to draw the child reader into the story. Goodrich once said, "I imagined myself on the floor with a group of boys and girls, and I wrote to them as I would have spoken to them" (qtd. in Murray 32). Interspersed throughout Parley's reminiscences are encouragements to get out a map or globe and trace the route being discussed, or to ask a parent or grandparent to share their experiences at a certain time.

Certainly a didactic tone infiltrates the books in the series, and the feasibility of all these experiences happening to one individual is fictional in itself; but Goodrich does by and large restrict himself to fleshing out facts about American history and customs, and he does so in an entertaining and readable way. Additionally, Peter Parley is a moral and ethical individual whom children are encouraged to emulate. Goodrich (1793-1860) was the only children's author of his time to be able to make his living simply by writing children's books, which indicates not only the quantity of work he produced, but its acceptability to the reading public. The newly founded American Republic needed stories and textbooks which were "authentically American," and Goodrich's portrayal of a superior American nation secured for him a place in the national literature (MacDonald, "Goodrich" 192).

A quality aligned with the American Republic from its earliest days is success. The Declaration of Independence proclaimed that all men were equal, and inferred that the freedom to pursue success was foundational to the American dream. No name is more closely associated with the American success story than Horatio Alger, Jr. Alger picked up on the necessary traits for succeeding -- "the Christian values of thrift, labor, industry, honesty, punctuality, and good-will" -- from the McGuffey Readers written a few decades earlier, embodying them in young boys, typically orphans in the big city, who practiced these behaviors and were the beneficiaries of lucky breaks from adults in a position to help them (Mosier 122).

All together, Alger wrote over one hundred books for children, totaling sales of over thirty million copies. All contained the same predictable plotline (Lystad 113), perfectly exemplified in *Ragged Dick*. This was the first title in the Ragged Dick series, published in 1868, and gained Alger the reputation for which he is known today. Dick is introduced to the reader on the first page, and he is immediately drawn to the young orphan trying to survive in New York by blacking the shoes of passersby. Dick differs from many of his predecessors in children's literature by actually being a complex character. He is honest, optimistic, hard-working, and kindhearted; but he also understands the ways of the world and has been known to indulge in smoking, gambling, and monetary extravagance. Alger's belief in people's innate goodness (as opposed to the Puritan doctrine of total depravity) and desire to help others is portrayed in Dick, and one cannot help but like him. He stands in stark contrast to Johnny Nolan, who has a poor work ethic and must rely on the kindness of others to help him find food and shelter.

Dick's aggressiveness and "open face" (Alger 16) provide him with the opportunity to show Frank, a wealthy little boy, around New York, and eventually Dick opens a bank account and gets some education. However, his attempts at finding a job as a clerk or in a counting-house are unsuccessful until, aboard a ferry one day, he witnesses a six-year-old boy fall in the water and, without thinking about the danger, jumps in and rescues him. Conveniently, the boy's father works in a counting-house, and to recompense Dick for the life of his son, he gives Dick a job. So there is a curious combination of hard work and achievement, along with "lucky stars . . . shinin' pretty bright" (Alger 130). It should be noted, however, that the success Dick finally enjoys, and what he has longed for throughout the novel, is not monetary wealth but "to grow up 'spectable' (Alger 131). This is in fact true for all Alger's heroes, who "covet middle-class acceptance and respectability" more than riches (Murray 71). Dick would not have been in a position to rescue the young boy had his honest face not opened the door to education with Frank; as a result, his good traits "allowed others to recognize [his] potential and thus help [him] out on [his] journey of . . . advancement" (Murray 70). In a sense, he does not earn his reward, but he does deserve it, because of his "fine character" (Karrenbrock 63).

That Dick is not a typical Sunday School boy lacking in faults, but overcomes his circumstances anyway, in part explains the popularity of Alger's hero. In addition, many readers "saw in Alger's stories the exuberance and optimism of America itself, the unbridled leveling of democratic opportunity" (Murray 68). Reliability and truthfulness are still rewarded in Alger's books, but he adds to the early nineteenth century hero's story "high adventure, suspense, and urban settings" which appealed to his young male audience (Murray 72). But the aim of life is no longer piety or salvation -- Dick never quotes Scripture, reads his Bible, or tries to convert others

-- but "material success" (Jordan 32), a concept that continues to embody what is "American" in the late twentieth century.

Not only did the American success story develop during this time, but also the moralistic and domestic story. While Alger's books tended to be aimed at young boys, the moralistic and domestic literature which appeared during the second half of the nineteenth century was written for young girls. In the stories of Rebecca Sophia Clarke (1833-1906), or Sophie May (her pen name), one finds a curious blend of characters, specifically two sisters named Prudy and Dottie Parlin. Prudy is a holdover from the earlier literature, a proper young lady who is painfully aware of what is moral and socially acceptable and seeks to indoctrinate those around her; as one critic put it, she is a "normal child who tries to be good" (Doll 130). Dottie, three years younger, is "more imaginative and mischievous and sometimes deliberately misbehaves" (Doll 131). She is often selfish and insistent on her own way, and no one around her (including her mother) will stand up to her.

In fact, "nothing very much ever happens" in the Prudy and Dottie stories, just simple everyday events retold for the reader's enjoyment (Avery, *Behold* 121). Sophie May's strong point in all her books on Prudy and Dottie is her "ability to portray children realistically" instead of within the "rigid good-and-evil dichotomy of the earlier writers" (Doll 132, 127). Dottie, Prudy, and the eldest sister Susy fight, argue, get punished, and disobey. When Dottie is not invited to Fanny Harlow's tea party, she takes clothes from her sister's closet, gets dressed, and walks to the party on her own, where she tears the guest of honor's picture book, crumbles her bread into her milk and eats it with a fork, then falls asleep in the high chair, all to the great mortification of her older sisters; but she is never punished or even corrected when she arrives home. She often wanders off on her own and gets into mischief, but no one chastises her. Yet, Dottie can be an endearing child and obviously wins the affection of those around her, just as Ragged Dick's character makes up for his lack of manners and education. The sketch of family life in Sophie May's books is the attraction to the young reader, and the domestic novel enjoyed a heyday in both children's and adult literature for many years.

Written under the pseudonym of Margaret Sidney, Harriet Lothrop's book *Five Little Peppers and How They Grew* is another domestic novel, but there are some distinctives which set it apart from its contemporaries. The primary separator is poverty. The Peppers seem even poorer than Ragged Dick, but in their case there is "nothing shameful or suspect" about their poverty (Murray 60). Mrs. Pepper, a widow, is trying to raise five children alone, and she continually "immolate[s] self and [bouy[s] up failing spirits, however great the adversity" (Avery, *Behold* 165). But the family's poverty gives the children opportunities for creativity, such as their trying to make the old stove work and Polly and Ben playing Santa Claus to the younger three children. While they don't have much food to choose from, there are always potatoes and bread to eat. They seem to laugh continually, an aberration which the reader quickly assimilates and comes to envy in the "Little Brown House" (as everyone calls the Peppers' home). The only time poverty is a serious hindrance is when the children contract the measles and Polly's eyes are feared for, but the kindness of the neighbors and the doctor removes this concern almost before it is expressed. Ultimately, the family life is "idyllic" even in the midst of want and "genteel poverty" because "everyone loves one another and helps one another" (Lystad 134).

The Pepper family gets a "lucky break" similar to Ragged Dick's in the appearance of the kind boy Jasper King (who saves the youngest Pepper, Phronsie, from a lost trek reminiscent of those walks of Dottie Dimple) and his wealthy father. Both the boy and eventually his father see in the Pepper family something which they, for all their material prosperity, are lacking, so they invite Polly to live with them and take piano lessons (the greatest longing of her heart). In spite of the rigid class stratification in society at that time, there is no social unease between Polly and the Kings in the mansion (Avery, *Behold* 169). When Polly gets lonely for the Little Brown House and its inhabitants, the Peppers are sent for one by one, and the two families end up joining together as one large, extended family.

Sidney's main purpose for writing the book was for "amusement, but instruction in morals [was] also important" (Lystad 137). That Sidney could accomplish this without the family attending church or reading the Bible shows how far the literature had moved from its Puritan beginnings. Sidney's characters all exemplify Christian values such as "honesty, devotion to family, helpfulness, obedience, and humility" (Murray 61). These values could be transmitted "without overt doctrine; goodness [had become] simply a matter of possessing or developing self-sacrificing behavior" (Murray 62).

There is also a social message being preached in the way people respond to the needs of the Pepper family, that it is not "shameful to be poor or sick, but it is shameful not to assist the poor or the sick" (Lystad 137). Related to that is the "idealization of the mother" who sets such an example of thriftiness (re-using old thread) and hard work (sewing at all hours of the night to provide for the family) that the major theme of the book, according to Ruth MacDonald, is "to help mother" ("Lothrop" 270). The children love her unconditionally and remain well-behaved, uncomplaining, and hardworking out of respect for their mother. The "happiness of the home life" portrayed in *Five Little Peppers and How They Grew*, in spite of the poverty, is the main reason the book, and its many sequels, enjoyed such a following (MacDonald, "Lothrop" 267).

Is it any wonder, then, that such a gifted writer and satirist of the period would turn his attention to these works and their perfect little heroes and heroines, poking fun at the unrealistic and highly-idealized characters sketched there? Mark Twain (or Samuel Clemens) did just that. He had grown up reading the Sunday School literature with the perfectly good children who resided and were rewarded there, as well as the bad little ones (usually boys) who were severely punished or died because of their misdeeds. These children were "never naughty, fractious, or lazy, but always hardworking, obedient, good-humored, and loved because of [their] good behavior" (MacDonald, *Literature* 10). To the nineteenth-century mind which had put aside Puritanism, this child was not on the whole an "appealing child" (Avery, *Behold* 102), and certainly not to Twain.

So, early in his writing career, Twain wrote two brief and unrenowned stories satirizing the children in Sunday School literature. He had been well-trained from his earliest work in the newspaper field in the "art of burlesque and parody" (Baldanza 99), and these skills are easily seen in "The Story of the Good Little Boy" and "The Story of the Bad Little Boy," both of which were written around 1865 and published in *Sketches New and Old* ten years later. These works are crude and certainly not undiscovered masterpieces, but the fact that he could publish them in 1875 shows once again how much the reading public had changed from its Puritan ancestors.

In "The Story of the Good Little Boy," Jacob Blivens initially sounds as if he had jumped one hundred years from a Sunday School tract onto Twain's page. He is obedient, prompt, respectful, and keeps the Sabbath. Jacob has read the Sunday School stories and wishes to be the subject of one himself; only he realizes that he would have to get sick and die, witnessing amidst the pain to the glories of heaven. Twain, however, does not allow his little hero such a rewarding end. One day, Jacob comes upon some bad little boys who have tied empty nitro-glycerine cans to the tails of about fifteen stray dogs, with the intention of blowing them up for sport. Jacob naturally intervenes, but his good intentions are wasted on Alderman McWelter, an adult who has happened upon the scene and assumes Jacob is guilty of the prank. The alderman smacks Jacob on the rear with his hand, and Jacob, along with the dogs, is blown to bits and scattered across four townships. So he never has a chance to make his deathbed remonstrances on his family. Twain closes the tale with these words: "Every boy who ever did as he did prospered except him. His case is truly remarkable. It will probably never be accounted for" (Twain 67). This of course plays upon the unreality and fictionality of the Sunday School literature it is mocking.

If possible, "The Story of the Bad Little Boy" is even more deriding. The same concept would in fact be used by Twain years later to craft Tom Sawyer. Twain's ironic voice is much clearer as he tells the story of Jim, whose mother is neither ill nor anxious over him -- "if he were to break his neck it wouldn't be much loss" to her (Twain 55). Jim pulls all sorts of pranks, even though he knows they are bad, and he is never punished or made to pay a price; in fact, "everything about this boy was curious -- everything turned out differently with him from the way it does to the bad Jameses in the [Sunday School] books" (Twain 55). He breaks the Sabbath by boating and doesn't drown; he hits his sister and she doesn't die but gets over it. He doesn't die young, like the bad boys in the Puritan literature, nor does he reform. Instead, he marries, raises a large family, then "brain[s] them all with an axe one night," and "now he is the infernalist wickedist scoundrel in his native village, and is universally respected, and belongs to the legislature" (Twain 58, 59). The only way Twain can "explain" Jim's survival and non-conversion is to maintain that Jim led a charmed life, blessed with more luck than all of Horatio Alger's characters put together.

It is probable that Cotton Mather and James Janeway turned over in their graves when Twain's stories were published. But Twain's boys, and even the moral but not preachy characters in the domestic, success, and educational books before them, are evidence that the American reading public had moved a great distance from the Puritan forefathers' moorings. Throughout the nineteenth century, an attitude had gradually developed that children's literature as entertainment was entirely legitimate. Americans came to realize that their children would be attracted to books which depicted characters with whom they could identify. Very few children saw themselves as a Jacob (or a Jim, for that matter) from the Sunday School literature of the eighteenth century, but they could easily identify with the Peppers, or Ragged Dick, or Dottie Dimple, as children who have responsibilities but also enjoy laughter and play. The journey was a long one, taking nearly two hundred years, and in fact books that preach to children can still be found in the twentieth century; but they are not very successful. Children, like adults, typically respond more positively to a person embodying truth and reality than to a sermon, and those who write for children have finally caught on to that idea.

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Plato and the Place of Women

by John Jaeger

Some scholars have considered Plato a strong proponent of feminist ideas, while others have noted in his philosophy narrow views generally critical of women. Susan Okin has asserted that the philosopher's "proposals for the education and role of the female guardians in the *Republic* are more revolutionary than those of any other major political philosopher, not excluding John Stuart Mill."[1] Other feminist scholars, likewise, have seen in Plato a strong advocate and compatriot. Yet such interpreters as Allan Bloom have suggested that Plato was a "questionable ally" for feminists, for he did not hold to the "factual equality of women."[2] The reason for such different interpretations stems in part from the variety of ideas expressed in Plato's dialogues. For example, the ideas about women shown in the *Republic* seem inconsistent with those of the *Timaeus*. The former asserted that many women had the necessary qualities to serve as guardians of the ideal city;[3] the latter stated that women held a vastly lower position than men in the order of creation (men who lacked courage or righteousness in previous lives became reincarnated as women).[4]

This article attempts to interpret the variety of Plato's statements about women and provide a balanced evaluation of them. Through a consideration of Plato's texts, considered in their historical context, I hope to determine the philosopher's stance on women. I argue that Plato expressed both ideas about women that were open and progressive, and ideas about them that were narrow and limited. He thus carried within his philosophy both proto-feminist and misogynist tendencies. Plato had a more positive view of women and a more progressive understanding of their potential societal role than most people of his time; he remained, however, a figure of his period, with many patriarchal tendencies. In presenting this position, I first will give attention to Plato's writings that affirm females. Following this, attention will be given to places in Plato's work that are less positive about women. Finally, I will seek to sort out the materials and give a coherent picture of the philosopher's views.

Plato's Writings Affirming Women

This section examines passages where Plato seems strongly to affirm females. Attention will be given to the *Republic*, the *Symposium*, the *Laws*, the *Phaedrus*, and the *Theaetetus*. I will focus primary attention on the first two, but will seek additional support from the others. My method of interpreting these texts is without irony; I take the statements Plato has made in these writings as serious philosophical assertions.

The Republic

In the *Republic,* Plato displays his plan for the establishment of an ideal society. Such a society would be run by philosopher-kings who participated in the good and strove to establish societal life according to virtue and truth. The ruling class was designated as guardians, and these

(as was true of all citizens) were chosen for this task because of their particular nature and abilities. The *Republic* deserves significant attention in this paper because Plato suggested that certain women could serve as guardians, as "philosopher-queens." This surprising suggestion is a major reason the philosopher is considered by some a proto-feminist. Plato's argument, occurring in book V of the *Republic*, has three levels to it: "The first wave concerns the admission of women as Guardians; the second concerns the communal life of the Guardians; the third concerns the practicability of the ideal state, and this leads into the discussion which occupies the rest of books V-VII."[5] This three-fold structure will be followed in analyzing Plato's argument.

The philosopher began by considering whether women could potentially be guardians. He acknowledged that men and women were different, but questioned whether this *de facto* excluded all women from leadership roles. Plato considered dogs as an analogy. "Are dogs divided into hes and shes, or do they both share equally in hunting and in keeping watch and in the other duties of dogs?"[6] He acknowledged that with dogs the males were stronger than the females, but this did not hinder the latter from functioning in similar ways to the former. Thus Plato asked whether women were "capable of sharing either wholly or partially in the actions of men, or not at all?"[7]

Before committing himself to an affirmative answer, he considered the possible objection that since women were of different natures than men, they then should have different roles to perform.[8] In response, Plato asserted that the differences between men and women, in some cases, were like those between men with hair and those who were bald, or between physicians and carpenters.[9] He then went on to assert that "there is nothing peculiar in the constitution of women that would affect them in the administration of the State."[10] The female constitution (and nature) differed from that of males, but not so significantly to preclude the possibility of the former serving alongside the latter. While men as a general rule surpassed women in every way, that did not mean certain women lacked capacities for guardianship. Some women had the potential to be guardians of the ideal State, and these abilities needed to be put to good use.

These women should receive the same education and training as men, so as to be the best citizens and best servants of the State. For there could be "nothing better for the interests of the State than that the men and women of a State be as good as possible."[11] Such training included exposure to music, arts, gymnastics, and mathematics.

The second wave addressed the communal life of guardians. The guardians were to "live in common houses and meet at common meals."[12] They would have no possessions of their own and would exist only to serve the State. Males and females would be bred for the purpose of eugenics; the best matches would be made for enhancing the membership of the society. As this was done with the breeding of "dogs and birds," so also this should be practiced among the guardians.[13] Plato reasoned that "both the community of property and the community of families. . .tend to make them more truly guardians."[14] In all things, the guardians were to be united. They were to have "common education, common children" and "to keep watch together and to hunt together like dogs. . . ."[15] It is striking how unified Plato envisioned the relationship between men and women in such an arrangement. Members of both genders would train together, work together, and live together. Their unified and harmonized roles as guardians were

to assist them in functioning together as aspects of a common organism, or as members of a cohesive body.

In the third wave, Plato sought to offer practical suggestions as to how such a society could be constructed. In this section, he made the connection between philosophy and governing, stating that the rulers must be philosophers.[16] The guardian was "both warrior and philosopher."[17] Those with philosophical insight participated in the reality of the Good, and thus were qualified to rule in a good society.

The striking aspect to this section was Plato's description of the requisites necessary for one to become a philosopher.[18] Since he asserted that women could become guardians, he thereby was affirming that such women had these capacities. Among these necessary characteristics were truthfulness, generosity, kindness, humility, courage, graciousness of mind, and harmoniousness of constitution. In addition, the philosopher needed to have a good memory, "be quick to learn," and be "the friend of truth, justice, courage, temperance. . . ."[19] Plato considered some women to have all these qualities.

The Symposium

The *Symposium* also provided some strong affirmations of women. This dialogue involved a gathering of men who offered a series of speeches exalting love (*eros*). The work showed the importance of the feminine in the understanding of *eros* and of the good through a consideration of the theme of love. Before any speeches were given, at the suggestion of the dry, rational Eryximachus, the flute girls were dismissed.[20] Several men, most of whom were in lover-beloved relationships, were then to speak the praises of eros. Men in homosexual groupings had dismissed the heterosexual (the female) by leaving the flute girls out.

The first speech, by Phaedrus, emphasized the love of a lover for his beloved, yet used a male-female relationship to describe it. He told how Alcestis "was willing to lay down her life on behalf of her husband, when no one else would. . . ."[21] Likewise, the second speaker, Pausanias, affirmed the connection between love and Aphrodite, the goddess of love. He stated that "we all know that Love is inseparable from Aphrodite. . . "[22] Pausanias then described two different kinds of love, with heterosexual love being the baser one. Still, the two kinds of love were intimately connected to the feminine, in that they were both tied to the goddess. The value of the feminine continued to be affirmed throughout the dialogue.

The third speech, by Eryximachus, had no specific mention of the feminine in love. Yet the physician broadened the definition of love in such a way that it indirectly touched on the feminine. Eryximachus stated that love was "not merely an affection of the soul of man towards the fair, or towards anything" but was a "great and wonderful and universal" deity.[23] As Saxonhouse noted, the physician "unwittingly introduced a theme concerning the male and the female. He emphasized love's role within the context of the whole of nature."[24] And the whole nature includes both male and female.

The fourth speech, offered by Aristophanes, used a comic myth to describe the interconnected male-female aspects of love. According to the myth, there originally were three sexes (male, female, and the union of male-female).[25] Love now was the desire to reunite the "original nature, making one of two, and healing the state of man."[26] While Aristophanes placed

greater emphasis on the male-male relationship, he incorporated the male-female and female-female as well.

Agathon, offering the fifth speech, then used feminine language in describing the nature of love. He considered love as "young," "tender," "sweetness," fair and gentle.[27] As Agathon had a feminine quality in his status as a beloved, so he incorporated the feminine into his speech about eros. When Socrates critiqued Agathon's speech, he used the image of a "Gorgon head" that could turn one to stone.[28] This image evoked reminded one of the female Medusa, whose appearance turned men to stone.

When Socrates offered his own speech, the focus on the feminine moved from covert to overt. Page DuBois provided a helpful analysis of the role Socrates played by means of communicating the message of Diotima: "In this conversation within conversation, in a highly elaborate rhetorical frame of reportage, Socrates speaks the words of a woman, takes her place, acts her part in this dialogue that replaces the embodiment of the voice of the woman in the theater. . . ."[29] Socrates not only embodied the feminine by narrating the role of Diotima. In addition, he modeled the role of the beloved of a female lover. Diotima served as the "teacher," described as "most wise."[30] And Diotima's speech spoke of such female themes as being "pregnant in soul" and "giving birth" to beauty.[31] This speech incorporated the very feminine qualities that the speakers tried to shut out by removing the servant girls and by speaking of love from their lover-beloved relationships.

When Alcibiades entered, he was accompanied not only with noise from outside the door, but also, as Saxonhouse noted, "by the music of the flute girl. It is the drunken Alcibiades who must reintroduce women and music in order for us to understand the character of Socrates. . ."[32] Alcibiades was the one participant who understood Socrates, even though he ultimately would reject his teaching. The dialogue had come full circle when the flute girl brought Alcibiades into the room; the feminine had been reintroduced into the dialogic structure.

Other Dialogues

Along with the *Republic* and the *Symposium*, some of the other dialogues revealed Plato's appreciation for women. In the *Laws*, the Athenian was made to say that "the pleasure is to be deemed natural which arises out of the intercourse between men and women; but that the intercourse of men with men, or of women with women, is contrary to nature. . ."[33] This passage, if taken at face value, appears to affirm heterosexuality. The passage is more difficult if one ascribes to the view that Plato was homosexual.[34] Then, one would tend to believe that the philosopher did not intend the pro-heterosexuality statements to be taken seriously. Also in the Laws, the Athenian was made to say that both men and women should "go through the same exercises. . . gymnastics and horsemanship are as suitable to women as to men."[35] While the Laws did not match the Republic in many ways, as will be noted in the next section, at this point they agreed; men and women should go through the same educational process.

The *Phaedrus* contained positive ideas about women as well. This work, according to DuBois, "plays on the Greek definitions of male and female, using the vocabulary of sexual difference in Greek culture to establish a new portrait of the philosopher" that combines both sexes.[36] This scholar rightly drew attention to such elements in the dialogue as Socrates' being

inspired by the muses and the nymphs, and his recognition of the poetic power of Sappho.[37] One might also note how Socrates mentioned both the "the prophetess of Delphi and the priestesses at Dodona" in relation to the subject of love.[38]

Plato also made use of feminine imagery in the dialogue the *Theaetetus*. Here Socrates, as a teacher of philosophy, was repeatedly described as a "midwife."[39] This image focused on the same pregnancy/giving birth themes used in the Symposium. As a midwife assisted in the birthing process, Socrates assisted in the birth of philosophical ideas in his students. Socrates encouraged young people to attain toward the Good, and this effort may best be described in terms of a woman's occupation. The Theaetetus also, like the Phaedrus, had a significant reference to the role of the Muses.[40] Here again, Plato seemed to affirm women and the place of the feminine in his philosophy.

Some summary comments about these dialogues might be helpful. In the *Republic* and the *Laws*, Plato affirmed the positive qualities women had and the expanded societal roles women could hold. In the former, he suggested not only that women were capable of receiving the same education men received, but that some of them could serve alongside men as guardians. In the latter, Plato reaffirmed the importance of women receiving equal education with men. Implicit in these works was the idea that women, by nature, had significant, untapped capabilities useful for the effective functioning of society.

In the *Symposium*, the *Phaedrus*, and the *Theaetetus*, the philosopher offered subtle affirmations of women. He used feminine imagery and feminine characters to present women in a positive light. The *Symposium* depicted Diotima as a woman of wisdom who could serve as the figure of the lover in a lover/beloved relationship with Socrates. This dialogue also used feminine images, such as pregnancy, to describe *eros*. The *Phaedrus* contained significant references to the feminine in the figures of the muses, nymphs, prophetesses and priestesses. In the *Theaetetus*, Socrates repeatedly made use of the image of the midwife to describe his role in instructing people in philosophy.

Plato's Writings Detracting From Women

With all that has been presented above, one might wonder if Plato in fact was a proto-feminist. He certainly made strong, controversial statements about women and seemed to try to include the feminine in his philosophical thought in a significant way. According to Cantarella, Plato's reputation along these lines goes back even to Roman times. Some women would "dangle their copies of Plato's *Republic* provocatively under the noses of their menfolk."[41] Yet along with the many passages cited earlier, there are other ones that play down or detract from the affirmations of women. Attention will be given to such statements in the *Republic*, the *Laws*, the *Timaeus*, the *Apology*, and the *Phaedo*.

With regard to the *Republic*, several important elements must be kept in mind. First, Plato did not argue for the general equality of women, but only for the potential for *some* women to match the level of men. He held to "the general inferiority of the female sex," believing that in all areas "a woman is inferior to a man."[42] He claimed certain women possessed the capacity to be guardians, but the majority of women fell far below men in abilities.

Second, Plato's positive statements about women in the *Republic* seem focused on the guardians only. He did not appear to call for the other classes to give up the traditional marital relationships—relationships dominated by the man. Additionally, his affirmations of the guardians did not grow out of a concern for human rights or equality. He merely wished to establish the best possible society, and this involved making good use of the most gifted of the women.

Third, Plato seems to have held to the traditional Greek idea of women being possessions. Note that in the very sections of the *Republic* (Book V) where he acknowledged women as possible guardians, he talked about "the possession and use of women and children."[43] Women seemed to have been understood as owned objects in a way parallel to children.

Fourth, the philosopher made several derogatory statements about women in the *Republic*. He stated that people who robbed corpses acted in "meanness and womanishness."[44] He also wrote that one should not "imitate a woman, whether young or old, quarrelling with her husband, or striving and vaunting against the gods in conceit of her happiness. . ."[45]

Plato made a few very negative statements about women in the *Laws* as well. The Athenian was made to say that one "is mistaken in leaving the women unregulated by law" for they were "prone to secrecy and stealth on account of their weakness. . . ."[46] The passage went on to state that "woman's nature is inferior to that of man in capacity for virtue," and "women are accustomed to creep into dark places. . ."[47]

In the *Timaeus*, Plato has some statements so strong against women that Natalie Bluestone has called these an expression of "contempt for women. . . ."[48] The *Timaeus* held that cowardly or immoral men would in their next lives be transformed into women.[49] In a different location in the dialogue, he reiterated this point, adding only that if the person continued to live badly in successive lives, he would "continually be changed into some brute who resembled him in the evil nature which he had acquired. . . ."[50] Becoming a woman was the first step on this downward spiral.

The *Apology* has an interesting passage where Socrates defended himself in court. He pointed out that many others in such a situation might beg for mercy and burst into tears. Plato had Socrates say that such persons were "a dishonour to the State" and were "no better than women."[51] Does this mean Socrates implied that women were a dishonor to the State?

Finally, mention should be made of the *Phaedo*, where Socrates was presented as having drunk the hemlock and awaiting his impending death. At the very beginning of this work, Socrates' wife, Xanthippe, came to him and wept. He asked that she be brought home. For the remainder of the dialogue (sixty pages in this edition), Socrates continued to talk philosophically to his male friends. He removed the female element, his very wife, from the philosophical context.

Evaluating the Plato Texts

Having completed the examination of the passages that affirm women and those that denigrate them, it is time to attempt an evaluation. Plato's statements do not easily mesh together, as Susan Okin has aptly noted: "One might well ask how the same, generally consistent philosopher can assert, on the one hand, that the female sex was created from the

souls of the most wicked and irrational men and can argue, on the other hand, that if young girls and boys were trained identically, their abilities as adults would be practically the same."[52] Various answers have been offered to explain these seeming inconsistencies.

Bloom, following the lead of Leo Strauss, explained the discrepancies in Plato's comments about women as artificial. Plato never intended for the *Republic* to be read as a serious proposal either for the State or for women. As Bluestone expressed it, Strauss and Bloom looked to texts affirming women and saw "the passages as amusing, Plato's attempt to write comedy."[53] Bloom believed Plato was in competition with the comic poet Aristophanes; the absurd claims about women (and other matters) were intended to be ironic and humorous.

One problem with this view is that it relies largely on supposed similarities between the writings of Plato and Aristophanes. The former supposedly parodied the latter and sought to surpass him as a comic writer in the *Republic*. Yet even if striking similarities were found between these writers, one would have to engage in significant speculation to determine from this that Plato wrote for humorous effect; Plato could have simply used some of the ideas of Aristophanes in developing his dialogues. Another problem with this view is that Plato asserted positive things concerning women in other works than the *Republic*. And some of these, such as the *Theaetetus*, do not appear at all ironic in format.

Okin noted that some scholars explain the varied assertions Plato made about women as due to "lapses."[54] According to this interpretation, the philosopher reached a more enlightened perspective on women than was common in his day, but he could sometimes lapse back into the old patterns of thinking. In such periods, he made the derogatory statements about females. As Okin noted, though, "Plato was not the kind of thinker we can readily believe forgot his beliefs . . ."[55] As a philosophical thinker with strong literary skills, Plato chose his words carefully. Lapses such as these scholars describe were unlikely to occur.

Christine Allen sought to find consistency in Plato's varied statements about women by pointing to the body/soul distinction.[56] According to her, Plato could describe women as inferior in terms of their bodily existence, but as equals in terms of their ensouled existence. Thus the philosopher could envision women as serving as guardians, because they had potential to rise above their limited corporeal existence. And women, as they attained to a knowledge of the good, would be emphasizing their souls (where they were equal to men) rather than their bodies (where they were inferior to men). While Allen's suggestions do offer a way to unify and make consistent Plato's disparate statements, they also place too great a stress on the body/soul distinction.

An alternate approach would be to see Plato shifting in his thinking. The *Republic* was written prior to the *Laws*, so one might see a change taking place in the philosopher's view of women. Perhaps Plato considered the ideal society and the next roles for women, but later became jaded and rejected this. He perhaps moved to a more traditional Greek perspective on women and on society as a whole. Yet the statements that affirm the feminine were found in works, such as the *Phaedrus*, that dated well after the *Republic*. The "shift in thought" theory cannot account for this discrepancy. This theory also seems too neat and tidy; it easily answers the problems, but it makes Plato more pliable in his thinking than is justifiable. The philosopher certainly did mature in his thought over the years, but the later alterations usually modified, rather than replaced, beliefs earlier held.

Okin explained this difficulty by focusing on the place of private property in the *Laws*, and the absence of it in the *Republic*. According to her, the restoration of private property as stated in the *Laws* led to women being "once again perceived as the privately owned appendage of a man. . . ."[57] As a result of this, Plato interpreted women's role and nature in the traditional terms of Greek home life.

Okin's position is attractive, because it allows the passages about women to be taken seriously and to be viewed as generally enduring. Rather than trying to explain away the discrepancies in Plato's statements about women, it seems better to see them as varying according to different situations. The *Laws* then addressed a practical situation accepting private property and traditional morality, and Plato's comments reflect this.

Yet Okin may still try to unify the philosophers statements too much. Plato combined in his thinking about women two different elements. First, he held to a philosophical perspective that provided a much more positive assessment of the feminine and of female potential than was present in the fifth or fourth century, BC. In this sense, Plato was a radical who followed his profound ideas wherever they led him. The feminists are right to see Plato as something of a trailblazer, viewing women in ways others around him generally did not. Second, Plato was a man of his time, sharing some of the negative biases and prejudices about women common to his day and time. The most striking and persuasive fact that leads to this conclusion is the proximity of contrasting statements. Among the very sentences in Book V of the *Republic* that embrace women as guardians are found these negative, stereotypical comments about women.

Another factor involved here is the variety of dialogues in which the philosopher addressed the subject of women. If he had only written about them in one or two places, it might be plausible to consider certain statements as lapses or as ironical in tone. Yet Plato dealt with women in several dialogues. This suggests that the subject of women was of importance to him. It also suggests that he wrote thoughtfully and carefully about them. The subject of the feminine was not merely a tangential concern to him, but a relatively major one.

Also, these dialogues differed from one another significantly. The *Republic* and the *Laws* dealt primarily with politics, while the *Symposium* and the *Phaedrus* focused on eros and rhetoric. The *Apology* described Socrates' philosophical defense at his trial on the charges of corrupting the youth and denying the gods. Yet among such diversity of subject matters, there was a kind of consistency in Plato's discussion of women. He tended to write consistently along two different lines; either he offered positive, progressive ideas about the potential of women, or he offered negative, sexist-sounding thoughts about the limitations of women. This repeated diversity of statements thus suggests that both elements need to be maintained. Plato's affirmations of women should be considered authentic and impressive; also, his denigration of women should be taken seriously as well.

Plato was among the most important and forward-looking philosophers of his time, or of any time. He saw philosophical problems with a depth and breadth that few others ever have. In addressing the issue of women, Plato showed profound insight by considering women in light of their potential contributions to society and by seeing the value of the feminine in philosophical reflection. Yet he also made statements about women and expressed ideas about them that can charitably be called male chauvinistic—probably better be called misogynistic. In

this sense, Plato remained a historically conditioned Athenian male, holding to some of the narrow ideas about women common to his particular culture.

Notes

[1]Susan Moller Okin, "Philosopher Queens and Private Wives: Plato on Women and the Family," *Philosophy of Public Affairs* 6 (1977), 345.

[2]Allan Bloom, *The Republic of Plato*, 2nd Ed. (New York: Basic Books, 1968) ix.

[3]Plato, "The Republic," In. 455.

[4]Plato, "The Timaeus," In. 91.

[5]Julia Annas, "Plato's Republic and Feminism," *Philosophy* 51 (1976), 307-08.

[6]Plato, *The Dialogues of Plato*, Vol. 1, Trans. B. Jowett, Intro. Raphael Demos (New York: Random House, 1892), In. 451.

[7]Ibid., In. 453.

[8]Ibid., In. 453.

[9]Ibid., In. 454.

[10]Ibid., In. 455.

[11]Ibid., In. 457.

[12]Ibid., In. 458.

[13]Ibid., In. 459.

[14]Ibid., In. 464.

[15]Ibid., In. 466.

[16]Ibid., In. 474.

[17]Ibid., In. 525.

[18]Ibid., Ins. 486-87.

[19]Ibid., In. 487.

[20]Plato, "The Symposium," In. 176.

[21]Ibid., In. 179.

[22]Ibid., In. 180.

[23]Ibid., In 186.

[24]Saxonhouse, 15.

[25]Plato, "The Symposium," In. 189.

[26]Ibid., In. 192.

[27]Ibid., In. 196-97.

[28]Ibid., In. 198.

[29]Page DuBois, *Sowing the Body: Psychoanalysis and Ancient Representations of Women* (Chicago: University of Chicago Press, 1988.)

[30]Plato, "The Symposium," Ins. 207-08.

[31]Ibid., Ins. 208-09.

[32]Saxonhouse, p. 12

[33]Plato, "The Laws," In. 636.

[34]Eva Cantarella stated that "Plato is said to have been exclusively homosexual." See Eva Cantrella, *Bisexuality in the Ancient World*, Trans. by Cormac O. Culleanain (New Haven and London: Yale University Press, 1992), 54.

[35]Plato, "The Laws," In. 804.

[36]DuBois, p. 182.

[37]Plato, "Phaedrus," Ins. 241-43.

[38]Ibid., In. 244.

[39]Plato, "Theaetetus," Ins. 149ff, 260.

[40]Ibid., In. 191.

[41]Cantarella, p. 58.

[42]Plato, "The Republic," In. 455.

[43]Ibid., In. 451.

[44]Ibid., In. 469.

[45]Ibid., In. 395.

[46]Plato, "The Laws," In. 781.

[47]Ibid.

[48]Natalie Harris Bluestone, *Women and the Ideal Society: Plato's Republic and Modern Myths of Gender* (Amherst: The University of Massachusetts Press, 1987), 13.

[49]Plato, "The Timaeus," In. 91.

[50]Ibid., In. 41.

[51]Plato, "The Apology," Ins. 34-35.

[52]Susan Moller Okin, "Philosopher Queens and Private Wives: Plato on Women and the Family," *Philosophy of Public Affairs* 6 (1977), 345.

[53]Bluestone, "Why Women Can't Rule," 47.

[54]Okin, "Women in Western Political Thought," 27.

[55]Ibid.

[56]Allen, "Plato on Women," 132.

[57]Ibid., 369.

Langland's Mary Magdalene: Proverbial Misogyny and the Problem of Authority

by Gavin Richardson

Author's Note:

Piers Plowman is a religious allegorical dream vision extant in at least three redactions, the so-called A, B, and C texts, composed by William Langland between ca. 1365 and 1386, the year of his death. Part of the fourteenth-century alliterative revival, the poem was extremely popular, yielding about sixty extant texts. (Extant texts of Chaucer's Canterbury Tales, by way of comparison, number in the eighties.) Of Langland himself we know very little, save what he tells us in autobiographical passages which associate him with the Malvern Hills setting of the poem. Probably a minor cleric, Langland uses his considerable eclectic learning to criticize the abuses and moral failures of the ecclesiastical, political, and mercantile institutions of the late fourteenth century. Though the B-text is divided into twenty passus, or "steps," the poem largely falls into two broad divisions: Passus 1-8 recount the vision of Piers Plowman, an idealized figure sometimes conflated, as the name would indicate, with St. Peter. This visio is largely devoted to venality satire and the correction of a lazy English nation. The second visio is of Do-Well, Do-Better, and Do-Best--essentially a quest by the narrator Will for the keys to righteous living. Will encounters several allegorical characters who attempt to guide him to Do-Well, Do-Better, and Do-Best, usually with disappointing results. One such figure is Conscience, who explains to Will the various visions he experiences in his quest. When Will dreams of Christ appearing in the guise of a bloody knight in Passus 19, Conscience relates a narrative of Christ's Crucifixion and Resurrection which employs the familiar patterns of proverbial misogyny discussed below.

In *Le Livre de la Cité des Dames* (ca. 1405) , Christine de Pizan refers to a clerical tradition vilifying women's speech and denigrating the Magdalene's role as proclaimer of the Resurrection. Christine discourses with Reason as follows:

> "My lady, men have burdened me with a heavy charge taken from a Latin proverb, which runs, 'God made women to speak, weep, and sew,' which they use to attack women."
>
> "Indeed, sweet friend," [Reason] replied, "this proverb is so true that it cannot be held against whoever believes or says it . . . . God endowed women with the faculty of speech--may He be praised for it--for had He not done so, they would be speechless. But in refutation of what this proverb says, (which someone, I don't know whom, invented deliberately to attack them), if women's language had been so blameworthy and of such small authority, as some men argue, our Lord Jesus Christ would never have deigned to wish that so worthy a mystery as His most gracious resurrection be first announced by a woman, just as He commanded the blessed Magdalene, to whom He first appeared on Easter, to report and announce it to His apostles and to Peter. Blessed God, may you be praised, who, among the other infinite boons and favors which You have bestowed upon the feminine sex, desired that woman carry such lofty and worthy news."
>
> "All those who are jealous of me would do best to be silent if they had any real insight, my lady," I said, "but I smile at the folly which some men have expressed and I even remember that *I heard some foolish preachers teach that God first appeared to a woman because He knew well that she did not know how to keep quiet so that this way the news of His resurrection would be spread more rapidly.*"

> She answered, "My daughter, you have spoken well when you call them fools who said this. It is not enough for them to attack women. They impute even to Jesus Christ such blasphemy, as if to say that He wished to reveal this great perfection and dignity through a vice. I do not know how a man could dare to say this, even in jest, as God should not be brought in on such joking matters." (27-29; my emphasis)[1]

Though written some two decades after Langland's final revisions, this passage serves as a useful point of comparison with Conscience's portayal of the Magadelene. In his description of Christ's appearance to Mary Magdalene, Conscience asserts that her proclamation proves that "þat womman witeþ may noȝt wel be counseille" ("what a woman knows may not well remain secret") (19.162).[2] Strangely, Conscience's subscription to proverbial misogyny has gone almost without scholarly comment. Skeat's copiously annotated 1886 edition makes no mention of this issue, nor does A. V. C. Schmidt in his comparatively recent edition of the B text. In the only article to focus solely on this personification, Mary Carruthers characterizes Conscience as a bit *too* agreeable; in the final two passus he is a "gentleman knight and tenderhearted companion" whose courtesy leads him to undermine the safety of Unity/Holy Church (29). Only Derek Pearsall seems to be perplexed enough by Conscience's antifeminist aside to comment: "A conventionally sly remark, very inappropriate in the context" (328).

This study examines *Piers Plowman* B.19.157-69, the narrative history of Conscience's antifeminist proverb, and the social and historical contexts which occasion its use. I argue that the "counseille" proverb is part of a subtle but deliberate strategy to divest Mary Magdalene's Christophany of whatever divine and ecclesiastical authority it might command. Conscience is like Christine de Pizan's "foolish preachers" who, either through ill humor or more pernicious goals, turn what should be an authority-conferring distinction into an opportunity for a misogynistic joke. Conscience's interest in centralizing ecclesiastical power by means of traditional misogyny may reflect clerical anxiety over women's increasingly public religiosity in the late Middle Ages--a time marked by schism, heresy, and rumors of women assuming priestly duties. For the churchmen whom Sarah Beckwith calls the "Keepers of the Word" (185), Mary Magdalene was a dangerous example whose speech, if it could not be silenced, could at least be derided.

II

Conscience recounts the Magdalene's Christophany as follows:

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[1] Blamires (page 109, note 47) suggests that Christine de Pizan probably became familiar with this charge from reading the *Lamentations of Matheolus,* lines 2309-2322.

[2] All quotations from the B text are taken from the Kane-Donaldson Athlone edition, with translation from Donaldson's alliterative verse translation. This proverb has been cited recently by Susan E. Deskis as an example of medieval proverbial misogyny in contrast to the unusually positive portrayal of shared marital counsel in Old English gnomic verse (143). She suggests two Latin analogues from Hans Walther's catalogue, nos. 9126 and 32784.

"Ac Marie Maudeleyne mette hym by þe weye
Goynge toward Galilee in godhede and manhede
And lyues and lokynge and aloud cride
In ech a compaignie þer she cam, *Christus resurgens.*
Thus cam it out þat crist overcoom, recouerede and lyuede:
Sic oportet Christum pati & intrare &c;
For þat womman witeþ may noȝt wel be counseille.
Peter parceyued al þis and pursued after,
Boþe Iames and Iohan, Iesu to seke,
Thaddee and ten mo wiþ Thomas of Inde.
And as alle þise wise wyes weren togideres
In an hous al bishet and hir dore ybarred
Crist cam In, and al closed boþe dore and yates,
To Peter and to hise Apostles and seide *pax vobis*;"
(19.157-69)

Conscience's account is close enough to gospel narratives to have escaped closer scrutiny. The two major points are accurate: Mary saw the risen Christ first, and she first proclaimed the Resurrection.[3] But Conscience embellishes the facts in a prejudicial way, furnishing a suitable

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[3] In the *Legenda Aurea* (ca. 1260), Jacobus de Voragine provides five reasons why Christ appeared first to Mary Magdalene:

> The first, that she loved him much more ardently; Luke 7:47: "Many sins are forgiven her because she loved much." The second, in order to show that he had died for sinners; Matt. 9:13: "I came not to call the just but sinners." The third, because harlots go ahead of the wise in the kingdom of heaven; Matt. 21:31: "The harlots will go into the kingdom of God before you." The fourth, that as a woman had been the messenger of death, so a woman should be the one to announce life: this according to the Gloss. The fifth, that where sin abounded, grace would superabound, as we read in Rom. 5:20. (220)

Repentance ostensibly alludes to the second reason in his prayer to Christ:

The þridde day þerafter þow yedest in oure sute;
A synful Marie þe seiȝ er seynte Marie þi dame,
And al to solace synfulle þow suffredest it so were:
Non veni vocare iustos set peccatores ad penitenciam.
(5.496-98)

Repentance's respectful portrayal of the Magdalene's Christophany makes Conscience's portrayal seem discourteous by comparison. Such respect also suggests that Conscience's view of the Magdalene may not necessarily be Langland's.

context for his antifeminist proverb. When Conscience tells us that Mary Magdalene "aloud cride / In ech a compaignie þer she cam, *Christus resurgens*," he suggests that she was indiscriminate about her audience. In the Gospels, however, Mary Magdalene or the group of mourning women is commissioned to report the news of the Resurrection specifically to the disciples, and in Mark 16:7, especially to St. Peter. In Matthew 28:10 and Luke 24:9, Christ instructs the group of women with this charge, but Mark 16:10 and John 20:17-18 single out the Magdalene specifically as bearer of the news.[4] The sense conveyed by the Gospels is of a divine commission to convey specific information to a specific audience. Langland's dramatic contemporaries follow the Scriptures closely in emphasizing the specificity of the Magdalene's commission. In the York Cycle she is given her own play, *Jesus Appears to Mary Magdalene*, which ends with Christ's charge to his most devoted disciple:

> To Galile schall þou wende,
> Marie, my doghtir dere,
> Vnto my brethir hende,
> Þer þei are all in fere.
> Telle þem ilke word to ende
> Þat þou spake with me here.
> Mi blessing on þe lende,
> And all þat we leffe here. (Smith 425)

The Towneley *Resurrection* also contains a similar commission from Christ and ends with Mary Magdalene's saying she will tell the disciples of the Resurrection and thus ease their sorrow (England and Pollard 324-325). The fifteenth-century Digby *Mary Magdalen* is a bit more faithful to Matthew 28:10, as the group of women are given this instruction, but *Christ's Resurrection* in Bodleian Ms. e Museo 160 again singles out the Magdalene to convey the news to the other disciples and to Peter specifically, in accordance with the angel's commission to the women at the sepulcher found in Mark 16:7 (Baker 62, 188).

It is this purposeful and limited commission that gave Mary Magdalene her greatest significance in the eyes of the early church as writers appointed her *apostola apostolorum*, the Apostle to the Apostles.[5] Hippolytus of Rome (second century) probably originated this

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[4] See also Matt. 28:7, 8; Mark 16:7, 13; John 20:2.

[5] Here it should be noted that the medieval Magdalene is a problematic composite character. In 591 Gregory the Great complicated the issue by "cobbl[ing] together a Magdalene from three separate scriptural figures: an unnamed female sinner (Luke 7:37-50); Mary of Bethany, sister of Martha and Lazarus (John 11:1-45); and the demonically possessed Mary of Magdala (Mark 16:9)" (Jansen 60). On Mary Magdalene as *apostola apostolorum*, see Garth 98, Haskins 58-97, Rosemarie Nürnberg, "Apostolae Apostolorum: Die Frauen am Grab als erste Zeuginnen der Auferstehung in der Väterexegese," Alcuin Blamires, *The Case for Women in Medieval Culture* 108-112, and Katherine Ludwig Jansen, "Maria Magdalena: Apostolorum Apostola." Other prominent studies of the Magdalene include Marjorie M. Malvern's *Venus in Sackcloth: The Magdalen's Origins and Metamorphoses* and Victor Saxer's two-volume study,

honorific, which became widely popular in the Middle Ages. Honorius Augustodunensis writes that Mary Magdalene merited her singular Christophany ("angelum videre meruit Dominusque resurgens primo omnium ei publice apparuit"), and that Christ sent her as an apostle to his Apostles ("eamque apostolam apostolis suis misit"); Honorius sees Mary as a second Eve bearing the message of eternal life instead of subjecting humankind to mortality ("et sicut prima femina mortem viro traderet, ita nunc femina perhennem vitam viris nunciaret"; *PL* 172.981). In Joseph Szövérffy's survey of medieval Magdalene hymns, *Apostola* is one of four principal titles that she is repeatedly given (92). Vernacular authors such as Osbern Bokenham (139) and Nicholas Love (206) also observe this distinction in their praise of the Magdalene, and Joseph Harris has argued that the ballad "Maiden in the Mor Lay" draws upon similar Magdalene traditions (79). Possibly the most dramatic illustration of her apostolic role can be found in an English twelfth-century psalter probably prepared for Christina of Markyate. Here the Magdalene, with hand raised, extends her finger in a gesture of address, recounting the news of the Resurrection to eleven wide-eyed Apostles who hang on her every word. This iconography is not common, but it can be found in multiple manuscript illustrations, carvings, and stained glass beginning in the eleventh century (Haskins 220, 452).

Conscience's suggestion that the Magdalene noised her news indiscriminately abroad undermines her quasi-evangelical authority. Even his summarizing statement, "Thus cam it out þat crist overcoom, recouerede and lyuede," implies a random relaying of information. The language of the Vulgate, confirmed by patristic, hagiographic, dramatic, and lyric traditions, stresses Mary Magdalene's role as an appointed envoy to the Apostles, not the indiscriminate speaker we find in Conscience's account.

III

Conscience's portrayal of a garrulous Magdalene offers an ideal opportunity to employ the proverb "What a woman knows may not well remain secret." The garrulity of women was a proverbial commonplace, and its appearance in one of the most encyclopedic poems of the English Middle Ages may therefore be unsurprising. Examination of the contexts in which this proverb occurs elsewhere, however, reveals more specific, and more specifically ideological, agendas which condition its use and which motivate Conscience's apparently gratuitous denigration of the Magdalene.

The "counseille" proverb's first English attestation comes from the widely popular *Proverbs of Alfred*, in which we are told that King Alfred was "þe wysuste mon þat wes englelond on" (lines 23-24).[6] For the author or compiler of the *Proverbs*, part of the king's wisdom involved a facility with misogynistic traditions. At "Sifford," before a gathering of bishops and earls, knights and clerks, Alfred counsels his men: "Be never so insane nor so drunk with wine that you ever tell your wife all your plans, because she will reveal all in front of all your enemies . . . for woman is word-crazy and has a tongue too swift, and even though she

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Le Culte de Marie Madeleine en Occident, des origenes à la fin du moyen âge.

[6] I translate from the J text (Jesus College Oxford MS. 29). The "counseille" proverb is item W534 in the Whitings' proverb dictionary; compare items F426 and W485, and Tilley's item W649.

might want to, she cannot withhold anything." In the *Proverbs of Alfred* we first witness what will become a recurrent narrative context for this proverb: the secrets which a "word-wod" woman divulges will be hazardous to men.

No text more strongly emphasizes the danger of confiding in wives than Jean de Meun's portion of the *Roman de la Rose*, in which the female personification Nature "confesses" to a male Genius for creating that most reprehensible of all creatures, Man. What ensues is a broad parody of Catholic confession in which a priestly Genius uses his authority not only to counsel Nature, but also to embark on a diatribe against the seductive menace and verbal infidelity of women, employing the same sententious advice found a century earlier in the *Proverbs of Alfred*:

> No man born of woman, unless he is drunk or demented, should reveal anything to a woman that should be kept hidden, if he doesn't want to hear it from someone else . . . for if, just one single time he ever dares grouch at her or scold her or get angry, he puts his life in danger--if he deserved death for his deed--that she will have him hanged by the neck, if the judges catch him, or secretly murdered by friends. (276)

As in the *Proverbs of Alfred,* we see the details of the insanity or drunkenness that must afflict a foolish man who speaks his mind to his wife, as well as the disastrous consequence which would befall him. A few lines later, Genius dramatizes the proverb by portraying a sexually seductive wife who weasels her husband's secret out of him, saying:

> I see all these other women who are sufficiently mistresses of their houses so that their husbands confide in them enough to tell them all their secrets. They all take counsel with their wives when they lie awake together in their beds, and they confess themselves privately so that there is nothing left to them to tell. Truth to tell, they even do so more often than they do to the priest. I know it well from them themselves, for many times I have heard them; they have revealed to me everything, whatever they have heard and seen and even all that they think. In this way they purge and empty themselves. However, I am not the same sort. (278)

Jean de Meun's mention of priests in this passage transforms these loose-lipped wives into metaphorical confessors--a metaphor further explored below.

Chaucer would make liberal use of the "counseille" proverb, employing some form of it in *The Wife of Bath's Tale* (the digression on Midas and his ass's ears, line 980), *The Monk's Tale* (2015-30; 2090-94), and *The Tale of Melibee* (1060). Chaucer's Monk, for example, does not ascribe Samson's downfall to fortune , but to his error of confiding in women:

> Of Sampson now wol I namoore sayn.
> Beth war by this ensample oold and playn
> That no men telle hir conseil til hir wyves
> Of swich thyng as they wolde han secree fayn,
> If that it touche hir lymes or hir lyves.
> (*MkT* 2090-94)

The Wife of Bath is especially fond of quoting proverbs, even to the disparagement of her own gender. In her tale, when she discusses the suggestion that a woman most desires her husband's confidence, she embarks on a long digression employing, and radically altering, the familiar myth of King Midas and his ass's ears--a digression in which Midas's wife, not his barber, betrays his embarrassing secret. She further affirms the truth of the proverb in a confessional passage concerning the secrets of Jankin:

> My fifthe housbonde--God his soule blesse!--
> Which that I took for love, and no richesse,
> He som tyme was a clerk of Oxenforde,
> And hadde left scole, and went at hom to bord
> With my gossib, dwellynge in oure toun;
> She knew myn herte, and eek my privetee,
> Bet than oure parisshe preest, so moot I thee!
> To hire biwreyed I my conseil al.
> For hadde my housbonde pissed on a wal,
> Or doon a thyng that sholde han cost his lyf,
> To hire, and to another worthy wyf,
> And to my nece, which that I loved weel,
> I wolde han toold his conseil every deel.
> And so I dide ful often, God it woot,
> That made his face often reed and hoot
> For verray shame, and blamed hymself for he
> Had toold to me so greet a pryvetee.
> (*Prol. WBT* 531-42)

Thus Jankin joins husbands from the *Proverbs of Alfred*, the *Roman de la Rose*, and the Wife's own tale as men whose lives are ruined or jeopardized by their loose-lipped wives.[7]

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[7] One might also observe that the verbal promiscuity of these women frequently possesses a sexual correlative. The wife of Genius's *Roman de la Rose* diatribe partially undresses as she solicits her husband's secret, while Delilah and the Wife of Bath are both portrayed as sexually powerful and potentially dangerous. The "counseille" proverb also features prominently in Thomas Hoccleve's *Tale of Jonathas*, in which the prying woman is the prostitute Fellicula. This correlation between verbal and sexual promiscuity might have prompted Langland's audience to recall the Magdalene's traditional status as a reformed prostitute, thereby associating her with the Venerien Wife of Bath, the prostitute Fellicula, the temptress Delilah, and the seductive wife of Genius's diatribe in a sorority of sexually and verbally dangerous women. Langland alludes to the Magdalene's sexuality in passus 5, lines 496-498 and passus 10, line 428, presenting the Magdalene as one of salvation history's greatest sinners whose redemption illustrates God's abundant grace. No one, according to the Dreamer, could have led a worse life in the world than her. Conscience, however, does not make the Magdalene's presumed sexual past an issue in passus 19.

This selective but representative narrative history of the proverb reveals that loose-lipped and prying women jeopardize men's crucial secrets, and sometimes their very lives. And in two instances the usually domestic "counseille" proverb carries with it implicit ecclesiastical associations. Genius's diatribe in the *Roman de la Rose*, with its portrayal of women as irresponsible secular confessors, reinforces the exclusively male role of confessor by pointing out a woman's inability to hold an office so dependent upon the ability to "keep counseille." Chaucer was to repeat these ecclesiastical associations in the Wife of Bath's *Prologue*, in which Alisoun asserts that her gossip "knew myn herte, and eek my privetee, / Bet than oure parisshe preest . . . ." If this is how women keep counsel, so the argument would run, they surely would make disastrous priests. In the *Roman de la Rose* and the Wife of Bath's *Prologue*, the proverbial garrulity of women is expanded from a domestic sphere to reflect a religious one.

However, the author who provides the clearest connection between the "counseille" proverb and anxieties over women's religious authority is Langland himself. In passus 5, Wrath, a former friar, slanders all women while confessing to Repentance:

> I haue an Aunte to Nonne and an Abbesse boþe;
> Hir were leuere swowe or swelte þan suffre any peyne.
> I haue be cook in hir kichene and þe Couent serued
> Manye Monþes wiþ hem, and wiþ Monkes boþe.
> I was þe Prioresse potager and oþere pouere ladies,
> And maad hem Ioutes of Ianglyng þat dame Iohane was a bastard,
> And dame Clarice a kny3tes dou3ter ac a cokewold was hir sire,
> And dame Pernele a preestes fyle; Prioresse worþ she neuere
> For she hadde child in chirietyme; al oure Chapitre it wiste.
> Of wikkede wordes I, wraþe, hire wortes made
> Til "þow lixt!" and "þow lixt!" lopen out at ones
> And eiþer hitte ooþer vnder þe cheke.
> Hadde þei had knyues, by crist! hir eiþer hadde kild ooþer.
> Seint Gregory was a good pope, and hadde a good forwit:
> That no Prioresse were preest, for þat he purueiede;
> They hadde þanne ben *Infamis*, þei kan so yuele hele counseil.
>
> (5.153-68)

For Wrath, the "counseille" proverb involves no mere metaphor but stands as the principal argument against women priests. Wrath dismisses the prioresses' assumptions of authority with the same reproach that Conscience levels at the Magdalene, using the same proverb; they cannot restrain their "janglyng" mouths.

IV

Up to now my focus has been on literary traditions that may help make sense of Langland's problematical Magdalene, but it is in a social context that Conscience's proverbial denigration of the Magdalene can be better understood, and gendered controversies of the late fourteenth and early fifteenth centuries recommend such an approach. In the first half of the

thirteenth century, it appears that some prioresses were testing the limits of their religious authority despite the oft-repeated injunctions of 1 Timothy 2:11-12, encroaching upon the priestly duty of hearing nuns' confessions. Their presumption led to a sharp rebuke by Pope Gregory IX, who forbade prioresses to assume such duties.[8] It is this decretal to which Wrath alludes in passus 5, and Wrath's use of the "couseille" proverb implies an association on some level in Langland's mind between the Magdalene and these prioresses who had overstepped their bounds.

Perhaps Langland was concerned with these gendered tensions because his age was uniquely marked by an increasingly public feminine religiosity that became associated with everything subversive and dangerous. The explosion of lay piety, affective devotion, and vernacular translation of Scripture threatened to circumvent the already-besieged clerical community in England. Mystics such as Julian of Norwich were recording their spiritual experiences while Langland was writing his poem, and those who received visions from God authorizing non-traditional actions would prove most difficult to contain. Jean de Gerson, the staunch defender of orthodoxy best known for his vigorous persecution of Wyclif's continental counterpart, Jan Hus, felt compelled to remind Langland's generation that "the female sex is forbidden on apostolic authority to teach in public, that is either by word or by writing . . . . All women's teaching, particularly formal teaching by word and by writing, is to be held suspect unless it has been diligently examined, and much more fully than men's" (Colledge and Walsh 151). Here we may be reminded of a Canterbury monk's reaction to Margery Kempe: "I wold þow wer closyd in an hows of ston þat þer schuld no man speke wyth þe" (27).

If contemporary accounts can be trusted, there were not enough houses of stone in all of England to contain the women who were supposedly assuming important roles in heretical movements of Langland's day. Lollardy especially offered opportunities for women that orthodox Catholicism would never have allowed, as women assumed important but hazardous roles as readers and interpreters of Scripture. Yet the extent to which women were actually involved in Lollardy is the subject of considerable debate. Claire Cross has suggested that through being central to the family unit by which Lollardy thrived, women were spiritual leaders in the heresy. According to Cross, women were active teachers mainly through Conventicle recitation of memorized Scripture (360, 370-71). Margaret Aston continued Cross's line of inquiry, additionally addressing rumors that Lollard women were actually functioning as priests. However, Shannon McSheffrey has cautioned against exaggerating women's roles, reminding us that most of these women were illiterate and ancillary to a definite male leadership structure. McSheffrey writes, "Even most influential female Lollards confined their endeavors to informal situations rather than public teaching roles" (21).

Although the extent of women's actual involvement in Lollardy is debatable, one thing is certain: women were *perceived* to be usurping traditionally male roles in heretical movements, including preaching and expounding Scripture, and this usurpation was to be a source of great anxiety. Margery Kempe's public religiosity repeatedly earned her the accusation of "fals loller," suggesting an association among her contemporaries between the heresy and preaching

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[8] See Friedberg, Decretal Gregor. IX Lib. V. Tit. XXXVIII. cap. x (cols. 886-7).

women. It may be no coincidence that the two great persecutors of Wycliffite and Hussite belief, Thomas Arundel and Jean de Gerson, also made a point of condemning women preachers. Margaret Aston adduces considerable evidence from chronicle and sermon literature, poetry, and polemical tracts to reveal widespread concern over women's roles among the champions of orthodoxy. By the 1390s rumors were circulating throughout London that women were celebrating masses, and Hoccleve's oft-quoted verbal assault on Oldcastle shows how women were already established as vigorous heretical interpreters of Scripture in the minds of the orthodox by this time:

> Some wommen eeke, thogh hir wit be thynne,
> Wole argumentes make in holy writ!
> Lewde calates! sittith doun and spynne,
> And kakele of sumwhat elles, for your wit
> Is al to feeble to despute of it!
> To Clerkes grete apparteneth þat aart
> The knowleche of þat, god hath fro yow shit;
> Stynte and leue of for right sclendre is your paart. (13)

Hoccleve responds to the threat of Lollard women scholars in what is by now a predictable pattern: by impugning their authority through misogynistic portrayals of small minds and big mouths. The imagined "kakeling" of Hoccleve's women is a revealing correlative to Langland's depiction of "janglyng" prioresses and an indiscriminate Magdalene. The charge of garrulity seems to have been a multi-purpose putdown for any group of presumptuous women.

Aston discusses the most compelling evidence for a late fourteenth-century debate over women's religious authority in the case of Walter Brut (or Brit), arrested in 1391 on heresy charges. Brought before the Bishop of Hereford, John Trefnant, Brut contended that women did indeed have priestly powers denied them by orthodoxy, expressing such powers in explicitly Petrine terms (e.g., they have the power "to bind and to loose").[9] Prominent theologians were convened to counter Brut's claims, and his case evolved into a kind of referendum on whether women could attain religious privileges formerly reserved to men. In the debate between Brut and his opponents, the Magdalene was introduced as proof of the defensibility of women preachers: "multe mulieres constanter predicaverunt verbum quando sacerdotes et alii non audebant verbum loqui et patet de Magdalena et Martha" ("Many women steadfastly preached the Word when priests and others did not dare speak the Word, as evinced by the Magdalene and Martha" (Aston 52; my translation). Brut's case demonstrates that the symbolic power of the Magdalene's voice could be and was appropriated by proponents of expanded female religious liberties.[10]

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[9] William White was also alleged to have used these Petrine terms in the early fifteenth century; see Aston 52, 59.

[10] Here one might also be mindful of allegations made toward Waldensian women. In his *Summa adversus Catharos et Valdenses* (ca. 1241), the Dominican Moneta of Cremona asserts that "the Waldensians appealed to the example of Mary Magdalene to justify preaching

Brut's defense benefitted from hagiographical traditions that made Mary and Martha outstanding women evangelists. In the *Legenda Aurea*, St. Peter entrusts Mary Magdalene to the care of Maximin fourteen years after the Resurrection. When the disciples disperse to spread the gospel, Maximin, Mary, Martha, Lazarus, and others are cast out to sea in a rudderless ship by unbelievers. Miraculously arriving safely at Marseilles, the Magdalene immediately sets to work converting heathens through the power of her speech. The composer of the *vita* invests the Magdalene's lips with both erotic and rhetorical power:

> When blessed Mary Magdalene saw the people gathering at the shrine to offer sacrifice to the idols, she came forward, her manner calm and her face serene, and with well-chosen words called them away from the cult of idols and preached Christ fervidly to them. All who heard her were in admiration at her beauty, her eloquence, and the sweetness of her message . . . and no wonder, that the mouth which had pressed such pious and beautiful kisses on the Savior's feet should breathe forth the perfume of the word of God more profusely than others could. (376-77)

It is no wonder then, given Mary Magdalene's status as an emblem of the value--even the privilege--of women's speech, that she could be perceived as a dangerous role model by later clerics. A figure outside the male apostolic circle of Christ but who was still clearly favored by him, the Magdalene would serve as an inspiration for a growing body of late medieval women who similarly sought an affective bond with Christ independent of a male clerical "inner circle." Prominent women such as Christina of Markyate and possibly even Richard II's Queen Isabella owned Psalters depicting the Magdalene proclaiming the Resurrection to the other Apostles. Osbern Bokenham tells us that Lady Bourchier, Countess of Eu, commissioned the English translation of her *vita*, with pointed emphasis on her apostolic role:

> "I have," quod she, "of pure affeccyoun
> Ful longe tym had a synguler deuocyoun
> To þat holy wumman, wych, as I gesse,
> Is clepyd of apostyls þe apostyllesse;
> Blyssyd Mary mawdelyn y mene,
> Whom cryste from syn made pure & clene,
> As þe clerkys seyn, ful mercyfully,
> Whos lyf in englysshe I desyre sothly
> To han maad, & for my sake
> If ye lykyd þe labour for to take,
> & for reuerence of hyr, I wold you preye."
> (5065-75)

And when Margery Kempe portrays herself repeatedly answering the question, "Why wepist þu so, woman?" surely she is engaging in more than a little self-fashioning. Conscience's proverbial

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by women" (Kienzle 105). Of course, since this *Summa* was intended to point out the errors of the heresy, its allegations may be distortions of actual Waldensian practice.

denigration of the Magdalene, then, reflects contemporary tension between a male clerical orthodoxy struggling to maintain ecclesiastical control in opposition to a growing number of women who, like the Magdalene, refused to be silent, who believed in the validity of their spiritual experience, and who sought a greater public authority in matters of the soul.

V

We are finally confronted with an issue raised at the outset of this study: if Conscience is such a courteous character in passus 19, why attribute this proverbial misogyny to him? Any discussion of Conscience's role must begin with a definition of his function in faculty psychology, and Mary Carruthers offers a useful summary of scholarly readings. According to Carruthers, scholastics held that Conscience represented basic "moral sense," a blend of synderesis and conscience. Quoting Aquinas, Carruthers defines synderesis as a "habit, a natural disposition of the practical intellect, 'the first practical principles bestowed on us by nature,' by means of which the practical intellect is inclined to the good and is able 'to discover, and to judge of what [it has] discovered'" (Schroeder 15). Conscience, then, is a catch-all term for several "intellectual habits" derived from synderesis, and is a faculty devoted to making distinctions and applying knowledge. Carruthers further comments, "The role of conscience was able to include not only the function of moral judge but also that of intellectual judge distinguishing between truth and falsehood" (16). Given this definition, it appears strange that Conscience would depart from Scripture and portray an indiscriminate Magdalene by means of an antifeminist proverb in his account of the Resurrection. Perhaps Carruthers' discussion of Conscience's collective role explains the portrayal. Citing the work of Morton Bloomfield, Carruthers observes that Conscience's role as knight "may indeed reflect an aspect of the monastic conception of conscience--not only as the guide and protector of the individual soul but as a collective conscience defending the collective soul of the Church" (17-18).

I would suggest that Conscience's account of the Resurrection results from his collective role as defender of Holy Church, and his use of proverbial misogyny constitutes an attempt to unify and defend an increasingly fractured Catholic orthodoxy. This is a role he will play in greater detail as the final two passus unfold--building and defending the Barn of Unity. Immediately after employing the "counseille" proverb, Conscience tells us that "Peter parceyued al þis and pursued after, / Boþe Iames and Iohan, Iesu to seke, / Thaddee and ten mo wiþ Thomas of Inde." Conscience emphasizes Peter's intellectual understanding of Mary Magdalene's words, for these words prompt him and other Apostles to await Christ's appearance before the Eleven. The sense of 19:157-69 is that Mary Magdalene indiscriminately broadcasts the news of the Resurrection, but it is Peter who first fully understands its ramifications and, with the other Apostles, takes action. Here Langland may have been influenced by an interpretation best developed by Aquinas, who argued that the Magdalene's Christophany was flawed, that she was unfit to preach and needed the male Apostles to translate her information into action (Børresen 245-46).

Perhaps Conscience, in devaluing Mary Magdalene's authority and affirming Peter's, is making clear just who exactly has the power to bind and loose. Given the historical rivalry that

obtains between the two figures,[11] it may be no coincidence that the divestment of Mary's authority and the investment of Peter's occurs in the space of a mere thirty-four lines, culminating with the papal privilege given to St. Peter:

> And whan þis dede was doon do best he þouȝte,
> And yaf Piers pardon, and power he grauntede hym,
> Myght men to assoille of alle manere synnes,
> To alle maner men mercy and forȝifnesse
> In couenaunt þat þei come and kneweliche to paie
> To Piers pardon þe Plowman *redde quod debes.*
> Thus haþ Piers power, be his pardon paied,
> To bynde and vnbynde boþe here and ellis,
> And assoille men of alle synnes saue of dette one. (19.182-90)

Here Conscience replaces Christ's post-Resurrection commission to all of the Apostles (John

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[11] Christ's command to Mary Magdalene to bear the news of the Resurrection specifically to Peter entwines these two figures forever in the narrative of the greatest authority-conferring experience in church history, and calls attention to Peter's dependence upon Mary Magdalene for the news. The Magdalene's Christophany granted her a privilege unattained even by Peter, the foremost of the Apostles and the "rock" upon which the church is founded. The respective designations of Mary Magdalene and Peter even betray a kind of hierarchical rivalry, as *apostola apostolorum* and *princeps apostolorum* both make special claims for themselves. This rivalry was much more than a nominal one. Gnostic gospels reveal a well-documented and strongly gendered tension between Mary Magdalene and Peter in nascent Christianity. (On the Magdalene in Gnostic writings, generally see Malvern 42-56; Pagels 12-14, 22, 64-66; and Haskins 42. For other early texts that depict a gendered tension among the Apostles, see Schüssler-Fiorenza 304-9, 332-33.) Perhaps Gnostic and medieval writers were elaborating on the same tensions suggested in New Testament accounts in which Peter seems to doubt the Magdalene's words (e.g., Luke 24:12). Most importantly, Mary's unequivocal privilege of seeing Christ first was undermined by Paul's mention of Peter and omission of Mary in the Resurrection account of 1 Corinthians 15:5, thus making them competitors for the distinction and fostering a debate that would prove to be of the highest importance in establishing papal power and the roles of women in the church. In the figure of Peter, medieval dramatists would depict an Apostle angrily dismissive of the Magdalene in terms that emphasized her gender. The Towneley *Thomas Indie*, for example, begins with Mary Magdalene bringing the news to the Apostles; Peter shouts her down with an impassioned "Do way, woman, thou carpys wast!" (1ine 7). The exchange continues at length, with the Magdalene accusing Peter of heresy and Peter vigorously maintaining that the Magdalene's lying is shameful. For other medieval texts which depict Peter's skepticism of the Magdalene, see the Coventry ("Corpus Christi") *Appearance to Mary Magdalene* (Davies 343-46), and the Ms. e Museo 160 *Christ's Resurrection* (726-29; Baker 191). This rivalry would provide Langland with an inviting narrative context in which to insert a misogynistic proverb so dependent upon gendered tension and mistrust.

20:19-23) with Peter's singular commission (Matt. 16:18-19). Conscience also undermines the communal sense of John 20 by referring to the gathering as "Peter and . . . hise Apostles"--a foregrounding of Peter not found in Scripture. Peter's special commission is similar to the communal commission, but it occurs well before the Resurrection, even before Christ's transfiguration. Perhaps Conscience makes these changes in the belief that a resurrected Christ would have greater divine authority to bestow on Peter; the sequence of events is shifted accordingly.

Given Langland's skepticism regarding the ecclesiastical abuses of the post-apostolic church, perhaps Conscience's portrayal of the Magdalene is meant to demonstrate how earthly power can corrupt this essential faculty. (Conscience's unwise decision to allow the friars, particularly Frere Flaterere, entrance into the Barn of Unity will later demonstrate his debilitated powers of discernment). In Conscience we see a figure enhancing the authority of Peter (and, by extension, papal authority) at all costs, even at the expense of a beloved saint. And of course the Great Schism forms the contemporary backdrop for Langland's narrative--a backdrop of divisiveness in which church authority was fragmented among two and three popes between 1378-1417, and to which Langland alludes in 19.417-27. Conscience's efforts in the name of unity illustrate the impulses that yield such a state of affairs; his attempts to consolidate Peter's authority necessarily detract from Mary Magdalene's. For a church to have one earthly leader, there can be no division of power.

Although it is true that Langland was in many ways a social conservative who probably would have opposed women's pursuit of greater ecclesiastical authority, Conscience seems too deeply flawed for his views to be considered authorial. Langland might have supported the end of his arguments, but not the means, characterized as they are by a mocking application of proverbial misogyny. Conscience's prejudices involving Mary Magdalene cannot be attributed merely to a confusion of traditions; Langland manifests a strong familiarity with relevant Scripture and Magdalene hagiography elsewhere. There are six references to Mary Magdalene in *Piers Plowman.* In 5.497 Repentance says that Christ appeared to the Magdalene first to show that he died for sinners. In 10.428 Will refers to her sinful nature to justify a self-indulgent predestinarianism since even some of the most iniquitous are saved: "Than Marie Maudeleyne who myȝte do werse?" In the speech attributed to Trajan in 11.250-58, Langland employs the interpretation of Luke 10:40-42 that casts Mary Magdalene as a representation of the contemplative life in order to praise poverty. In 13.194 Conscience praises poverty as well, noting that Mary Magdalene gained more from her box of ointment than Zacchaeus did from half his riches. Anima also associates the Magdalene with virtuous poverty in 15.294, observing the extra-biblical tradition that she lived on roots and dew and her devotion to God in her later life. The Resurrection account of 19.157-62 marks the final appearance of Mary Magdalene in *Piers Plowman.* It seems, then, that for Langland's characters, as well as for principal actors in church history, Mary Magdalene could be whatever each figure needed her to be--saint, sinner, whore, apostle, gossip--and Conscience is no different. His interest in affirming male ecclesiastical authority leads him to apply the proverb "þat womman witeþ may noȝt wel be counseille," with all of its unflattering narrative associations, in depicting a "word-wod" Magdalene unworthy of the momentous news she bears, incapable of using it to establish Holy Church. For Langland, Conscience is the revisionist historian of a church lamentably estranged from a once unified, divine origin.

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The Status of Pollution in Tennessee

by H. W. Wofford

What places come to mind when you think about polluted sites in the United States? Perhaps you think about Love Canal in Niagara Falls, New York, where the Hooker Chemicals and Plastics Co. buried 22,000 tons of chemical waste in a half-dug canal and where a housing development was built on top of it (1). Or maybe Lake Erie comes to mind. It was so heavily contaminated by industrial wastes and sewage that it was closed for fishing and swimming, and many species of lake fish were on the verge of extinction. In 1965, almost one-fourth of the lake was so polluted that its oxygen supply was virtually depleted (2). What about Los Angeles, California? Los Angeles is located in a geological bowl which traps air pollution, and during the sixties smog sometimes got so bad that industries and motor vehicle traffic had to be shut down for several days a year. You may not be as familiar with Boston harbor. At one time it was so polluted that there were reports of rats **walking across** the harbor on the floating debris!

When people are asked to name polluted states, New Jersey is often mentioned. This is probably because of areas on the coast such as Newark, with its sprawling railroad yards and chemical refineries. Much of Newark is an eyesore, prompting a friend of mine from New Jersey to describe it as the "armpit of the universe." However, this is probably not a fair way to characterize New Jersey as a whole. When you get away from the industrial areas, the country-side in New Jersey is among the most beautiful and undisturbed in the United States. Sometimes Texas and Louisiana will be added to the list because of the expansive petrochemical industries on the Gulf Coast of these states.

But what about our state? Where would you rank Tennessee as a polluted state? I don't think most people in Tennessee would consider our state to be very polluted. After all, we have traditionally been known for our agricultural economy, rather than for our industrial output. I must confess that, until I returned to Tennessee after having spent fifteen years training as an ecotoxicologist, I did not think of Tennessee as polluted. It is interesting how differently you look at the place where you grew up after having been away for some time. You can back off and look at it a little more objectively. Coming back as a trained environmental toxicologist, I looked at Tennessee through new eyes. Over the last twelve years, I have been accumulating information about the state of pollution in Tennessee from newspaper clippings, state and federal publications, and web sites. My goal for this paper is to pass on to you a summary of what I have gleaned from all this information. What you read may surprise you.

I can't possibly write about every environmental problem in Tennessee in a paper of this length. In order to make the task a bit more manageable, I will begin with some overall statistics concerning the status of pollution in Tennessee, and then focus on our immediate environment, Madison and surrounding counties.

Tennessee's Environmental Scorecard

There are many ways in which the environmental health of an area can be assessed. These include determination of the amount of air pollution, the amount of water pollution, the amount of waste emptied into the sewer system, the rate of deforestation, the public health status, and the status of environmental education. I have summarized some of them in **Table 1**. As you can see, Tennessee consistently comes in as one of the ten worst polluted states in the nation.

It is informative to go to the Agricultural Museum in Milan, Tennessee. In this museum, there is an exhibit about soil erosion and conservation efforts made by Tennessee to prevent it. There is a picture in this exhibit of a man standing in a ditch caused by soil erosion. He cannot see out of the ditch! Great strides have been made in recent years to control soil erosion, with no-till farming being the most recent such control measure.

Air pollution is also a big problem in Tennessee. It is probably contributing to the destruction of hundreds of thousands of acres of trees in the Great Smoky Mountains Park. Air pollution, mainly sulfur and nitrogen oxides, from industry and the cars of the millions of tourists who visit this park weakens the trees, making them susceptible to infections by fungi, bacteria and insects (5). I had the opportunity to talk to a technician at the Agricultural Experimental Station here in Jackson. He has been measuring the pH of the rainwater falling on the station for several years. Though it isn't part of his job, he does it out of interest. On several occasions, the precipitation falling on Jackson was acidic enough to be classified as acid rain. Interestingly, this always happens when the wind is coming from the southwest. This shouldn't be too surprising, since Memphis, the largest center of industry in West Tennessee, is southwest of us. On one or two occasions he recorded alkaline rain. I have never seen this discussed in the environmental literature. What are we putting into the air in West Tennessee that is making our air more alkaline (basic)?

Tennessee Rivers and Lakes

Another way to assess the environmental health of a state is to examine the health of its rivers and lakes. 60,000 stream miles and 540,000 lake acres can be found within Tennessee (27). One way of determining the health of these waterways is to look at whether or not these waterways have been posted. In other words, have some intended uses of these waterways been restricted? This usually means that either body contact, recreation, or fishing has been restricted or banned. In 1996, twenty-six per cent of stream miles and twenty-two per cent of lake acres in Tennessee were classified as not fully supporting their intended use (27). These waterways have been posted for such diverse causes as presence of fecal coliforms, lead, mercury, PCBs, chlordane, and dioxins.

Two Tennessee rivers, the Forked Deer River and the Obion River (which pass through parts of Madison or Gibson Counties), are classified as completely failing to support their intended use (**Table 2**). The Mississippi River, which is notorious for its pollution, has been added to the table for purposes of comparison. As you can see from the table, our local river systems are not considered safe for the usages we commonly make of waterways and are considered less safe than the "mighty Mississippi." Having contracted either Giardia or amebic

dysentery from swimming in the Forked Deer River in the days of my youth, I heartily recommend that you heed the warnings!

Madison and Gibson Counties' Environmental Scorecards

The Environmental Defense Fund maintains a web site that allows individuals to rank almost any site in the country according to its rate of release of toxic chemicals and the health effects of these chemicals (28). In terms of release of Toxics Release Inventory (TRI) chemicals, an inventory of chemicals maintained and monitored by the EPA, Madison County ranks forty-seventh in the state in release of these chemicals, while Gibson County ranks sixteenth. This surprised me. I expected that Madison County would release more chemicals than Gibson County. However, Gibson County has four facilities in the top one hundred for most chemicals released, while Madison County has none. It is important to note that these numbers do not take into consideration non-TRI chemicals, including many agricultural chemicals. I shudder to think of what I was exposed to while "growing up on the farm."

However, these rankings should not give residents of Madison County too much peace of mind. Although Madison County fares well in comparison to other Tennessee counties, it must be compared to the nation as a whole (28). Madison County ranks in the top twenty per cent of all counties in the U.S. in terms of:

Release of non-cancer hazards
Water releases of recognized developmental toxicants
Water releases of suspected immunotoxicants
Release of chemicals with ozone-depleting potential.

Gibson County fares even worse. It ranks in the top twenty per cent of all counties in the U.S. in terms of:

Release of cancer hazards
Air releases of recognized carcinogens
Air releases of recognized developmental toxicants
Air releases of suspected cardiovascular or blood toxicants
Air releases of suspected reproductive toxicants.

Problem sites in the Madison County Area - Superfund Sites

Another criterion that can be used as a yardstick of the environmental health of a region is whether or not that region contains any Superfund sites. Residents of Jackson have the dubious distinction of living within thirty miles of four EPA Superfund sites (**Table 3**). Two of these are located within the city limits of Jackson and are within two miles of ten of Jackson's water wells. EPA Superfund sites are sites that are deemed to be so contaminated and pose such a health risk that they are assigned the highest priority for cleanup. The problem with Superfund sites is that when the funding was set up for this program, the cost of the cleanup was grossly

underestimated. As a result, many sites have been identified, but have not been cleaned up. Regarding the four sites in the vicinity of Jackson, only partial cleanup has been undertaken, and cleanup efforts are still underway.

The state of Tennessee also has a Superfund program. **Table 3** contains a listing of the Tennessee Superfund sites in Madison and Gibson Counties. As you can see, Tennessee has added an additional seven sites in our area to the Superfund list. Of these sites, only the Owens-Corning site has been declared clean. **Table 3** also includes some sites in this area that have not been declared Superfund sites, but have been in the news lately because of environmental problems.

In order to give you a better appreciation of the magnitude of these environmental problems in our area, I have given some of the history and the possible health consequences of some of these sites in the following sections.

American Creosote Works

The American Creosote Works was declared an EPA Superfund site in 1987 and is considered to be one of the worst creosote-contaminated sites in the country (21). The plant operated from the early 1930's until 1981. It was located on fifty-five acres in southwest Jackson just off of State Street, between the Forked Deer River and the 45 Bypass.

Creosote is used as a wood preservative. It is most often seen in old telephone poles and railroad ties. After the wood was treated by placing it in baths of hot creosote, it was stacked on racks outside to dry. The excess creosote dripped onto the ground and has been working its way into the water table. Creosote contains a large number of chemicals called polyaromatic hydrocarbons and related compounds, many of which are potentially carcinogenic (cancer-causing). One PAH, benzo[a]pyrene (BAP), was found in high concentrations in the soil. BAP is one of the five most carcinogenic chemicals that we have currently identified.

In 1991, the EPA started the cleanup of the site. All of the remaining creosote (approximately 200,000 gallons) was removed, and all structures were torn down to the ground. However, funding problems halted the cleanup of the soil at the site (22). The state and federal governments planned to spend $5 to $12 million to clean up this site (21). However, the total projected costs have increased to as much as $50 million. About 8.4 acres of land will be scraped two to five feet deep, removing 35,000 to 88,000 tons of soil. The work was scheduled to begin in 1996 or 1997, but I have not seen evidence of cleanup operations. At one point it was seriously suggested that the site be used as a jail! I can't imagine how many lawsuits that would have generated. Does being used for bioremediation constitute cruel and unusual punishment?!

Iselin Railroad Yard

The Environmental Protection Agency wants to put Jackson's old Iselin Railroad Yard on its Superfund list of the most serious hazardous waste sites (12). This eighty-acre site is just south of Iselin Street in Southeast Jackson, directly across from Washington-Douglass Elementary School. It is also near ten of JUD's city water wells. This site was used for the maintenance and repair of railroad engines for many years by the Mobile & Ohio and Illinois

Central railroads (13). The degreasers used to clean the engines and their parts were often allowed to run onto the ground and into a creek that fed into the Forked Deer River. Often, the water in the creek ran black.

Among the chemicals found at the Iselin site are chromium, lead, vinyl chloride, chloroethane, benzene, copper, tetrachloroethane, dichloroethane, ethylbenzene, and xylene. These chemicals carry such possible health risks as cancer, birth defects, liver toxicity, kidney toxicity and neurotoxicity. JUD is currently monitoring the city water for these chemicals and has plans in place for treating the water if necessary.

Cleanup of the Iselin site was predicted to start in 1996, but to the best of my knowledge this process has not started yet (14).

Milan Army Ammunition Plant

The Milan Army Ammunition Plant has been in operation since 1942, manufacturing ordinance for the military. From 1942 to 1978, wastewater from the O-line production area was discharged into eleven unlined settling ponds. In 1991, it was discovered that RDX and other potential carcinogens such as TNT, 2,4-dinitrotoluene, nitrobenzene, and HMX used in the manufacture of explosives, had seeped out of these ponds and had gotten into the groundwater that provides the drinking water for Milan (19). In 1992, the U.S. Army started a $9 million study to assess the degree of contamination of the water, eventually drilling four hundred test wells (16, 20). The results of this testing indicated that the city's drinking water was below the danger point of 2.0 ppb.

In light of concerns that the levels of these chemicals could increase in the future, the Army agreed to spend $9 to build a water treatment facility at the plant and to drill three new water wells for Milan farther away from the arsenal. In May 1995, the levels of the chemicals in the city water had not increased significantly (17). By 1997, the Army had spent $58 million on the cleanup operation. This involved the design and construction of cleanup systems using a combination of high-tech filtration and UV systems, and a low-tech artificial wetlands where native plants and microorganisms break down the chemicals, a process called bioremediation (18). The O-line ponds were also capped with clay to prevent further leaching of the chemicals into the water table. A recent report indicates that the cleanup of the contaminated ground water is on schedule and should be complete by 2009 (29). Unfortunately, parts of the city park will be unavailable for the next six to eight months as wells are being dug which will be used to filter the groundwater.

Lead Exposure in Jackson

Jackson is the only city in West Tennessee to be cited by the Environmental Protection Agency (EPA) for having high lead levels in the drinking water. According to EPA guidelines, lead levels in drinking water must not exceed fifteen ppb. Unsafe levels of lead were found in a small number of homes with lead materials in their plumbing and are not due to lead in the JUD water supply. Although a report in 1994 showed that about twenty-two per cent of the children

in Madison County have elevated levels of lead in their blood, it is believed that most of this lead did not come from the water, but from lead-based paint and leaded gasoline.

More recently, residents of East Jackson in the neighborhood of the former H. O. Forgy recycling plant have been tested for lead levels (15). This plant that turned scrap metals into materials for industry allowed lead to seep into the soil for thirty-seven years, from 1946 to 1983. When evaluated for its risk, this site received a score of 85.26. In order for a site to be placed on the EPA Superfund List, it must have a score of 28.5. The score for the H. O. Forgy site is one of the highest ever seen.

Velsicol Corporation Dump Site

The Velsicol Corporation is a Memphis-based company involved in the manufacture of insecticides. Several hundred thousand drums (seven million gallons) of waste created from the production of these insecticides were buried on thirty-seven acres between 1964 and 1974 in Hardeman County near Toone, which is just south of Jackson (23). Over time the drums rusted and leaked, allowing the chemicals to leach into the water table. It is estimated that over one thousand acres of groundwater are contaminated because of this leakage (24).

Removing and properly disposing of all these drums could cost in excess of $1 billion. At this point, a ground water treatment plant has been constructed, and the area has been capped with clay to prevent further leaching into the water table. This is all the cleanup that is currently planned. Velsicol has spent $12 million on capping and stabilizing the site to this point (25). However, the clay cap over the site has been found to be only ninety-eight per cent effective (26). It is now being capped with plastic, which will be "one hundred per cent effective." The workers who went into this site to stabilize it were either very brave or very foolish. This is by far the worst contaminated site that I have ever encountered, and it's only a thirty-minute drive away!

Conclusions

I have presented a large number of facts and figures about the state of pollution in Tennessee. What conclusions can we draw from all of this? The obvious conclusion is that Tennessee is a relatively contaminated state. It is very likely that health problems are and will continue to be a result of this contamination. Many of these sites are areas where chemicals are entering our water table. Adequate quality drinking water may very well be the next great environmental crisis for the whole world, including the United States. West Tennessee is blessed with one of the best aquifers in the world. However, there are many sites in which chemicals are slowly working their way into this aquifer. These chemicals will not stay localized. Hydrologists tell us that the aquifer in West Tennessee flows. As it does, it will carry chemicals to areas that are many miles away from the sites of contamination.

It should be noted that as bad as the status of pollution in Tennessee may seem, it is getting better. Almost every statistic I have mentioned in this paper has shown improvement in the last twenty years. For example, in 1996, twenty-six per cent of stream miles and twenty-two per cent of lake acres in Tennessee were classified as not fully supporting their intended use (27). In

1984, forty-six per cent of stream miles and thirty-four per cent of lake acres were not fully supporting. This constitutes a significant improvement.

How did we get this way? I suspect it has much to do with our state historically having a predominantly rural economy. Thus, some of the problems resulting from urbanization and industrialization have come to us later than for other states, and we are dealing with them much later as a result. Also, I feel there is almost a vacuum of environmental awareness and consciousness in West Tennessee. I was impressed by this when I came back to Tennessee after having spent fifteen years in other parts of the country. Many people think nothing of littering in this area, and they tend to pour out chemicals such as used oil and antifreeze on the ground. This same attitude has carried over into industry. For most of this century, industrial wastes have just been dumped into a ditch. Jackson has only very recently put a tree ordinance in place. In New England, you must get permission from all of your neighbors before you can cut one tree in your yard. Union, as a Christian university, **must** set an example of environmental stewardship for the community.

I suspect that the contamination of our area also has to do with the loss of contact between our citizens and the environment. As people moved away from the farms, seeking jobs in the cities, they lost their contact with the soil. I grew up on a farm. I spent most of my waking hours prowling around, turning over logs, watching birds fly, and catching insects and tadpoles; in the process, I developed a deep appreciation and love for the environment. The students in my classes have learned this, as I frequently get on my "soap box" about environmental issues. Children who grow up in cities don't have these opportunities. Studies have shown that inner city children have no idea where their food comes from, other than the store. These children don't have a connection to the land, and it is less likely that they will show concern about environmental issues. I have been impressed on many occasions by individuals who will get outraged about the fate of whales, which they have never seen, and not be concerned about the destruction of the environment going on behind their own house.

Ultimately, the contamination of Tennessee is about our population. As the population and economy of Tennessee has grown, so has the demand for food and goods. With this increase, there has to be an increase in the utilization of chemicals and subsequent problems of dealing with the byproducts of the manufacture of these chemicals. My dad understands this very well. He is a retired farmer. During his career as a farmer, he has released thousands of pounds of agricultural chemicals into the environment. He despises these chemicals, but he can't see any way around the use of them. Without the use of pesticides and herbicides, we wouldn't be able to feed everyone in the U.S., much less export excess food to starving people in other parts of the world.

What can we do about it? We can't avoid the use of water. There are some things that we can do at a personal level to help protect ourselves. For example, we could drink bottled water. But recent studies have shown that bottled water, despite its cost, is not necessarily any safer than our tap water. It would be a good choice if you live in an area with a known contamination problem.

Filtration of the water might be an option. However, this also has its problems. The type of filtration employed must match the contamination problem. A different approach is necessary to remove bacteria from water than to remove heavy metals or organics. Another problem is

knowing when to change out the filters. In many cases, there is no obvious way to tell when a filter is saturated other than having the water tested. After a filter becomes saturated, it may start to release its absorbed chemicals back into the water and, in some cases, the concentration of the pollutants in the water may be higher than without a filter.

You can have your water tested. This is especially advised if you have reason to believe that it is contaminated. However, unless you can convince the Health Department that there is a problem, you may have to pay for the testing yourself. Depending on the contaminant you are concerned about, this can range from fifteen dollars up to several hundred dollars per test. If you have city water, it should be tested for a wide range of chemicals on a regular basis, and you should be able to get a report from the city.

The best way to get good quality drinking water is to have uncontaminated water in the first place. This requires us to develop a sound environmental ethic about the proper handling of waste products. Here, education is probably the most important factor. Be informed. I suspect that often chemicals have been released into the environment more out of ignorance than out of greed. Get involved. Attend community meetings on environmental issues. There have been many in this area, some very recently. Write your legislators. Remember that in even the worst cases that I have described, the companies involved were not breaking any laws at the time.

After reading this article, has your opinion about the amount of pollution in Tennessee changed? If so, let me know.

Table 1 - Tennessee's Environmental Scorecard

Quantity of release		
No. 1 in the nation for soil erosion		
2nd worst air-polluting state	1990	(8)
	1995	(3)
139 million lbs of toxic chemicals into the air in 1990	1997	(6)
	1995	(10)
12th worst water-polluting state	1995	(10)
8th worst state for toxins dumped into sewers	1990	(11)
21 million lbs of toxic wastes		
10th worst state for toxins dumped into sewers	1994	(4)
15.7 million lbs of toxic wastes		
6th worst toxin-emitting facility in the country	1990	
New Johnsonville power plant		
3rd worst state in the nation overall	1992	
	1995	(9)
5th worst state in the nation overall	1997	(6)
Health Implications of the release		
2nd worst in the nation for protecting the environment	1989	(7)
Criteria: Drinking water, Food safety, solid-waste recycling, forest management, and impact of growth		
9th worst in the nation in release of chemicals which cause birth defects	1995	(10)
11th worst in the nation in release of chemicals which cause cancer	1995	(10)
Three cities in top 25 % with premature heart- and lung-related deaths linked to particulate air pollution: Nashville, Memphis, Chattanooga	1996	(5)

Table 2 - The Health of Local Rivers in Tennessee (27)

		Tennessee Department of Environment and Conservation Classification		
River	**Miles in Tennessee**	**Fully Supporting**	**Partially Supporting**	**Not Supporting**
Forked Deer	20.7	0 %	0 %	100 %
Obion	71.1	0 %	0 %	100 %
Mississippi	175.3	0 %	14 %	86%

Supporting - Can be used for body contact, recreation and fishing

Table 3 - Problem Sites in the Madison / Gibson County Areas

Site	County	City
EPA Superfund Sites		
American Creosote Works	Madison	Jackson
Iselin Railroad Yard (Proposed)	Madison	Jackson
Milan Army Ammunition Plant	Gibson	Milan
Velsicol Corp. Dump Site	Hardeman	Toone
Tennessee Superfund Sites		
H. O. Forgy and Son	Madison	Jackson
Boone Dry Cleaners	Madison	Jackson
Porter-Cable Corporation	Madison	
Noma-ITT	Madison	Jackson
Owens-Corning (Now declared clean)	Madison	
B & H Transformer	Gibson	
Michie Dump	McNairy	Michie
Other Problem Sites		
ITT Milan (Jones Companies Ltd.)	Gibson	Milan
Yorkville Elementary School	Gibson	Yorkville

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13. *Jackson Sun*. May 13, 1993. State began Iselin work 2 years ago.

14. *Jackson Sun*. November 23, 1995. Probe may delay cleanup.

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16. *Jackson Sun*. June 4, 1992. Army checks Milan water.

17. *Jackson Sun*. May 27, 1995. Drinking water in one well shows no change.

18. *Jackson Sun*. January 21, 1997. Military uses natural technique to clean water.

19. *Jackson Sun*. October 31, 1996. Water being tested around Milan Arsenal.

20. *Jackson Sun.* January 26, 1997. Clean water the natural way.

21. *Jackson Sun.* June 26, 1996. No one shows up for EPA hazard meeting.

22. *Jackson Sun.* June 25, 1996. Massive cleanup will ready superfund site.

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Juff Contributors

John Jaeger further explores his interest in philosophical issues here, on the heels of his 1998 *JUFF* piece on Kierkegaard. He is assistant professor of library sciences and holds a master of divinity degree as well.

Randy Johnston is Department Chair and associate professor of chemistry. This is his third article to appear in *JUFF* since his 1994 arrival at Union.

Barbara McMillin has just been named Dean of the College of Arts and Sciences after serving six years as chair of English. The article here is a reworking of a paper presentation last February at the Tennessee Philological Association meeting in Jackson.

Melissa Moore has contributed multiple articles to *JUFF* in the area of literary criticism. Currently on maternity leave, she holds the title of associate professor of library services.

Gavin Richardson begins his second year at Union with his *JUFF* debut. Assistant professor of English, his article is being revised for cross-publication.

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