Teaching Philosophy

FROM THE EDITORS

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We welcome our readers to the fall 2014 edition of the *APA Newsletter on Teaching Philosophy*. We offer this time four articles and a list of books for possible review.

The first article, "Correlates of Exam Performance in an Introductory Logic Course," is by Renée Smith and Linda Palm of Coastal Carolina University. The paper offers us a description of research conducted by the authors into several factors that affect student learning. The authors sought to find correlations among such measurable factors as academic performance (as measured in the outcome of a course in logic and critical thinking), academic activities (such as homework, attendance, and tutoring), and psychological factors (such as students' assessments of the frustrations they experience in the course and of their own academic self-efficacy). Their research indicates places where improvements in student learning could be achieved by requiring more homework, by enforcing attendance, by using additional rewards for the completion of homework assignment, and, as a hedge against student frustration, by attempting to gauge and adjust the difficulty of homework and other assignments and ensuring that students are able to deal with instructional resources where required.

The second article, "Logic Through Its History," is by Danielle Macbeth of Haverford University. Although Professor Macbeth's article appears to be an account of some salient turning points in the history of logic rather than a lesson in teaching logic, the pedagogical horizons of the essay are clear. The author notes, first, that logical analysis has not fulfilled the expectations of Russell and others of resolving philosophical problems. But the history of logic is rather fluid, and not a triumphant growth in a single direction that promises to enter eventually into stagnant philosophical problems and resolve them. Following Putnam, the author tells us that although fundamental logical principles appear to be eternal truths, they have in fact been interpreted in varying ways throughout history. Taking a historical perspective on logic enables us to "reclaim the discipline of logic" for pedagogical purposes by showing our students how logic, throughout its history, has been a study of our powers of reason, such as are "critical to our capacity for inquiry, knowledge, and understanding." To that end, Macbeth offers her readers a sample outline of a course on logic that takes such a historical perspective, and she closes with some observations drawn from her experiences of teaching logic in this manner.

Our third article is "Do You Believe in Magical Connections?" Felicia Nimue Ackerman of Brown University, a frequent contributor of poems and brief anecdotes relating to the vocation of teaching philosophy and its tasks, takes on here a myth about teaching that is too sacred, perhaps, to question: that behind every successful person there is a great teacher that put her or him on track for happiness and success. The author borrows a statement about this myth—if it is a myth—from the *New York Times Magazine*: "Go up to any adult with a good life, no matter what his or her station, and ask if a teacher made a difference, and you'll always see a face light up. The human element, a magical connection, is at the heart of successful education." We shall not here anticipate Professor Ackerman's deconstruction of this myth. Most of her readers will find her efforts quite delicious.

"How I Mark Up Philosophy Texts," our fourth article, is by Lee Braver of the University of South Florida. Braver presents in part a survey of how he goes about marking up texts in philosophy to facilitate his interpretation, overview, and understanding of what is significant in the text's arguments. But his paper presents a strategy for mastering difficult texts, and it thus has pedagogical value. The author attempts to convey these strategies to his students and to make them effective in their own reading of philosophy. The author does not attempt to measure whether students who come to use these techniques in fact demonstrate greater acumen in analyzing philosophical texts on exams and in papers than those who do not use them. Perhaps we can encourage Braver to do so and to report on his outcomes in a later paper. As it now stands, however, approaching texts in the manner suggested here should result in a classroom presentation of the texts in question that is more lucid and more conducive to students' understanding of texts that they may perceive, before analysis, as a collection of unrelated insights rather than a tightly composed text aiming at the justification of interrelated theses.

We always encourage our readers to suggest themselves as reviewers of books and other material that they think may be especially good for classroom use. Though the names of books and other materials that we have recently received from publishers for possible review are listed in our **Books Received** section in each edition of the newsletter, reviewers are welcome to suggest material

for review that they have used in the classroom and found useful. However, please remember that our publication is devoted to pedagogy and not to theoretical discussions of philosophical issues. This should be borne in mind not only when writing articles for our publication but also when reviewing material for our publication.

As always, we encourage our readers to write of their experience as teachers for our publication. We also welcome articles that respond, comment on, or take issue with any of the material that appears within our pages.

The following guidelines for submissions should be followed:

- All papers should be sent to the editors electronically. The author's name, the title of the paper, and full mailing address should appear on a separate page. *Nothing that identifies the author or his or her institution should appear within the body or within the notes of the paper.* The title of the paper should appear on the top of the paper itself.

- Authors should adhere to the production guidelines that are available from the APA. For example, in writing your paper to disk, *please do not use your word processor's footnote or endnote function; all notes must be added manually at the end of the paper.* This rule is extremely important, for it makes formatting the papers for publication much easier.

- All articles submitted to the newsletter are blind-reviewed by the members of the editorial committee:

ARTICLES

Correlates of Exam Performance in an Introductory Logic Course

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Faced with the option of satisfying a university core requirement in quantitative reasoning by taking two math courses or a math course and a logic course, a number of students chose the latter option. Some of these students reported being frustrated with their perceived inability to learn math. The logic instructor feared that these same students would not fare well in the logic course since it called for similar reasoning skills. This motivated the researchers to examine a number of predictors of success in an introduction to logic and critical thinking course. The goal of the study was to discover the degree to which course performance was related to specific academic and psychological variables. The academic variables were completing homework assignments and attending class; the psychological variables were both students' self-efficacy beliefs concerning their ability to be successful completing difficult tasks and their reported frustration in doing so.

To say that the body of literature in social cognitive theory and educational psychology is vast is an understatement. A review of the literature reveals three interrelated areas that describe student learning relevant to the present study: (1) *academic performance* (e.g., grades, retention, and academic standing), (2) *academic activities* (e.g., homework, attendance, studying, tutoring, reading, and note-taking), and (3) *psychological factors* (e.g., students' beliefs and affectations concerning their own academic performance).

A number of studies have examined the relationship between (1) *academic performance* and (2) *academic activities*. For example, Thatcher, Fridjhon, and Cockcroft (2007) in a study of second year psychology students reported significant positive correlations between frequency of lecture attendance and the following performance measures: test scores, essay performance, exam performance, and final course mark. Similarly, Wigley (2009) found that the frequency of lecture attendance in a psychology class was positively correlated with exam performance. Credé, Roch, and Kieszczynka (2010) conducted a meta-analysis and concluded that attendance may be the single best predictor of college students' grades. However, there are suggestions that the relationship between attendance and course performance may be influenced by other variables. Allen and Webber (2010) and Newman-Ford, Fitzgibbon, Lloyd, and Thomas (2008) warn that the relationship between attendance and performance may depend on certain contextual factors such as the nature of the attendance policy and the kind

of attendance monitoring system. Additionally, a simple view of attendance would suggest that students enrolled in a class taught in a distance learning format would be at a disadvantage academically since these students do not attend class. Smith and Palm (2007) as well as Brallier, Palm, and Gilbert (2007) found no significant difference in academic performance between students enrolled in traditional lecture courses and those enrolled in distance learning versions of those courses. Since distance students had access to course content online, "nonattendance" did not deprive these students of material that traditional students would normally miss when absent from class.

Completion of homework assignments is another academic activity that has been examined in relation to academic performance. While the preponderance of the research about homework, as well as most of the controversy, has focused the effectiveness of homework in the primary and secondary grades, homework completion has been positively correlated with academic achievement, particularly at the high school and college level (Cooper 1989; Cooper 2007; Cooper, Robinson, and Patall 2006). Salamonson, Andrew, and Everett (2009) examined demographic, academic engagement, and academic disengagement variables as predictors of performance of nursing students in a pathophysiology course and reported that "homework completion emerged as the strongest positive predictor of academic performance, followed by lecture attendance."[1] Similarly, Aldosary (1995) found that of homework and attendance, homework scores were more strongly correlated with course grade for environmental design students.

Types of homework have also been examined in relation to course performance. Bonham (2001) found that students who completed computer-based homework assignments performed no better than those who completed traditional "paper and pencil" homework, although the former group reported spending more time outside of class on the material. Jacobson (2006) studied students in pre-algebra classes and found that among students assigned computer-based homework, the more homework completed, the better the performance on an exam. However, exam performance of students who completed computer-based homework was no better than that of students who completed traditional "paper and pencil" homework. Similarly, Kodippili and Senaratne (2008) found no significant difference on exam performance between algebra students who completed online homework and those who used paper-based homework. Nevertheless, students in the online homework group were more likely to pass the class with a grade of "C" or better than students in the paper-based homework group.

It is not surprising that engaging in academic activities, such as attending class and completing homework, are correlated with improved academic performance, but there are other elements that contribute to academic success, including certain psychological factors. Social cognitive theory distinguished itself from radical behaviorism by emphasizing the importance of internal cognitive and affective states in shaping human behavior. This approach maintains that a person's learning is influenced by a

dynamic interaction among the person's mental states, her environment, and her behavior (Bandura, 1978). One's assessment of one's ability to perform appears to play a central role in predicting academic success. Bandura (1995) describes self-efficacy as "the belief in one's capacity to organize and execute the courses of action required to manage prospective situations."[2] It is a measure of one's confidence in one's own ability to affect change or to achieve a goal. Negative beliefs about one's ability to perform a task or complete a goal, coupled with frustration doing so, may be relevant factors that impede a student's academic performance. Thus, other studies have examined the relationship between (1) *academic performance* and (3) *psychological factors*.

For example, Chemers, Hu, and Garcia (2001) measured academic self-efficacy and optimism of first-year university students and found that these variables were positively related to both students' self-ratings of academic performance and faculty evaluations of student performance at the end of the academic year. Tan et al. (2008), studying undergraduate education majors, found that self-efficacy for self-regulated learning as well as help-seeking behavior predicted students' academic performance expectations. Hsieh, Sullivan, and Guerra (2007) reported that self-efficacy and a mastery of goal orientation were positively correlated with college students' grade point average. Additionally, these researchers found that students in good academic standing had significantly higher self-efficacy beliefs than students on academic probation.

Finally, closing the loop, a number of studies have examined the relationship between (2) *academic activities* and (3) *psychological factors* such as self-efficacy, self-regulation, and frustration. For example, Margolis and McCabe (2006) reported that students' self-efficacy in an academic setting can be increased when they are given academic assignments, such as homework, that can be mastered with a moderate degree of effort. Bassi, Steca, Fave, and Caprara (2007) compared two groups of adolescents aged 15–19 and found that the group with high self-efficacy not only reported higher academic aspirations, but they spent more time on homework than the group with low self-efficacy. Kitsantas and Zimmerman (2009) examined self-regulatory beliefs as mediators between students' reported homework quality and their grade in an educational psychology class. Results of a path analysis indicated a direct relationship between homework quality and course grade as well as an indirect effect of homework quality on course grade that was mediated by self-efficacy for learning beliefs and to a lesser extent by perceived responsibility for learning beliefs. Bembenutty (2009) assessed relationships between self-reported homework activities and measures of self-efficacy, intrinsic interest, delay of gratification, self-regulation for learning, and course performance expectations of at-risk college freshmen enrolled in a mathematics class. Results of the study indicated that students "who were self-efficacious, who were intrinsically interested, who had positive outcome expectations and who reported delay of gratification were significantly more likely to adopt a proactive self-regulatory approach to the completion of homework tasks despite their academic limitations and daily barriers."[3]

The use of educational technology and its relation to students' affective states have been examined in a number of studies. Hove and Corcoran (2008) evaluated student frustration and student learning after exposure to lecture material presented in one of three educational environments—traditional lecture, slide-show supplemented lecture, and virtual learning environment. While students assigned to the slide-show supplemented lecture and the virtual learning environment learned more than students in the traditional lecture format, the self-reported frustration of those in a virtual learning environment was significantly higher than that of the students in the other two groups. Jacobson (2006) examined the effectiveness of computer homework as well as students' evaluation of a computer homework system in a developmental mathematics course. Although no significant difference in exam performance was found between students who completed computer homework assignments and control students who completed non-computer homework assignments, the majority of students in the computer homework group rated the computer homework program as very beneficial. Interestingly, students also expressed frustration using the computer program, noting particular difficulties with input format and program feedback. Hodge, York, and Richardson (2007) also reported algebra students' frustration with computer-based online homework, which the researchers attributed to technical difficulties involved in operating the computer program.

The present study was designed to examine academic and psychological correlates of performance in an introductory logic course. Specifically, the relationship between exam performance and each of the following variables was assessed: homework performance, course attendance, general self-efficacy, and frustration. Based on previous research, we hypothesized that homework performance, attendance, and self-efficacy would be positively correlated with exam scores. While some researchers have reported students' frustration with using computer-based learning systems, our interest was in students' frustration with learning the course content, which arose from our experience listening to students describe their perceived difficulties learning abstract symbolic notation required for math and logic. We predicted that frustration would be negatively correlated with exam performance. A secondary purpose of the study was to determine the relative contribution that each of these academic and psychological variables made to the prediction of exam performance.

METHOD

PARTICIPANTS
The participants in this study were thirty-nine undergraduate students who completed Philosophy 110 Logic and Critical Thinking at a southeastern liberal arts university. The sample consisted of twenty-seven men and twelve women. The students ranged in age from eighteen to twenty-eight years with a mean age of 21.15 years (SD = 2.40). Nine students were freshmen, eight were sophomores, six were juniors, and sixteen were seniors. The racial distribution of the sample consisted of thirty-two Caucasians, five African Americans, and two Asian/Pacific Islanders.

MATERIALS
Course Materials. The course textbook was Patrick Hurley's *A Concise Introduction to Logic*, ninth edition (Hurley, 2005) and its accompanying website (www.thomsonnow.com). On the website, there were twenty homework sets created by the instructor using a database of questions provided by the publisher. The website also provided interactive tutorials prepared by the publisher for each section of the book. The course instructor created three multiple choice exams comprised of questions written by the instructor and questions provided by the textbook publisher.

Self-Efficacy Measure. The General Self-Efficacy Scale (GSE) developed by Schwarzer and Jerusalem (1995) was used to measure students' self-efficacy beliefs. The GSE is a ten-item scale designed to assess "an optimistic self-belief that one can perform novel or difficult tasks, or cope with adversity in various domains of human functioning" (Schwarzer and Jerusalem, 1995). Respondents rate the degree to which each item describes them by selecting one of the following four responses: 1 = Not at all true, 2 = Hardly true, 3 = Moderately true, 4 = Exactly true. Numeric responses are summed across the ten items to yield a total general self-efficacy score. GSE scores can range from ten to forty, with higher scores indicating stronger self-efficacy beliefs. The GSE has been translated into twenty-nine languages and has been used to assess self-efficacy beliefs in adolescent and adult populations in numerous cross-cultural studies. High levels of reliability and validity have been reported for the GSE (http://userpage.fu- berlin. de/~health/selfscal.htm).

Frustration Measure. The course instructor developed a Frustration Index which contained the following four items:

- I felt I did not understand the material.

- I felt that I could not learn the material.

- I felt frustrated with my ability to understand the material.

- I felt frustrated with the professor's teaching style.

Students were instructed to select one of the following responses to each item: 1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always. Numeric responses to the four items were summed to yield a total Frustration Index score. Frustration Index scores could range from four to twenty, with higher scores indicating higher frustration.

PROCEDURE
The Introduction to Logic and Critical Thinking course met for two seventy-five-minute class sessions each week for a fifteen-week term and student attendance was recorded by the instructor. For each section of the book covered during the semester, usually one section per class meeting, there was a corresponding online homework set to be completed at the publisher's website (www.thomsonnow. com). Each homework set contained approximately forty questions and provided students with the opportunity to practice and apply concepts covered in class and in the reading. The homework accounted for 40 percent of the

course grade. Three unit exams, which together accounted for 40 percent of the course grade, were administered during the semester. Each exam consisted of multiple-choice questions that assessed students' mastery of the concepts covered in class, in the reading, and in the homework. The first exam covered the introductory material, such as identifying arguments, distinguishing inductive from deductive arguments, and characterizing arguments as sound or cogent, strong or weak, valid or invalid. The second exam covered twenty-one informal fallacies. The third exam covered sentential logic including translations, truth functions, truth tables, and proofs using natural deduction. The students completed the General Self-Efficacy scale and the Frustration Index on the last day of class. The university's director of institutional research and assessment provided an Excel file containing the following demographic information for students enrolled in the course: gender, age, class rank, and race.

RESULTS

The course instructor computed the following scores for each student enrolled in the course: an exam score (representing percentage of possible points earned on the three course exams), a homework score (representing percentage of possible points earned on the twenty homework assignments), an attendance score (representing percentage of class periods attended), a self-efficacy score (representing the score earned on the General Self-Efficacy Scale), and a frustration score (representing the score earned on the Frustration Index). The mean and standard deviation for each of the five scores along with the Pearson correlation coefficients between pairs of variables are shown in Table 1. A significant positive correlation was found between exam scores and each of the following variables: homework scores, attendance scores, and self-efficacy scores. A significant negative correlation was found between exam scores and frustration scores.

Hierarchical regression analysis was used to identify variables that made a significant contribution to the prediction of exam scores. The predictor variables were entered in the hierarchical regression in the following order: homework scores, attendance scores, self-efficacy scores, and frustration scores. The multiple correlation between the predictor variables and exam scores, $R = .82$, was significantly different from zero, $F(4, 34) = 17.22$, $p < .001$. The four predictor variables as a group accounted for 67 percent of the variance in exam scores. Table 2 provides a summary of the regression analysis. The table provides the following values for each step of the analysis: the unstandardized coefficient (B), the standard error of B, the standardized coefficient (Beta), the proportion of variance explained (R^2), and the change in explained variance (ΔR^2). Significant effects are indicated with asterisks. Homework scores, attendance scores, and frustration scores each made a significant contribution to the prediction of exam scores. Self-efficacy scores were not a significant predictor of exam performance. Homework scores, entered as the first predictor variable, explained 44 percent of the variance in exam scores. The entry of attendance scores at Step 2 produced a significant increment in explained variance of 6 percent. While the entry of self-efficacy scores at Step 3 produced a 2 percent increase in explained variance, this was not a significant increment. Finally, the inclusion of frustration scores at Step 4 produced a significant increment in explanatory power, accounting for an additional 15 percent of the variance in exam scores.

DISCUSSION

We predicted that student performance on logic exams would be positively correlated with homework scores, attendance scores, and self-efficacy scores, and negatively correlated with frustration scores. Bivariate correlations, which measured the strength and direction of the relationship between exam scores and each of these variables, confirmed our hypothesis. Of the three variables that were positively related to exam scores, homework scores were strongly related to exam performance ($r = .66$), while moderate correlations were found between exam scores and attendance scores ($r = .45$) and exam scores and self-efficacy scores ($r = .30$). The negative correlation between exam scores and frustration scores ($r = -.64$) was

Table 1. Means, standard deviations, and Pearson correlation coefficients between exam scores, homework scores, attendance scores, self-efficacy scores, and frustration scores.

Criterion Variable	M	SD	1	2	3	4
Exam Scores	70.51	20.62	.66***	.45**	.30*	-.64***
Predictor Variable						
1. Homework Scores	72.08	17.96		.32*	.19	-.35*
2. Attendance Scores	62.39	22.49			.24	-.21
3. Self-Efficacy Scores	33.15	3.84				-.31*
4. Frustration Scores	8.72	3.28				

*$p < .05$. **$p < .01$. ***$p < .001$.

Table 2. Hierarchical regression summary for variables predicting exam scores.

Step and Predictor Variable	B	SE B	*Beta*	R^2	$R\Delta^2$
Step 1: Homework scores	0.76	0.14	.66***	.44***	
Step 2: Attendance scores	0.24	0.11	.27*	.50***	.06*
Step 3: Self-efficacy scores	0.74	0.65	.14	.52***	.02
Step 4: Frustration scores	-2.71	0.69	-.43***	.67***	.15***

*$p < .05$. **$p < .01$. ***$p < .001$.

nearly as strong as the positive correlation between exam scores and homework scores.

A secondary purpose of the study was to determine the relative contribution that homework, attendance, self-efficacy, and frustration made to the prediction of exam performance. As a set, the four predictor variables explained 67 percent of the variance in exam scores. When entered successively into the regression analysis, homework scores accounted for 44 percent of the variance in exam performance, attendance accounted for an additional 6 percent, self-efficacy scores another 2 percent, and frustration scores another 15 percent. Homework scores, attendance, and frustration scores each made significant contributions to the prediction of exam scores, whereas self-efficacy scores did not.

Our findings with respect to the relationship between (1) *academic performance* and (2) *academic activities* indicated that homework and attendance were positively correlated with exam scores. Each variable, both individually and in the regression analysis, was a significant predictor of exam scores. Of the two academic activities, homework was a stronger predictor of exam performance than attendance, a result consistent with the research of Aldosary (1995) and Salamonson, Andrew, and Everett (2009).

Our findings with respect to the relationship between (1) *academic performance* and (3) the *psychological factor* of self-efficacy were congruent with those of other researchers (Chemers, Hu, and Garcia, 2001; Hsieh, Sullivan, and Guerra, 2007). In our study, self efficacy scores were positively correlated with exam performance both individually and in the regression analysis. However, relative to the other predictors in the regression analysis, self-efficacy did not make a significant contribution to the prediction of exam scores. A possible explanation for this result was that we used a general self-efficacy scale rather than one specifically targeting academic self-efficacy.

Whereas other researchers did not explicitly examine student frustration in relation to academic performance, they did cite students' reports of frustration using educational technology (Hodge et al., 2009; Hove and Corcoran, 2008; Jacobson, 2006). Unlike these studies, we asked students about their frustration related specifically to the course content, their ability to learn, their ability to understand, and the instructor's teaching style. We found that students' frustration in these respects was nearly as strong of an individual predictor of exam performance as homework was. When compared to the other predictor variables in the regression analysis, frustration scores made the second strongest contribution to the prediction of exam performance. While our students did complete computer-based homework, which may have influenced the frustration they felt, we did not ask them about their frustration with respect to the technology used in the course. We acknowledge that one of the limitations of our study was that the Frustration Index was developed by the instructor and its validity and reliability have not been established. However, given the strength of the relationship between students' reported frustration and their exam performance, there is reason to look more closely at this psychological variable.

Finally, our findings with respect to the relationship between (2) *academic activities* and (3) *psychological factors* deserve attention. Examination of the correlation coefficients in Table 1 indicate that the academic variables of homework and attendance were each positively correlated with self-efficacy, although both of these relationships were relatively weak and neither was significant. A negative correlation was found between each of the academic variables and frustration. The relationship between attendance and frustration was weak and nonsignificant. However, homework was significantly and moderately correlated with frustration ($r = -.35$), indicating that students who performed well on homework assignments reported lower levels of course frustration.

Implications for teaching logic and related courses include emphasizing homework completion, attendance, and monitoring students' feelings of frustration with learning the material. Students in the study were assigned twenty graded homework sets over a fifteen-week semester. In addition, homework accounted for a large part of the course grade. Our findings suggest that instructors of logic courses should require both attendance and homework and make performance on homework assignments a significant part of the course grade. Instructors should consider using additional rewards to motivate students to complete homework. Hancock (2000) found that students studied

more, *viz.*, did more homework, when instructors used effective verbal praise of their efforts. Radhakrishnan, Lam, and Ho (2009) demonstrated that college students who were offered a higher incentive for completing homework (1.25 percent toward their final grade) were more likely to do their homework and performed significantly better in a psychology course than students who were offered a lower incentive for homework completion (0.45 percent toward their final grade).

While the inclusion of students' reported frustration as a predictor of exam performance was a unique aspect of the present study, a limitation was that the Frustration Index was administered only once, at the end of the semester. Assessing student frustration early in the course and periodically thereafter as well as expanding the Frustration Index to identify specific aspects of the course causing frustration (e.g., class presentations, readings, homework, computer homework delivery system) would allow instructors to identify struggling students and to make appropriate adjustments in presentations and/or assignments. If early assessment reveals high frustration with homework assignments, students' motivation to complete the assignments and their subsequent academic performance are likely to suffer. For this reason, it is important to gauge the difficulty of homework assignments throughout the course. Whereas completion of moderately challenging academic assignments can strengthen students' self-efficacy beliefs (Margolis and McCabe, 2006), successful completion of moderately challenging homework may be correlated with decreased frustration. Ramdass and Zimmerman (2011) encouraged college instructors to develop homework assignments that are appropriate to the achievement level of struggling students as a means of increasing motivation and academic performance of these students. Bembenutty (2011) distinguished between "meaningful and maladaptive homework practices" and described a number of ways that high school students might undermine their own learning with respect to homework that could be applied *mutatis mutandis* to college homework practices. Bembenutty is confident that the right homework, with the right goals and instruction, can contribute to students' educational outcomes. We recommend not only that instructors use homework to increase academic performance, but be mindful of practices that may result in students becoming frustrated with their ability to learn the material.

Very little research has been done on the role of homework in college, and most of the studies concerning homework focus on K-12 educational settings. Moreover, given that homework can take many forms, for example, readings, essays, short-answer questions, problem sets, etc., and seek to accomplish distinct goals (e.g., teaching new concepts, preparing for classroom activities, and practicing new skills), future research on the role and effectiveness of homework at the college level should consider these variables in light of student learning goals.

NOTES

1. Salamonson, Andrew, and Everett, "Academic Engagement and Disengagement as Predictors of Performance in Pathophysiology among Nursing Students," 123.

2. Bandura, *Self-Efficacy in Changing Societies*, 2.

3. Bembenutty, "Self-Regulation of Homework Completion," 149-50.

BIBLIOGRAPHY

Aldosary, A. S. "The Correlation between Final Grade Score, Attendance, and Homework in the Performance of CED." *European Journal of Engineering Education* 20, no. 4 (1995): 481–86.

Allain, R., and T. Williams. "The Effectiveness of Online Homework in an Introductory Science Class." *Journal of College Science Teaching* (May/June 2006): 28–30.

Allen, D. O., and D. J. Webber. "Attendance and Exam Performance at University: A Case Study." *Research in Post-Compulsory Education* 15, no. 1 (2010): 33–47. doi:10.1080/13596740903565319.

Bandura, A. "Reflections on Self-Efficacy." In *Advances in Behavior Research and Therapy*, vol. 1, edited by S. Rachman, 237–69. Oxford: Pergamon, 1978.

Bandura, A., ed. *Self-Efficacy in Changing Societies*. New York: Cambridge University Press, 1995.

Bassi, M., P. Steca, A. Fave, and G. Caprara. "Academic Self-Efficacy Beliefs and Quality of Experience in Learning." *Journal of Youth & Adolescence* 36, no. 3 (2007): 301–12. doi:10.1007/s10964-006-9069-y.

Bembenutty, H. "Self-Regulation of Homework Completion." *Psychology Journal* 6, no. 4 (2009): 138–53. Retrieved from EBSCOhost.

Bembenutty, H. "Meaningful and Maladaptive Homework Practices: The Role of Self-Efficacy and Self-Regulation." *Journal of Advanced Academics* 22, no. 3 (2011): 448–73. doi: 10.1177/1932202X1102200304.

Bonham, S. W. "Online Homework: Does It Make a Difference?" *The Physics Teacher* 39, no. 5 (2001): 293–96.

Brallier, S. A., L. J. Palm, and R. M. Gilbert. "Predictors of Exam Performance in Web and Lecture Courses." *Journal of Computing in Higher Education* 18, no. 2 (2007): 82–98.

Chemers, M. M., L. Hu, and B. F. Garcia. "Academic Self-Efficacy and First-Year College Students' Performance and Adjustment." *Journal of Educational Psychology* 93, no. 1 (2001): 55–64.

Cooper, H. "Synthesis of Research on Homework." *Educational Leadership* 47, no. 3 (1989): 85-91.

Cooper, H. *The Battle Over Homework: Common Ground for Administrators, Teachers, and Parents*, 3rd ed. Thousand Oaks, CA: Corwin Press, 2007.

Cooper, H. M., J. C. Robinson, and E. A. Patall. "Does Homework Improve Academic Achievement? A Synthesis of Research, 1987–2003." *Review of Educational Research* 76, no. 1 (2006), 1–62.

Credé, M., S. G. Roch, and U. M. Kieszczynka. "Class Attendance in College: A Meta-Analytic Review of the Relationship of Class Attendance with Grades and Student Characteristics." *Review of Educational Research* 80, no. 2 (2010): 272–95. doi:10.3102/0034654310362998.

Hancock, D. R. "Impact of Verbal Praise on College Students' Time Spent on Homework." *Journal of Educational Research* 93, no. 6 (2000): 384–89. doi:10.1080/00220670009598733.

Hodge, A., C. York, and J. Richardson. "Online Homework in University Algebra Courses: Perceptions of Student Learning and Motivation." In *Proceedings of the 29th Annual Meeting of the North American Chapter of the International Group for Psychology of Mathematics Education*, edited by T. Lambert and L. R. Weist (Lake Tahoe, NV: University of Nevada, Reno, 2007), 169.

Hsieh, P., J. R. Sullivan, and N. S. Guerra. "A Closer Look at College Students: Self-Efficacy and Goal Orientation." *Journal of Advanced Academics* 18, no. 3 (2007): 454–76. doi:10.4219/jaa-2007-500.

Hove, M., and K. J. Corcoran. "Educational Technologies: Impact on Learning and Frustration." *Teaching of Psychology* 35, no. 2 (2008): 121–25. doi:10.1080/00986280802004578.

Hurley, P. J. *A Concise Introduction to Logic*, 9th ed. Belmont, CA: Thomson-Wadsworth, 2005.

Jacobson, E. "Computer Homework Effectiveness in Developmental Mathematics." *Journal of Developmental Education* 29, no. 3 (2006): 2–8.

Kitsantas, A., and B. J. Zimmerman. "College Students' Homework and Academic Achievement: The Mediating Role of Self-Regulatory Beliefs." *Metacognition Learning* 4, no. 2 (2009): 97–110. doi:10.1007/s11409-008-9028-y.

Kodippili, A., and D. Senaratne. "Is Computer-Generated Interactive Mathematics Homework More Effective than Traditional Instructor-Graded Homework?" *British Journal of Educational Technology* 39, no. 5 (2008): 928–32. doi:10.1111/j.1467-8535.2007.00794.x.

Margolis, H., and P. P. McCabe. "Improving Self-Efficacy and Motivation: What to Do, What to Say." *Intervention in School & Clinic* 41, no. 4 (2006): 218–27. doi:10.1177/10534512060410040401.

Newman-Ford, L., K. Fitzgibbon, S. Lloyd, and S. Thomas. "A Large-Scale Investigation into the Relationship between Attendance and Attainment: A Study Using an Innovative, Electronic Attendance Monitoring System." *Studies in Higher Education* 33, no. 6 (2008): 699–717. doi:10.1080/03075070802457066.

Radhakrishnan, P., D. Lam, and G. Ho. "Giving University Students Incentives to Do Homework Improves Their Performance." *Journal of Instructional Psychology* 36, no. 3 (2009): 219–25. Retrieved from EBSCOhost.

Ramdass, D., and B. J. Zimmerman. "Developing Self-Regulation Skills: The Important Role of Homework." *Journal of Advanced Academics* 22, no. 2 (2011): 194–218. doi:10.1177/1932202X1102200202.

Salamonson, Y., S. Andrew, and B. Everett. "Academic Engagement and Disengagement as Predictors of Performance in Pathophysiology among Nursing Students." *Contemporary Nurse: A Journal for the Australian Nursing Profession* 32, nos. 1/2 (2009): 123–32. Retrieved from EBSCOhost.

Schwarzer, R., and M. Jerusalem, eds. "Generalized Self-Efficacy Scale." In *Measures in Health Psychology: A User's Portfolio. Causal and Control Beliefs*, edited by J. Weinman, S. Wright, and M. Johnston, 35–37. Windsor, UK: NFER-NELSON, 1995. Retrieved from http://userpage.fu-berlin.de/health/engscal.htm.

Smith, R. J., and L. J. Palm. "Comparing Student Learning in Traditional and Distance Sections of an Introductory Philosophy Course." *Discourse: Learning and Teaching in Philosophical and Religious Studies* 6, no. 2 (2007): 205–26.

Tan, C. X., R. P. Ang, R. M. Klassen, Y. Lay See, I. F. Wong, V. S. Huan, and C. Wan Har. "Correlates of Academic Procrastination and Students' Grade Goals." *Current Psychology* 27, no. 2 (2008): 135–44. doi:10.1007/s12144-008-9028-8.

Thatcher, A., P. Fridjhon, and K. Cockcroft. "The Relationship between Lecture Attendance and Academic Performance in an Undergraduate Psychology Class." *South African Journal of Psychology* 37 (2007): 656–60.

Wigley, S. C. "The Relationship between Attendance and Academic Performance in Further Education College A/S Psychology Students." *Journal of Further and Higher Education* 33, no. 2 (2009): 183–90. doi:10.1080/03098770902874242.

Logic Through Its History

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In the fall of 1900, Russell, following Peirce, extended Peano's monadic predicate calculus to a full logic of relations. Russell was euphoric.

> My sensations resembled those one has after climbing a mountain in the mist, when, on reaching the summit, the mist suddenly clears, and the country becomes visible for forty miles in every direction. For years I had been endeavoring to analyze the fundamental notions of mathematics, such as order and cardinal number. Suddenly, in the space of a few weeks, I discovered what appeared to be definitive answers to the problems that had baffled me for years. And in the course of discovering these answers, I was introducing a new mathematical technique, by which regions formerly abandoned to the vaguenesses of philosophers were conquered for the precision of exact formulae. Intellectually, the month of September 1900 was the highest point of my life.[1]

And in the decades that followed, it came fervently to be believed—not only by Russell but also by Carnap, Nagel, and many, many others—that not only philosophical problems but even religious and political ones would be fully resolved through the sort of logical analysis of ordinary language that Russell had made famous in his theory of descriptions.[2] We now know that this is false. Russell's practice of logical analysis has not enabled the resolution of significant philosophical difficulties, let alone religious and political ones. Indeed, it has been claimed that this logic is irrelevant even to the practice of mathematics and to philosophers concerned to understand that practice.[3] The only unalloyed success mathematical logic has enjoyed is in computing, mechanical reasoning. If logic is to remain a significant subfield of philosophy, a radically new approach is required, in particular, I want to suggest, a historical approach. We need to study the history of logic both in order to determine what went wrong and to discover how best to move forward; and we need to teach that history to our undergraduates to enable them to understand the power of reason in inquiry.

As everyone knows, Aristotle founded the discipline of logic. Aristotle also, so he thought, completed the discipline by setting out all and only the valid categorical syllogisms in the first three figures. Now, a syllogism, according to Aristotle, is a "discourse in which, certain things being stated, something other than what is stated follows of necessity from their being so"; that is, the premises "produce the consequence . . . no further term is required from without in order to make the consequence necessary."[4] A *perfect* syllogism is one in which the conclusion *plainly* follows directly from the premises; an imperfect syllogism is one in which intermediate conclusions are needed in order to form a perfect syllogism in which the conclusion plainly follows. The major of a perfect syllogism is, moreover, invariably *universal*; it must be universal because it provides a rule according to which to reason. It has the form: all/no M is P. The minor, correspondingly, is and must be *affirmative* insofar as it provides an instance to which the rule can be applied. The instance is given either by "all S is M" or by "some S is M." Applying the rule to the instance yields one or other of the four categorical forms as conclusion. For purposes here, two features of this logic are worth emphasizing.

First, this logic is focused on the act of inferring, on what may be judged to be the case on the basis of acknowledged premises. It does not concern the relation of logical consequence, which is the focus of our mathematical logic. What is at issue in Aristotle's discussion is what *follows* from the stated premises and indeed follows of necessity.

Suppose that the major is the rule that mammals are warm-blooded, and it is judged that cats are mammals, that is, that cats are an instance to which the rule applies. Applying the rule one immediately infers that cats are warm-blooded. Notice how different this conception of inference is from the sort of understanding someone like Venn would have of this case. On Venn's account (which was first introduced in 1880), both the major and the minor present states of affairs, respectively, that nothing is a mammal and not warm-blooded, and that nothing is a cat and not a mammal. If both these propositions are true, then it is also true that nothing is a cat and not warm-blooded. Indeed, that conclusion is implicit already in the two premises taken together. All the conclusion does is to make explicit something contained already in the two premises. For Venn, then, there is no logical difference between the major and the minor; both are merely propositions that for the purposes of logic are assumed to be true. And nothing is asserted of any cats. This brings us directly to the second noteworthy feature of Aristotle's logic: the fact that its terms are assumed to be non-empty.

In Aristotle's logic subalternation is valid; that is, it may be inferred from the fact that all S is P that some S is P, and similarly, from the fact that no S is P that some S is not P. And such inferences *are* valid in Aristotle's logic because, he thinks, no judgments can be made about Ss if no S exists. If there are no Ss then there are no *facts* about Ss and hence no true predications of Ss. Judgments are invariably about *the* Ss, that some or all of them are or are not P. As the point can also be put, although we today find it natural to distinguish logically between the question what it is to be, say, a cat, and the question whether there exist any cats, no such distinction is drawn in ancient Greek thought: "the notions of existence and predication, which we distinguish as two separate logical or linguistic functions, are conceived in Greek as two sides of a single coin."[5] Ancient logic is a *term* logic, where a term is what a thing is called—for instance, Socrates, snub-nosed, human, or sitting—and is at once referential and predicative. No logical distinction is drawn between referring and predicative expressions; and as referential, all terms, and hence all concepts, are understood to be object involving. It is Kant who will first distinguish logically between referring and predicative expressions, between, as Kant thinks of it, intuitions, which are singular representations immediately of objects, and concepts, which are general through marks.

According to Aristotle, "he who knows what human—or any other—nature is, must know also that men exist; for no one knows the nature of what does not exist."[6] Descartes—for reasons connected to his fundamental advances in mathematics—came to think the exact opposite: "according to the laws of true logic," he holds, " we must never ask about the existence of anything [never ask if it is, *an est*] until we first understand its essence [what it is, *quid est*]."[7] From being what is essential to some actually existing object, that which makes it to be what it is and so to be at all, essence becomes, for Descartes, a purely mental entity, a *meaning*, or as Descartes thinks of it, an *idea*, something that can be grasped directly by the pure intellect and is, on Descartes's account of cognition, the means by which we understand anything at all. "Essence . . . is divorced

from the object of reference" in Descartes's metaphysics and wedded, not to the word as Quine suggests, but to the mind, and becomes thereby a Cartesian idea.[8] Kant inherits just this conception of concepts as prior to and independent of any relation to any object, but then he *combines* it with a profound and far-reaching innovation of his own. Although *concepts*, on Kant's view as on Descartes's, are not inherently object involving, *judgment*, for Kant, *is* inherently object involving. This is obviously so in the case of empirical judgments, but it is true even in mathematics on Kant's account. Mathematical judgments, like empirical judgments, are true of objects, though in the case of mathematics only as to their form. (The findings of transcendental logic, because they take the form of principles rather than of judgments, are not in the same way object involving.)

Kantian concepts are at once predicates of possible judgments and that through which independently given objects are thought, that is, anything for consciousness at all. Kantian intuitions correlatively give objects and are the source of all objectivity for Kant. Objects are given only in intuitions and can be thought only through concepts, which are predicates of possible judgments; and judgments, though not also concepts, are constitutively object involving. Effectively, to combine the thought that concepts do not give objects but are only that through which objects are thought with the idea that for thought to have content is for it to be in relation to an object or objects, Kant introduces a new logical entity, namely, a *quantifier*. And this really is a new notion, one that is needed only because and insofar as concepts are taken to be only predicative and not also referential. If concepts are conceived, following Aristotle, as *already* object involving and referential, then one needs only a determiner, not a quantifier, to indicate whether one predicates of all the Ss, or only of some of them, or instead of none of them. But if concepts are not already object involving and referential, as in Kant (following Descartes), then reference to objects must be achieved by some other means, for instance, with quantifiers. Thus we read in the *Jäsche Logic* that an example of an analytic judgment is "to everything *x*, to which the concept of body (*a + b*) belongs, belongs also *extension* (*b*)."[9] Kant clearly does not think, as Aristotle would, that a sentence such as "all bodies are extended" predicates of the bodies, all of them, that they are extended. Instead, he introduces a quantifier, "to every *x*," to provide objects for the conditional predicate "extended-if-a-body" to be about.

Putnam once remarked that one of the confusing things about logic is "that even when a principle [of logic] may seem to have undergone no change in the course of centuries . . . the *interpretation* of the 'unchanging' truth has, in fact, changed considerably."[10] I have suggested that we see just such a shift in the interpretation of unchanging truths as we move from Aristotle's logic to Kant's: whereas for Aristotle the judgment that all S is P predicates of the Ss, all of them, that they are P, for Kant, that same judgment is conceived quantificationally to the effect that for all *x*, if *x* is S then *x* is P. And underlying this shift in interpretation is Kant's logical division of concepts and intuitions. But if that is right, then "the first serious advance in real logic since the time of the Greeks" is not Peano's logical division of

singular terms and general terms, as Russell claimed, but instead *Kant's* logical division of concepts and intuitions.[11]

A second such advance is due to Frege. It was Frege who saw that the Kantian opposition of concepts and intuitions is too crude, that it conflates two essentially different distinctions, that between *Sinn* and *Bedeutung* with that of concept and object. Whereas for Kant all cognitive significance, all being for a thinker, is through concepts, and all objectivity, all truth, lies in relation to a object or objects, either as given in sensory experience or merely with respect to their form in mathematics, Frege requires us to distinguish, on the one hand, between cognitive significance (Fregean sense, *Sinn*) and concepts, which are the *Bedeutung* of concept words, and on the other, between objective significance (*Bedeutung*) and objects.

As Frege understands it, the *Sinn*/*Bedeutung* distinction is orthogonal to that between concept and object; according to him, both concept words and object names both express senses and designate or mean concepts and objects, respectively. He writes in some comments on his distinction between *Sinn* and *Bedeutung*:

> It is easy to become unclear about this [the sense/ meaning distinction as applied both to object names and concept words] by confounding the division into concepts and objects with the distinction between sense and meaning, so that we run together sense and concept on the one hand and meaning and object on the other. To every concept-word or proper name, there corresponds as a rule a sense and a meaning, as I use these words.[12]

Kant, we can see in retrospect, commits just the error Frege warns against. Kantian intuitions have *Bedeutung* but, independent of the involvement of (Kantian) concepts, they lack all cognitive significance: intuitions without concepts are blind. Kantian concepts, correspondingly, express, or even are, Fregean senses, but independent of any object given in intuition they have no objectivity, no *Bedeutung*. Kantian intuitions are both of objects and the source of all objectivity; and Kantian concepts are at once predicates of possible judgment and that through which things have any and all cognitive significance to a thinker. But as Frege sees, not all objectivity lies in relation to an object, and cognitive significance is not merely predicative. On Frege's view, again, both concept words and object names express senses, and so are cognitively significant, and both concept words and object names designate (or at least ought to designate) something objective, namely, concepts conceived as laws of correlation and objects, respectively.

I have suggested that there have been two significant developments in logic since it was first founded as a discipline by Aristotle. The first was Kant's logical division of the terms of Aristotle's logic into concepts, which are predicative, and intuitions, which are referential. Because Kantian concepts are not themselves object involving, though, Kant thinks, judgments must be, Kant introduces the notion of a quantifier as a means of referring to objects in judgments, the same notion that is found also in our mathematical logics. The second great development was due to Frege. As from Kant's perspective Aristotle's notion of a term collapses the distinction of concept and intuition, so from Frege's perspective Kant's distinction of concept and intuition collapses two different distinctions, that between *Sinn* and *Bedeutung* into that between concept and object. But we need, I think, to draw yet another distinction, one that even Frege does not draw. Whereas Frege holds that the *Sinn*/*Bedeutung* distinction is orthogonal to the division of concept and object, so that both object names and concept words both express senses and designate, respectively, objects and concepts, I want to suggest that, although the *Sinn*/*Bedeutung* distinction applies to any sort of language, to language as such, the distinction between concepts and objects functions differently, that it serves to demarcate two fundamentally different sorts of languages, namely, natural languages and mathematical languages. (Frege's *Begriffsschrift* is a mathematical language, as contrasted with a logic for natural language.)

A language in the sense of concern here is not merely a means of recording or reporting something of which one is antecedently and independently aware. Rather, it is the medium of our (self-conscious) awareness, that through which we, as thinkers, rational beings, achieve any and all cognitive relation to reality. What Frege enables us to realize is that any such language must involve both sense, *Sinn*, and designation or meaning, *Bedeutung*. Language, that is to say, is inherently revelatory, at least in intention; by its nature as language it reveals or discloses, or in cases of failures, only purports to reveal or disclose, something objective, some aspect of reality, *Bedeutung*. But language can be that, the vehicle of cognitive awareness, only in virtue of expressing Fregean sense. The words of natural language, for example, do not merely stand for or refer to objects and their properties and relations; they are also constitutively inferentially related. To have the use of a word of natural language, to grasp its sense, is not only to be able to apply it correctly, to know what things are called that, but also to be able to *reason* about such things and in virtue of such reasoning to have second thoughts.

But Frege did not discover the *Sinn*/*Bedeutung* distinction, as contrasted with that of concept and object, by reflecting on natural language. In natural language sense and meaning are inextricably combined; the *Sinn*/ *Bedeutung* distinction is at work in the language but not even a notional separation of the two is possible in this case. And because it is not, no one could discover the distinction Frege discovers by reflecting on this case. It is instead in relation to his own mathematical language *Begriffsschrift* that Frege discovers his famous distinction. Because formulae of Frege's concept-script display senses, whether or not any truth-value is designated, it is easy in this case to draw a principled distinction between what is expressed and what is designated. Related, the "concept words" of natural language as much as its "object names" are object involving, just as Aristotle thought; both sorts of expressions are what things are called. Natural language, that is to say, knows nothing of Fregean concepts, which are laws of correlation arguments to truth-values. The words of natural language do not have sharp boundaries,

and they cannot be defined on the basis of a few primitive notions as mathematical words can.

Natural language does not involve anything like a Fregean concept, and mathematical languages, correspondingly, know no objects but only concepts, laws of correlation that have sharp boundaries—*tertium non datur* as Frege puts it.[13] Thus, although any language involves both *Sinn* and *Bedeutung*, the concept/object distinction is not, as Frege thought, merely orthogonal to that distinction. Instead, it marks an essential difference between the natural languages that first realize us as rational at all and mathematical languages such as Frege's that are essentially late fruits of millennia of mathematical investigation.

Mathematical logic has not enabled us to solve our outstanding philosophical problems or even materially to advance our philosophical understanding. And because it has not, we need to recover, revitalize, and to an extent, reinvent the discipline of logic. The first step on the way is self-consciously to recognize that our intuitions about logic have been shaped by logic's recent history and by the education we have, each of us, received in logic. Studying the history of logic will help us to do just that; it will enable us to achieve some critical distance from what are actually quite suspect metaphysical assumptions that we are prone to make. It is *not obvious* that logic ought to be informed by a fundamental division of form and content. It is *not simply given* that non-logical constants divide into referring and predicative expressions. It is *not tautological* that logic studies the relation of logical consequence. These are all substantive theses that have emerged in the course of the history of the discipline of logic. Only by returning to that history can we achieve a better understanding of what logic is and by extension what reasoning involves. Our powers of reason are critical to our capacity for inquiry, knowledge, and understanding, whether in mathematics, in the empirical sciences, or in philosophy. And historically, logic has been the study of such powers. We need to reclaim the discipline of logic for such study, and the way to do that, I have suggested, is through the study of its history.

APPENDIX 1: OUTLINE OF A HISTORICAL INTRODUCTION TO LOGIC[14]

First Unit: Term Logic (two weeks)

Aristotle's *Prior Analytics*, A 1-7: categorical sentences and syllogisms; major and minor terms and premises, and perfect and imperfect syllogisms; demonstrating the validity of second and third figure syllogisms; showing invalidity using examples.

Second Unit: Quantificational Logic Part I (four weeks)

Kant's *Jäsche Logic*: The logical distinction between concepts and intuitions (predicating and referring); truth-functional connectives and quantifiers; immediate and mediate inferences; some natural deduction rules. Venn diagrams, and translations and proofs in the sentential calculus and in the monadic predicate calculus.

Third Unit: Quantificational Logic Part II (four weeks)

Wittgenstein's *Tractatus Logico-Philosophicus* (parts): Names, predicates, and the picture theory of meaning; identity; the polyadic predicate calculus. Translations and proofs in the polyadic predicate calculus.

Fourth Unit: A Logic for Mathematical Reasoning (four weeks)

Frege's *Begriffsschrift*: The primitive signs of the language and the distinction between *Sinn* (sense) and *Bedeutung* (meaning or signification); reasoning from axioms using Frege's one rule of inference; defining concepts in mathematics and proving theorems on the basis of defined concepts; fruitful definitions and ampliative deductive proofs. Here the focus is on mastering the central ideas; skillful use of the language is not expected and cannot be achieved in the available time.

APPENDIX 2: SOME PEDAGOGIC ISSUES

Because both conceptual concerns and basic skills in translation and proof are emphasized, this course is quite demanding and is numbered at the intermediate level; it is not suitable for freshmen. There is no prerequisite. A standard textbook of first-order logic can be used in addition to the historical sources, which has the benefit of providing students with lots of exercises. But it also works simply to provide the students with lots of exercises.

Given its overall aim, the most significant challenge of the course is finding the right balance of skills acquisition (translating and finding proofs, and using truth-tables) with the study of the history and philosophy of logic. It is essential to the overall success of the course that one not merely include but positively interweave the various technical developments with the substantive philosophical issues. Thus, although it is necessary to have some classroom time devoted to skills acquisition (with extra help sessions as needed), the larger historical and philosophical context needs always to be kept in sight. To ensure that it is, when I most recently taught the course, in the fall of 2013, I generated class notes that were posted after each class. As a result, even those students who have some tendency to tune out when we turn from concrete problem solving to the larger context have notes that situate what they are learning how to do within the unfolding narrative that is sketched above. For those students who are more interested in ideas and less motivated to master the technical details and skills acquisition, homework problem sets and quizzes serve to keep them focused. (A final paper discussing the different systems, and the philosophical significance of their differences, is also required.)

It is inevitable in a course such as this that some students will gravitate more to the technical side of things, and others to the more philosophical side. This can and should be capitalized on. It is pedagogically very effective to have each sort of student learning from the other how to appreciate *both* the rigor and technical details *and* the underlying philosophical issues and ideas.

NOTES

1. Bertrand Russell, *The Autobiography of Bertrand Russell* (London: George Allen and Unwin, 1975), 148.

2. See Rolf George and Nina Gandhi, "The Politics of Logic," *Croatian Journal of Philosophy* 5, no. 1 (2005): 31–50.

3. See Paolo Mancosu's introduction to *The Philosophy of Mathematical Practice* (Oxford: Oxford University Press, 2008), especially p. 5.

4. Aristotle,*Prior Analytics*, 24b 18–23.

5. Charles Kahn, "Some Philosophical Uses of 'to Be' in Plato," *Phronesis* 26, no. 2 (1981): 105–34, p. 123.

6. Aristotle,*Posterior Analytics*, 92b 4–7.

7. René Descartes, First Replies in *The Philosophical Writings of Descartes*, vol. II, translated by J. Cottingham, R. Stoothoff, and D. Murdoch (Cambridge: Cambridge University Press, 1984), 78.

8. W. V. O. Quine, "Two Dogmas of Empiricism," in *From a Logical Point of View* (New York: Harper and Row, 1953), p. 22.

9. Immanuel Kant, *Lectures on Logic*, trans. and ed. Michael Young (Cambridge: Cambridge University Press, 1992), 607.

10. Hilary Putnam, *Philosophy of Logic* (London: George Allen and Unwin, 1971), 5.

11. Bertrand Russell, *Our Knowledge of the External World* (London: George Allen and Unwin, 1926), 50.

12. Gottlob Frege, "Comments on Sense and Meaning," in *Posthumous Writings*, eds. H. Hermes, F. Kambartel, and F. Kaulbach, trans. P. Long and R. White (Chicago: University of Chicago Press, 1979), 118.

13. It was the attempt to introduce logical objects into his system that led Frege into the contradiction that Russell discovered. That is, the problem lies in Frege's Basic Law V; it does not lie in his notion of a quantifier. Indeed, Frege's logic does not include the notion of a quantifier, not if by that we mean not merely a sign for generality but in particular a means of referring to objects. Frege's concavity is a sign for a second-level concept; it is not a mechanism of reference to objects. See my *Frege's Logic* (Cambridge, Mass.: Harvard University Press, 2005).

14. Those interested in trying out such a course as this may find it helpful to consult my *Realizing Reason: A Narrative of Truth and Knowing* (Oxford: Oxford University Press, 2014).

Do You Believe in Magical Connections?*

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A 2010 piece in *The New York Times Magazine* says, "Go up to any adult with a good life, no matter what his or her station, and ask if a teacher made a difference, and you'll always see a face light up. The human element, a magical connection, is at the heart of successful education."

Is it?

What made my pre-college face light up was not a teacher. It was a subject. I loved math: algebra, geometry, trigonometry, and introductory calculus. I decided I was going to be a mathematician. This goal seemed reasonable because in high school I was very good at math.

When I got to college, I found out that what I was very good at was high school math.

What made my face light up after I realized that I would never be a mathematician? Was it a magical connection with a teacher who guided me into philosophy instead?

Well . . . no.

My first philosophy teacher radiated confidence and enthusiasm. He talked enthusiastically about his family, his travels, and his view that people should not hesitate to have whatever sorts of sex lives they wanted. When he got around to the subject matter of the course, he had an irritatingly self-assured answer for everything.

My next philosophy teacher was a reserved, modest man who never talked about himself and always admitted when he couldn't answer a question or objection. Unfortunately, he had many, many opportunities to display this virtue.

The latter course also had a teaching assistant—a graduate student who had attended a small college and was determined to make it big in academia. I told my friends that if this assistant ever came to believe that the way to get in with the in-crowd in philosophy was to say that the moon was made of green cheese, he would not just say that the moon was made of green cheese. He would also believe it.

But I loved the courses. My magical connection was with the subject, not the teachers. Isn't that how it should be?

How about the widely touted caring teachers who reach out to troubled students and help them turn their lives around? These teachers can be valuable, but they should keep in mind that the better part of caring is discretion, and that some students find such outreach intrusive.

What virtually every student welcomes is teaching that makes a subject come alive. The best insight I ever got about teaching arose from a book on fashion for teens, which said that the right sort of blouse makes people think, "What a pretty girl," not "What a pretty blouse."

The right sort of teacher makes students think, "What a terrific subject," not "What a terrific teacher." I'm not sure how much it was my early philosophy teachers (rather than just the material itself) that made me think philosophy was such a terrific subject. But at least the teachers didn't get in the way. By that standard, they were much better than might be supposed from my above description of them.

How I Mark Up Philosophy Texts

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Doing philosophy is as much a craft as it is an art, and quality work requires the mastery of a number of skills. Unfortunately, much of the development of the distinctive skills of philosophy, namely, reading, thinking, and the construction and writing of arguments, evolves through trial and error instead of being deliberately honed via a method or techniques devised by those more experienced.

Reading in particular strikes me as an area where students are left to their own devices. They receive feedback on discussions, presentations, and papers, but do professors ever look over their students' marked-up texts and instruct them on how to improve that? As David W. Concepción writes, "philosophy professors should not ask students in introductory or early major classes to spend three hours or more per week doing something they have never done before (i.e., read like a philosopher) without telling them how to do it."[1] Those admitted to graduate schools are presumed to have mastered such basic skills, but we should not assume that they have full command of the more sophisticated versions of these skills they will need to succeed as graduate students and perhaps also as professors. There are a few books students can avail themselves of,[2] but advanced undergraduate and graduate students may feel embarrassed about needing "remedial" help with skills they are assumed to possess. Concepción's own fine piece is directed solely at lower-level courses.[3]

The thesis of this paper is that the mechanics of doing philosophy are not cleanly separable from the doing of philosophy. We accept that producing, say, high-quality pottery requires quite a few skills, such as spinning a pottery wheel and preparing and working a kiln. No matter the raw talent, one must have training if one is to achieve success. While philosophizing is not reducible to a set of activities, neither does it exist apart from them. We don't simply sit thoughtfully in a chair and have papers and books spontaneously froth forth. And since instruction in these skills seems lacking in our education system, I thought I might try to begin to fill the gap, if only with a few tips and suggestions.

Over a number of years, I have, through effort, error, and constant refining, developed a method for reading that may be of some use, or at least interest, to others. Those whose scholarly character is not fully formed can try them out to see if they prove useful.[4] In this paper, I will pull back the curtains to show what goes on in my mental workshop as I do my work. I will show you as directly and fully as I can, in concrete detail, the specifics of how I read philosophy. This paper thus recapitulates a practice I have developed for graduate and "capstone" undergraduate classes: I take time during an early class to show students how I have marked up my own work, encouraging them to adopt these techniques and adapt them to their own habits. While many may in the end abandon my techniques, some usually find them extremely helpful, and I believe that they come to find what works for them more quickly by seeing how more advanced scholars annotate texts and by trying out different ways. If any discipline should be reflective and transparent about its own practices, it is philosophy, so I recommend professors take a few moments in class to discuss the techniques they use the way I am doing here.

Reading is for me at the center of philosophical work. I think in conversation with, in response to, or at least provoked by the thoughts of others, thoughts presented, for the most part, in writing.

Thus I object to the notion of thinking for oneself *simpliciter*, and I object to it philosophically. Certainly, argument from authority—i.e., p is true because A said that p—has no place in philosophy, but it is a caricature to conflate engaging seriously with the history of philosophy with simply taking over the views of historical figures uncritically, or merely repeating reverentially what the "Great Ones" have said. The problems one finds problematic, the solutions one finds acceptable, the claims one objects to or seeks to improve upon—to say nothing of the forms of objection or improvement one finds legitimate and worthwhile— form the context within which an individual scholar thinks. We may alter the landscape considerably, but always by starting within the one we inherit and grow up in. One of the objectives of philosophical education is to acclimate students to emblematic instantiations of arguments— paradigms, in Kuhn's sense, of argumentation. One important way to learn how to philosophize is to study the way great thinkers critically engaged with their predecessors and contemporaries, how Aristotle objected to Plato, say, or how Kant dealt with Hume.[5] This kind of training by example seems to me invaluable, whether the archetypes come from dusty tomes of the canon, proofs of articles still in press, or the Q&A sessions of conference presentations.

For this reason, I find that there is little substitute for the slow, painstaking reading and rereading of the great primary texts. Part of what it means to say that a work is great is that it has such depth that we can return to it again and again, continually finding something new and valuable. The twentieth century's two greatest hermeneuticists, Heidegger and Gadamer, argue that texts are not static inert things but active interlocutors, which can respond differently depending on the questions or perspectives we bring to them.[6] While slow, careful reading is essential, I find that after several deliberate readings of difficult works, a quick skim uncovers much that I would not have seen otherwise. To use a cliché, this overview gives me a sense of the forest once the slow readings had made me intimately familiar with the trees. A useful annotation can organize the material for you, helping you determine and locate important passages, highlighting the overall structure of the piece.

One of the areas where I see Andy Clark and Dave Chalmers's "expanded mind" idea in action is in texts. As paradoxical as it sounds, part of my comprehension "ain't in the head," in Putnam's phrase, but in the marks I have made on the page. To use a somewhat unappetizing metaphor, my way of reading texts resembles the housefly's way of digesting

food. Instead of taking food into their bodies to digest it there, flies emit acidic juices to dissolve the food externally and then suck up the liquefied refreshments. Similarly, my reading and understanding take place *on the page*, in the annotations I make. Were I forced to teach or work from a clean copy instead of one of my marked-up texts, I would be as intellectually handicapped as if I had been hit in the head with a baseball bat. Always remember: you always forget more than you think you will, so let the text serve as an auxiliary memory. One that is well marked up yields its ideas far more easily and usefully. A well-annotated work is an open book.

As this kind of external comprehension plays such a large role in my work, I have developed a system of marks that aids me. Underlining in particular can be made into a relatively sophisticated form of notation. A single black line means that this text is important, a blue line beneath the black means that it is very important, and a third line in red that this is one of the central theses of the work.[7]

Don't get too hung up on the actual sentence structures if only part of the sentence is important for your purposes. Sentence fragments, for example, can be thought of as assertions in disguise: "This ridiculous skeptical viewpoint . . ." for example, enfolds the claim that "This skeptical viewpoint is ridiculous." If a subject appears in one sentence while the significant content occurs in the next one without explicitly mentioning the subject, you can underline the subject in the first sentence and then pick up the topic, usually with the verb, in the next one. Lifting dependent clauses from the context that makes them dependent turns them into full thoughts. Unless an attribution or qualification is important, remove extraneous "that" phrases that preface the meat of the sentence such as, "I think that" or "It is evident that."

Many prefer lighter vertical marks in the margins of passages of interest, marking them from the outside rather than intruding into the text. This method ameliorates the tunnel vision that may occur when underlining leads one to ignore all that is not underlined during subsequent examinations. I find that such vertical marks commit the opposite fault of guiding the eye too little, but this is obviously a matter of personal preference—try both and see what works for you. Writing in pencil can help, of course, by allowing you to revise previous mark-ups upon later readings. One of the figures I work on is Heidegger, who likes to lead the reader down a primrose path, only to yank the carpet from beneath our hermeneutic feet, as it were, which has tricked me into underlining passages he is actually rejecting. In such cases, I place a tilde ("~") in the margin beside the underlined passages to indicate their negation. This is one situation where using a pencil would be helpful.

I make many marginal notes about the content of what I'm reading which later allow me to find my way through the text quickly, what Concepción calls "flagging."[8] I try to find the general contours of the piece, the joints between the main parts of the argument, which I separate by horizontal lines and write a succinct description (preferably just a word or two) of the new topic just below the line. If the author makes a list of, say, three items, I mark each one by

a number and, if important, a very short description of each, as well as an initial phrase denoting the subject of the list. I have also developed my own vocabulary of abbreviations for terms I use frequently, given my interests: "w" means world, "m" means meaning, "kn" know or knowledge, and so forth. These enable me to make very small notes or flags in the margins, as long as I keep consistently to the same abbreviations. If the author defines an important term, you may want to write the term and "def" in the margins so that you can quickly remind yourself what the term means.

Annotating for teaching slightly differs from doing so for research. Marking up a text that I am teaching calls for more marginal paragraph summaries, which help me locate passages quickly. Research, on the other hand, calls for more discretion, only marking the parts essential to the work rather than to the explanation of the work.

An especially rich page gets a small dog-ear, while comments that are particularly striking or interesting but not essential to the argument get a marginal exclamation mark and, if good enough, a bottom-edged dog ear.[9] Brackets mean that the enclosed text presents a summary of what has been said up to this point, which can be helpful if I want a quick reminder.

I keep running tabs of important topics in two different ways. First, when I come across something interesting, I mark the page number and a very brief description of the point in a Word document. This places a restriction on the conditions under which I can work, since I must have access to a computer, but it creates a tangible, lasting result. As I find more discussions of that idea, I add the page number of each mention to that line in the Word document. I tend to add one to three words to the subsequent page number when the new passage contributes something significantly new, or an asterisk if it is a particularly apt discussion. If it diverges enough from the original passage, it gets its own entry on a separate line. This kind of compilation can take place in the skimming phase, after careful readings. Over time, the structure of the piece emerges as a picture of what is important gradually forms through the notes. This not only helps organize the material for teaching or research, but the active analysis of the text helps me grasp its main points better and more quickly than by reading alone.

Inspired by the Stephanus pagination of Plato's works, I mentally break each page into four sections denominated by the letters a–d which, added to a page number, makes finding passages easier. So, for example, 36c means that the passage is located around three-quarters of the way down on page 36. Combining letters refines the locations by indicating borderline placement, so that, e.g., 36bc indicates a passage right in the center of the page.

I also mark recurrent patterns within the book. If the first mention of an important topic appears on page 36 and the second one on page 87, I will write a small "87" next to the passage on page 36 and a "36" next to the passage on page 87. Hopefully, it is a particularly good discussion of the topic that becomes the repository for the page numbers for passages on a particular subject, though often the topic's first or second mention becomes the location by default

simply because that's when I start compiling the list. The optimum method would be to wait until all the citations are compiled and then decide which passage to make the core one, but I'd rather gather them as I read, even if it does mean that a lesser discussion often gets pride of place. If the author contradicts herself or draws some kind of contrast with another portion of the text, I write "v" next to the opposing passage, so if the argument on page 36 conflicts with that on page 87, I would write "v87" beside the passage on page 36 and "v36" on page 87. If the author is rejecting or criticizing an idea, movement, or thinker, I write, e.g., "v Kant" or "v dualism" in the margin.

This way of externally digesting a text has the added benefit of keeping you awake while reading. We all know how the mind, especially when fatigued by extensive reading, relaxes and starts riding along the lines of text without attending to them, only to snap out of it when one realizes that one has no idea what the last paragraph/page/few pages said. This method of actively engaged reading helps prevent sleep-reading.

What these note-taking methods can do is prepare the ground for ideas to emerge and form the basis for writing about the text. They expose the skeleton of the work in question, tracing its contours. Looking over the general structure of the work helps reveal what is important in the text by showing which ideas the author keeps returning to, and supplies a guide to its arguments. Often, my first step in writing is to look over my notes for patterns. My understanding of the Greek word "*logos*" is that, in addition to language and reason, it means pattern as well, an insightful ambiguity. A large amount of understanding a book consists in seeing its patterns, and the practices of reading described above help impart this sense.

If you get interested in a particular topic, the notes enable you to look over the places it was mentioned and compare them with each other. Does the author change her mind? Is she consistent? Does the idea change as the work progresses? Of course, you should be asking these questions of the text as you read it as well, which significantly aids comprehension, and these kinds of annotations help with that. Once the book is marked up, you can flip through it, skimming the underlined passages and looking at the marginal notes to get the overview mentioned above. While there is no algorithm by which one comes up with a topic or thesis to write about, this process makes the intellectual environment as friendly as possible for ideas to take root and be nurtured to maturity. Working over a text with these methods produces a lasting analysis that can be drawn upon again and again.

Now you may have noticed that this method faces a version of Meno's paradox: it seems that the only way to know what to mark is if you already understand the work and know what is important, making the demarcations either redundant (for why would one mark up a text one already knows?) or impossible (for how can one know what is important until one knows the work as a whole?). Initial markings are indeed prone to misplaced emphases—excessive attention may be given to issues that turn out to be peripheral while passing over topics that you come to realize are central.

The only way to prevent this completely is to read through it at first without marking anything, only taking pen in hand once a first reading is complete.

However, I find this solution rather draconian. It is inevitable that your understanding of a great work evolves as you reread it; as far as I can tell, this continues as long as you engage with the work. Waiting until you know exactly what to underline sets the bar too high, and it confronts the horn of the dilemma that makes such marking unneeded, or at least much less helpful. Yes, on a few occasions, I admit that I have discarded copies of works because I came to find the earlier demarcations embarrassing and, more importantly, obstructive. But such cases are rare. Moreover, the marking itself helped me achieve the more advanced comprehension needed even to realize the ineptitude of the initial markings. The effort of actively distinguishing the essential from the tangential, and of constructing an outline of the work as I read it, helps me understand it. A sensible touch of caution in your initial reading is generally good enough to prevent genuinely problematic marks, turning Meno's paradox into the virtuous hermeneutic circle.

I have accumulated over the years a number of tools that have become invaluable to the way I work. I am terrible at any kind of freehand drawing (the only "D" I ever got was in handwriting) so I like to use a plastic 6" ruler to keep my underlining neat. This requires a surface to write on, which restricts where I can work, but I find messy free-hand lines distracting and less amenable to the eye's quick survey of the page. Those able to draw neat lines on their own may not need this tool, though even the talented may find double underlining a challenge.

A weighted bookmark keeps the book open. Unfortunately, while leather ones are easy to buy, I have not found more of the rubber encased ones I bought a long time ago and cut in half. A single weight can hold down the side of the book that tries to close, though older books often close from both sides. I sometimes place smaller books under one side of the book when there is a significant imbalance between the two sides, i.e., near the beginning or end, or lay the book I'm reading on top of another larger open book, such as a dictionary. This allows me to adjust the height of each side as I progress—turning the pages of the underlying book as I read through the one on top—as well as bringing the book closer to my aging eyes.

I love Page Points from Levenger, a store with many highly priced items the inveterate reader can easily fetishize. Page Points are small, thin pieces of lightweight metal folded over that you slip onto the side of a page. They have the shape of an arrow which points directly to specific passages without leaving any residue and without wearing out upon repeated reuse, the way Post-it's® do. In addition to very specific indications—tremendously helpful for both research and teaching—they also make great bookmarks that don't fall out. Unfortunately, the original Page Points have been replaced, twice, with inferior but still useful products.

For writing, I recommend a fully ergonomic keyboard, the curved kind with a raised separation down the middle of the

keys (the best I've found is the Microsoft Natural Ergonomic Keyboard 4000). Finally, a mouse with a free spin wheel (sometimes called "Hyper-Fast Scrolling"), instead of the standard click-to-click roll, is useful on large documents or websites (I use the Logitech Wireless Performance Mouse MX). Logitech made a study of mouse usage and found that the average person scrolls twenty-six feet per day—a lot of ground for your index finger to cover! Free spinning is faster and easier. The mouse also has assignable buttons, three of which I give "copy," "paste," and "double click" functions.

I cannot say whether these methods will prove useful for you. What I can say is that it took me years to develop them, and that it would be difficult for me to do my work without them.

NOTES

1. David W. Concepción, "Reading Philosophy with Background Knowledge and Metacognition," *Teaching Philosophy* 27, no. 4 (December 2004): 352.

2. Mortimer J. Adler and Charles Van Doren, *How to Read a Book* (New York: Touchstone, 1972); Harold Bloom, *How to Read and Why* (New York: Scribner, 2001). My favorite for undergraduate writing, which can still be helpful for graduate students, is Michael Harvey's *The Nuts and Bolts of College Writing* (Indianapolis, IN: Hackett Publishing Company, 2003).

3. Concepción, "Reading Philosophy," 351.

4. It is entirely possible, of course, that they can bear fruit for no one but me. Even if this is so, however, scholarship being a largely solitary, private affair, these descriptions may still be of something like an anthropological interest—the study of a scholar in his study, his natural habitat. Normally we see only the finished products of scholarship, shiny thoughts with all marks of their making carefully polished away. They are revised and revised until they look like they emerged fully formed from the author's mind, like the birth of Athena, goddess of wisdom, from the forehead of Zeus.

5. See John Rudisill's excellent "The Transition from Studying Philosophy to Doing Philosophy," *Teaching Philosophy* 34, no. 3 (September 2011): 241–71, for a useful discussion of teaching students to transition from this kind of study to engaging in one's own philosophizing.

6. For more on these different conceptions of writing, see my "Davidson's Reading of Gadamer: Triangulation, Conversation, and the Analytic-Continental Divide," in *Dialogues with Davidson*, ed. Jeff Malpas (Cambridge, MA: The MIT Press, 2011).

7. For example, in the *Phaedo* 72d, Cebes says, "And besides, Socrates, rejoined Cebes, if the doctrine which you are fond of stating, that our <u>learning is only a process of recollection</u>, be true, then I suppose <u>we must have learned at some former time what we recollect</u> now." Here, I would underline "learning is only a process of recollection" in black and blue, possibly in red as well, as a succinct statement of a very important idea, but single underline "we must have learned at some former time what we recollect," as this argument plays a role in the dialogue's proof of immortality. This removes twenty-two of forty words from my focus, allowing the eye to find the important topics at a glance.

8. Concepción, "Reading Philosophy," 363-4.

9. For example, Heidegger has a great line about the practicality of philosophy: "It is entirely correct and completely in order to say, 'You can't do anything with philosophy.' The only mistake is to believe that with this, the judgment concerning philosophy is at an end. For a little epilogue arises in the form of a counterquestion: 'even if *we* can't do anything with it, may not philosophy in the end do something with us?'" (*Introduction to Metaphysics* [Yale University Press, 2000], 13). Now this is not terribly important to the context, or even the book as a whole, but it's a quote that I love and like to have easy access to, so the page has a bottom corner dog ear, with an exclamation mark next to it so that I can find it easily.

BOOKS RECEIVED

BROADVIEW PRESS

Baber, H.E., and Dimon, Denise, eds. *Globalization and International Development: The Ethical Issues*, 2013.

Ezcurdia, Maite, and Robert J. Stainton. *The Semantics-Pragmatics Boundary in Philosophy*, 2013.

Yaqub, Alladin M. *An Introduction to Logical Theory*, 2013.

COLUMBIA UNIVERSITY PRESS

Coutinho, Steve. *An Introduction to Daoist Philosophies*, 2014.

Badiou, Alain. *Ahmed the Philosopher: Thirty-Four Short Plays for Children and Everyone Else*. Translated with an introduction by Joseph Litvak, 2014.

CREATE SPACE INDEPENDENT PUBLISHING PLATFORM

Gray, Ali. *Plato's Academy and the Eternal Key*, 2014.

**EDINBURGH UNIVERSITY PRESS
c/o COLUMBIA UNIVERSITY PRESS**

Callanan, John. *Kant's Groundwork of the Metaphysics of Morals: An Edinburgh Philosophical Guide*, 2013.

Somers-Hall, Henry. *Deleuze's Difference and Repetition: An Edinburgh Philosophical Guide*, 2013.

HACKETT PUBLISHING COMPANY

Aristotle, *Nicomachean Ethics*. Translated with Introduction and Notes by C.D. C. Reeve, 2014.

Husserl, Edmund. *Ideas for a Pure Phenomenology and Phenomenological Philosophy: First Book: General Introduction to Pure Phenomenology*, Translated with notes and afterward by Daniel O. Dahlstrom, 2014.

Lande, Nelson P. *Classical Logic and Its Rabbit Holes: A First Course*, 2013.

Lemos, John. *Freedom, Responsibility, and Determinism: A Philosophical Dialogue*, 2013.

Moody, Todd C. *Does God Exist? A Dialogue on the Proofs for God's Existence*, 2nd ed., 2013.

Thomas Aquinas. *Basic Works*. Edited by Jeffrey Hause and Robert Pasnau, 2014.

HARVARD UNIVERSITY PRESS

Foley, Elizabeth Price. *The Law of Life and Death*, 2011.

PROMETHEUS BOOKS

Joshi, S. T., ed. *The Original Atheists: First Thoughts on Nonbelief*, 2014.

Kellogg, Michael K. *The Roman Search for Wisdom*, 2014.

OXFORD UNIVERSITY PRESS

Kleinig, John. *On Loyalty and Loyalties*, 2014.

ROUTLEDGE TAYLOR & FRANCIS GROUP

Luft, Sebastian, and Søren Overgaard, eds. *The Routledge Companion to Phenomenology*, 2012.

ROWMAN & LITTLEFIELD

Winfield, Richard Diern. *Hegel's Philosophy of Spirit: A Critical Rethinking in Seventeen Lectures*, 2013.

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