FROM THE EDITORS, TZIPORAH KASACHKOFF & EUGENE KELLY

ARTICLES

GERALD MOZUR
“A Guide to Philosophy in Two-Year Colleges”

ANDREW CARPENTER
“Online Discussion and the ‘Place’ of Learning”

GEORGE ENGELBRETSEN
“Teaching Algebraic Term Logic”

BOOK REVIEW

Tamar Ross: Expanding the Palace of Torah: Orthodoxy and Feminism
REVIEWED BY MARK ZELCER

LETTER TO THE EDITORS

LIST OF BOOKS RECEIVED

ADDRESSES OF CONTRIBUTORS
Welcome to the fall 2007 edition of the APA Newsletter on Teaching Philosophy. We have assembled here three articles, a book review, a list of books received, and a letter to the editors that we hope will be of interest to teachers of philosophy.

Gerald Mozur and Eric Brandon’s article, “A Guide to Philosophy in Two-Year Colleges,” was originally prepared for the APA Committee on Two-Year Colleges, of which Prof. Mozur was recently named chairman. It offers a description of two-year colleges’ mission, and their differences from four-year colleges in regard to student populations, to their needs and academic preparation, to programs, to teaching load, and to working conditions and expectations for faculty. Much of the information offered by the authors under these rubrics is intended for persons who might be interested in applying for a teaching position at a two-year college, and the essay is for that reason called a “guide.” It issues warnings concerning the conditions of employment and the difficulties of teaching underprepared and overburdened students, and assesses positively the potential for a satisfying and rewarding career on this level. The article closes with interesting statistics about two-year colleges, their faculties, and their students.

The second paper, “Online Discussion and the ‘Place’ of Learning,” by Andrew Carpenter of Ellis College of the New York Institute of Technology, discusses ways of applying the sociological notion of virtual communities to the teaching of philosophy in an online context to diverse populations of students. Specifically, the author believes that instructors can fashion programs of study for online students that enhance the learning of philosophy even beyond what is possible in traditional classrooms by exploiting the potential of virtual communities for discussion and exploration of philosophical texts. The article provides data on the number of interactions among students registered for courses the author taught a few semesters ago. He makes suggestions for how interactions between students can be enhanced in quality and increased in quantity. Some problems faced in online instruction are identified (such as fostering inclusiveness among students) and possible means to their resolution are discussed. A great advantage to online discussion, the author argues, is that there exists less enforcement of conformity among students and a freer atmosphere for disagreement. The paper then offers an extended exposition of the design for a successful discussion based on his experiences in one online course.

“Teaching Algebraic Term Logic,” by George Englebretsen, offers a further specification and analysis of themes discussed in F. Sommers’ article, “On the Future of Logic Instruction,” which appeared in these pages in our spring 2002 edition. Algebraic term logic is intended as a means of bringing students to formal logic without requiring them to learn either the difficult and non-intuitive techniques of modern predicate logic or the less powerful system of Aristotelian logic. Algebraic term logic, the author writes, approaches the power of predicate logic, but it has the advantage of taking as its point of departure the mathematics that entering students have already learned. It is natural, it has applications to arguments in the natural language, and, he maintains, it is for these reasons easier to learn. Algebraic term logic, as Englebretsen presents it, is derived from the work of the nineteenth-century British algebraic logicians. The word “term” in its title refers to that over which its variables range: properties, relations, proper names, or even entire sentences or clauses. It is “algebraic” in that the operators are derived from familiar mathematical operations. The body of the essay provides a development of the technique from the elementary operations and an application of them to arguments in the natural language.

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. The names of books and other materials that we have received for review are listed in the Newsletter. However, reviewers are welcome to suggest reviewing material that they themselves have used in the classroom and found useful, even if it does not appear in our Books Received list. 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 for our publication. We welcome papers 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:

• The author’s name, the title of the paper, and full mailing address should appear on a separate sheet of paper or, if the paper is sent to the Editors electronically, on a note that will not print out within the text of paper itself. Nothing that identifies the author or his or her institution should appear within the body or within the footnotes/endnotes of the paper. The title of the paper should appear on the top of the paper itself.

• Unless the paper is sent in electronic form, four complete copies of the paper should be sent.
I. Introduction

The mission, student population, and professional context of two-year colleges are significantly different from those of the four-year universities at which all of us have earned our advanced degrees. For some, starting a career at the two-year level would be the best thing to happen to them; for others, it may be “culture shock.” There is no rule here on who is best suited for a career at a community or technical college. But knowing something about this professional venue is certainly fundamental to making reliable decisions about whether this is a career-track for you. The present guide intends to provide just this for anyone considering a career at a two-year college. The balance of this exposition revolves around these three areas: the mission of two-year colleges, the student population, and the professional context in which philosophers work. With this overview in place, we go on to make specific suggestions for applying to positions at two-year colleges.

While it must be admitted that the institutional setting of two-year colleges has many variations, the present work does speak in terms of what is “typical,” “usual,” or “generally so” about professional life at these schools. Because we are aware of variations, we often follow a generalization by noting an exception. This should be understood as saying two things: the exception evidenced can be considered the “exception that proves the rule,” and the institutional settings are, of course, not absolutely uniform. Our generalizations are like rules of thumb—guides that give direction but are not exhaustive of all possibilities.

II. The Mission of Two-Year Schools

The major element of the mission of two-year schools, primarily known as community colleges or technical schools, is service to the community. The institution is created to serve the needs of its surrounding community. The needs are varied and they include business needs such as having an educated workforce, educational opportunity for those not fully prepared to advance to a selective admissions four-year school, and educational opportunity for those in employment transition. Moreover, there are needs for continuing education as well as adult high school. In addition, the two-year college is a focal point for activities in the arts and music as well as for special cultural events. The faculty at community colleges are actively engaged in developing and implementing programs that address these needs. For example, arts and humanities faculty support art shows, musical performances, guest lecturers, and so forth that are of interest to the community as well as students.

This mission is directed to providing affordable education to everyone. They may be typical college-age students not able to afford the tuition and board at selective four-year schools, they may be people who are in crisis due to divorce or job loss, or they may be economically challenged people, those with little or no support network. Characterizing the student body in this way is intended merely to underscore the types of service the institution must render. Two-year schools must be affordable (certainly relative to major universities and colleges). Two-year schools must be responsive to student needs for counseling, financial aid, social support, and everything that goes with ameliorating the conditions of life. Two-year schools must provide courses with immediate practical relevance for both students and community employers. A large part of the course offerings are in technical fields supporting the acquisition of job skills with certification programs as well as associate of arts or science programs. The range of offerings extends from auto mechanics, office technology, and drafting, to nursing and allied health fields such as dental hygiene and dental assisting, to name just a few. With such an emphasis, the mission is clearly to use education to help people better themselves economically and socially.

This raises the issue of the role that the liberal arts and sciences play in fulfilling this mission and, more specifically, where philosophy fits into this curriculum. One important observation is that philosophy and the liberal arts are in the minority at many schools. Rarely, if ever, is there a two-year school devoted primarily to a curriculum in the liberal arts. However, because there is a large enough contingent of students wishing to transfer to four-year schools, the liberal arts are not at risk of losing their presence in the curriculum. By recent accounts, the number of students enrolling at community colleges seeking transfer credit is increasing and this bodes well for the standing of the liberal arts. So, the demand for philosophy and other traditional subjects remains sufficiently strong.

It must be noted that the above description, although accurate for many schools, may not capture the reality at some campuses. Some faculty report that they see very few purely “technical” students (students seeking a narrowly defined certificate such as CAD, auto mechanics, or nursing) while others work with them daily. The point here is to be aware of this student population as one comes to the classroom. As noted above, as the number of college transfer students (those...
ultimately seeking a baccalaureate degree) increases, the types of student philosophers will face in their classrooms will approach those of four-year schools.

Two things are basic to the traditional liberal arts offerings. Because the curriculum is only for two years, intended to be parallel to the first two years at a four-year school, there are no “majors” or “minors” in various disciplines. Along with this is the fact that the typical curricular offerings do not move beyond the introductory level. It is difficult to support a major in philosophy, or any other traditional discipline, if there are no upper-division offerings. Although some colleagues report initiatives with neighboring four-year schools that allow for teaching more advanced courses and provide for a “major,” this instance is rare. A common situation for two-year schools is to offer only courses requiring no prerequisites.

A recent phenomenon that some have reported is the development of associate degrees in specific traditional subject matters such as philosophy. This mirrors somewhat the traditional “major” in the field. Where such programs exist, faculty can teach more advanced courses to students especially interested and qualified in the subject matter. The requirements for an AA in philosophy will vary from school to school, but at such schools, one would have opportunities that other institutions would never provide.

Some faculty report that, due primarily to their own insistence, prerequisites have been put in place for certain courses. For example, Introduction to Philosophy might require completion of English composition, whereas a course in the history of philosophy might require completing Introduction to Philosophy. The most common situation of prerequisites involves skill courses such as reading and composition courses rather than content courses in the philosophy curriculum.

With or without prerequisites, the typical curriculum where there is no specialized AA program is introductory with an assortment of topical courses. This applies across the board for the arts and sciences, not just philosophy. For philosophy, the typical core curriculum would cover something like the following:

- Introduction to Philosophy
- Introduction to Logic
- Introduction to Ethics/Moral Problems
- Biomedical Ethics
- Business Ethics
- Environmental Ethics
- Asian/Non-Western Philosophy

Where there is opportunity, such as with an AA program, there are additional offerings as varied and rich as four-year undergraduate institutions. Courses in epistemology, metaphysics, aesthetics, philosophy of religion, philosophy of science, as well as sequences in the history of philosophy would augment the core offerings listed above.

Such philosophy courses are also listed as part of the general education requirements. Many students enrolling in such introductory level courses are doing so not so much out of interest but out of the necessity of fulfilling these general education requirements. This is especially true for logic courses. Introduction to Logic has been a mainstay for many two-year programs. The fact that philosophy courses help support the general education core is but another reason why there is a recurrent demand for philosophy instructors. Philosophy serves well this goal of the curriculum and satisfying this need ensures that philosophy will continue to have its own place among the other arts and sciences.

Here, it might be pointed out that not all students coming to philosophy courses are merely general education students seeking only to quickly satisfy requirements for graduation. Of course, these students choose philosophy over other courses they might have taken. Instructors can at least take heart in knowing there is interest or curiosity in philosophy, and judging by reported enrollments, the field remains in demand.

Although philosophy is a mainstay, it is certainly not in the majority among the liberal arts. Far more sections of English, and usually history and psychology, are taught than philosophy courses. Thus, there are far more faculty in these other disciplines than in philosophy. This note, however, must be qualified by saying that there are exceptions. Some schools may have several philosophers and may actually have a “department” distinct from the more general area of “humanities” or “liberal arts.” However, usually philosophy is taught by a few full-time faculty, and in most cases, if not all, these few are aided by a cadre of adjunct instructors. In some extreme cases, there may be no philosophers at all (by which is meant no one with at least a master’s degree in philosophy) among those teaching these core courses. It is possible that one would be hired as the first fully qualified philosopher and be expected to develop the program. The range of institutional programs is wide. One is lucky to have many full-time colleagues, but having few or none is more likely.

So, to summarize this discussion of the mission of two-year schools, it is important to note that philosophers are teaching introductory courses, not for the sake of attracting “majors” or “minors,” but for the sake of general education and preparation for transfer to a four-year school. Where it is offered, an AA degree in philosophy serves well for transfer students and provides additional opportunities for teaching beyond the introductory level. Moreover, philosophers are generally not engaged in research—it is not part of the explicit mission of two-year schools—but are devoted to teaching and service. Because of the non-selective admissions, the primary challenge in teaching is connecting with students who have little preparation in reading and writing. The burden is on instructors to find ways to improve these skills while communicating the content of the course. Although to inspire or foster a love of learning can be a monumental achievement, it is extremely satisfying. Being able to communicate philosophy to the great diversity of student interest and preparation and to inspire them to learn more is no small task, but that is a philosopher’s mission at a two-year college.

III. Student Population

The student population at two-year schools presents a challenge for philosophy instruction. As briefly noted above, two-year schools or community colleges register anyone with a high school diploma. The fact that admissions are highly un-selective is a distinctive fact about two-year colleges. This means that first-year students may have only a GED or a high school diploma with very little college preparation. As a result, many students will be taking remedial courses in basic skills such as reading, writing, and arithmetic. The degree and number of these rather unprepared students obviously varies from school to school. One colleague reports that 65 percent of incoming students ranked at the bottom 25 percent of their high school graduating class. That is only one college, but it is safe to say that all schools will have their share of such students.

In addition to this, there are the numbers of students who are living in crisis due to divorce, job loss, medical problems, legal troubles, and the like. This is an important fact about teaching at a two-year college: such students may be well intentioned but have too many problems to overcome. In some sense the community college tries to be a safe haven for these
students—a nurturing environment in which each can grow and find oneself. The point here is that students may not do assigned work, or turn in work late, not due to procrastination but due to the serious interruptions of time and concentration that their home lives present. For example, it is common for a single mother to admit that she cannot do homework until the entire household has been fed and put to bed and this after putting in a full day at work. As a result, her work is incomplete, late, or not done at all, as sometimes she just falls asleep trying to do the work and it does not get done. This scenario is common, and there are numerous variations of it. Instructors coming into the classroom need to be aware of the degree and frequency of these sorts of situation in which many students struggle. In some sense, the number of such students really reveals how close to the community a community college is. Generally, without residential campuses, teaching is less isolated, or better, less buffered, from these realities of life.

The attitude of these students can be antagonistic in that an instructor who assigns any significant amount of homework can be viewed as “dumping” too much on them. Students then become resistant to the work, as they believe it is unfair. It is unfair because of all the other exigencies that must be faced. Moreover, such students are in a hurry to get their “education” done. It is hard for them to pause and try to be reflective about philosophical problems, even when they are directly relevant to their life situation. The concluding note here is to recognize that a significant percentage of students have life-challenges that impact their ability to prepare and complete classes. Many of these students might be characterized as “non-traditional,” but this factor varies depending on the particular demographics of an institution.

“Traditional” students—by which is meant the typical eighteen-year-old fresh out of high school and intent on getting a baccalaureate degree—are a significant percentage; however, most have at least part-time jobs and many continue to live at home. Some of them are enrolled because they do not know what else to do—they may not like school at all, but it is all they know. Such students expect courses to be just like high school and are poor performers. Others are highly motivated and are enrolled to save money. This, in fact, is a growing phenomenon. Many students are deliberately taking two years with a community college before transferring to their preferred four-year school—usually a flagship school or one of the public state universities. These students are responsive and draw a stark contrast with those just described. If you have both types in your classroom in significant numbers, it can be a challenge to move the entire class forward.

It is important to note that because full-time students, usually defined by carrying a minimum of twelve credit hours, are also working full- or part-time, their time is chronically overtaxed. Many balance their different obligations, but quite a few struggle for lack of time. It is familiar to hear of students working a graveyard shift and rushing to school for another four to six hours of classes. When students appear fatigued, certainly by semester’s end, it is often for good reason. It is helpful to know this about one’s students as it explains that lack of productivity is not always due to lack of interest or ability. Students are simply over-extended.

Traditional-aged students at a two-year college would be no different from those at four-year schools if it were not for the fact that two-year colleges are not residential campuses. There are exceptions here, but the rule is that a two-year school has classrooms, labs, library, etc., but no dormitories. This is important with respect to extra-curricular activities and campus events. Full-time students at a residential campus can be expected to attend meetings or events outside the classroom, especially events sponsored by an academic department or by the school itself. Living on campus makes them a captive audience. However, at two-year colleges where students schedule their classes around their job and family commitments, there is precious little time left for extra-curricular activities. Scheduling a guest-speaker at any time other than class time, and without offering extra credit, would result in a poorly attended talk because of this conflict in scheduling. Students converge in the classroom, but then quickly disperse at the end of class. Getting together to discuss class material or creating a club is extremely difficult under these circumstances. Students show up, attend, and then are gone from campus in a blink of any eye.

The “non-residentialness” of a two-year college further highlights the externality of the relationship students have with the college. Fostering a vested interest in the school and its activities is difficult when students quickly return to their workplace or home life. Such an interruption of continuity makes students view the college like any other business they patronize. They show up and pay tuition and expect an “education” in return, and this in the same manner as they would buy stereo equipment.

Some colleagues report an active interest in extra-curricular activities like a Philosophy Club. There are also Honor’s Programs and film series that engage students’ interest outside of class. Depending on the energy and interest of all involved, one can develop clubs as an important extension of the classroom. But, one should note that the characterization of students given above is a fact of life at many, if not most, two-year colleges. Knowing this beforehand will help in developing strategies to deal with it.

IV. The Professional Context: Salient Differences with Four-Year Institutions

Publishing is a central part of doing philosophy at a typical four-year research institution. Although some colleagues manage to publish, and publish regularly, this is not part of the typical job description for faculty at two-year colleges. Scholarship may give you credentials and may get you a job, but being able and willing to teach philosophy to the kinds of students already discussed is what will allow you to keep your job. Recall that the primary mission is to teach and serve. The institutional view of research varies: at some schools academic deans encourage faculty to write and publish; others discourage it entirely, seeing it as a distraction from teaching; and some may simply be indifferent, neither encouraging nor discouraging research. External pressure to publish or to refrain from publishing will, thus, depend on the school for which you work.

Of course, for many of us (if not all), there is an intrinsic motivation for reading, writing, and publishing philosophy. Such intrinsic connection with the field is what gets us through graduate school and qualifies us as professional philosophers. However, at a two-year school there are some obstacles to following this motivation. The primary one is the teaching load. Again, as always in this guide, there are exceptions, but the typical teaching load is five courses per semester. Some colleagues report a somewhat less burden with 4/5 load over two semesters. There are possibilities, perhaps, of even teaching three in a semester, but there may be other administrative duties to attend to as well. Depending on enrollment, and assuming a standard class size is about thirty, five classes a semester yields 150 students to track—three hundred over the course of the year. Of course, with withdrawals and drops, the final number likely is somewhat less. Still, this is a lot of students, and a lot of preparing and grading. This number gets even larger in the event that one teaches an overload or two—i.e., takes on an
additional course or two. Many colleagues report teaching six or seven courses a semester. Reflecting briefly on these facts reveals that your personal time for research will be limited and dependent on your own energy to work outside these constraints. Many colleagues report simply being too drained or tired to follow through on a research program. That some colleagues do have that energy is remarkable and we are proud of their accomplishments; but, in the main, many of us feel the enervation and even exhaustion this teaching load can produce and direct the majority of our energies into our teaching and institutional commitments.

The frustration this generates is not terminal. Typical employment contracts run through the summer and so it is very possible to have an entire summer off from teaching. Summer teaching is not obligatory. So, there is a choice here to be made. One can arrange for extended periods for research in these off months. Many colleagues report just this strategy in keeping their creative, research energies alive. One can work on an article or even bigger projects at one’s own pace.

There are alternative opportunities for scholarship outside journal and book publication. Recently, the Committee for Philosophy in Two-Year Colleges has presented a series of sessions at APA Divisional meetings that address this issue of staying intellectually alive while teaching so many courses. There are many avenues to take. For example, one can become involved in state or local philosophical associations. Making presentations or commenting on a paper are more manageable tasks given our time constraints. Just attending such conferences, such as the APA Divisional meetings, is a good way to stay connected to the research end of things. All graduate programs sponsor visiting scholars and attending these, perhaps even taking students along, can keep one intellectually engaged. There are, no doubt, other strategies one can formulate.

Attending conferences is an important and integral component of an academic career, but, just as at four-year schools, travel funds may be competitive. A common experience is that institutions will support one’s travel if one is presenting or is on the program. However, that is not universal. Some schools may support one trip a year. There is no rule here but availability depends on your context where contingencies such as budgetary concerns or even campus politics have to be faced.

However, one strategy in particular that is especially supported at two-year colleges is research in the classroom. Assessment of courses and strategies can yield important insights about how students learn, and how best to deploy a course. Such research finds a ready reception in journals in education. Moreover, articles informed by such first-hand research can find their way into the Chronicle of Higher Education or journals such as Academe (a publication of the NEA) and APA Newsletters. Also, journals such as Teaching Philosophy, Teaching Ethics, and the Journal on Excellence in College Teaching are all outlets for classroom research. Experimenting pedagogically and carefully analyzing to discover what works and why is just as artful and challenging a task as producing a standard journal article. Many colleagues are well-advanced in classroom research techniques and this work appears to be as satisfying for them as the more typical research work.

The point here is that many two-year schools are institutionally driven to assess student learning. The mandate to assess courses and programs presents an outlet for our research energies. Measuring the success of learning is an important component in accreditation and academic deans support any work that furthers that goal. Philosophers can do well exploiting this opportunity.

In summary, scholarship is typically something one does outside one’s primary duties of teaching and institutional service. This is in stark contrast with four-year schools where publication is expected as part of the job description. Given the typical lack of institutional support for research, philosophers will have to follow their own energies to pursue a research program. On the other hand, if one takes to the notion of classroom research, then one can tap into the institutional support that funds course-level and program-level assessment.

Since teaching is the primary responsibility, instructors are expected to ensure that learning takes place. This means that the real pressure is in the form of teaching evaluations and being able to satisfy and effectively educate the entire range of students already described. At four-year schools, the old saw is “Publish or Perish”; at two-year schools, the saying is better phrased as “Inspire or Expire.” Performance in the classroom is the sine qua non of professional life at a two-year college, and, hence, the importance of evaluation of teaching performance, and the assessment of student learning.

However, there is one further aspect that needs discussion. This is how the institution’s mission may become an obstacle to good teaching. The obstacle is this: because the institution’s mission is to serve the people, it finds success when as many people as possible are served. Thus, community colleges are particularly enrollment-driven institutions. High enrollments reflect well on a school and, perhaps more importantly, satisfy the bottom line. Although there is generally state funding, tuition still is the number one economic fact impacting the classroom: without enough enrollment, the class is cancelled. This administrative concern with increasing enrollment is evident in the policy of putting as many courses as possible on the Internet. The existence of “Internet universities” is simply an extension of this and an application of the business model of education. Education is a product and administrators want to exploit all available markets. Students are consumers shopping for the best buy. Instructors are vendors peddling their wares.

The obstacle that emerges is the pressure on instructors to maintain enrollment. Given the student population as described, what is the best way to maintain enrollment and to keep the customers coming back? The most common answer is by giving good grades. This is the obstacle: there can be coercion to lower standards and pass students who otherwise would fail. In order for an instructor to satisfy the students and the institution, he or she may have to redefine the grading scale or reformulate his or her teaching standards. Failing a significant portion of your students is a big red flag about a teacher and will typically invite a visit from the dean or academic vice-president. Students want a grade to move on with their degree; deans want high enrollment and happy students. Students who do not get their grade are not happy and drop out. When this happens, deans become unhappy and then the instructor may become unhappy as a result. There is a syllogism here about how to remain a happy teacher at a two-year school, but the basic point is to be aware that this coercion can, and does, exist. This may be true as well for some at four-year schools, but there instructors are given much more autonomy because it is research, not teaching or enrollment, that is the driving motive behind professional standing and advancement.

It is true that some colleagues do not feel this coercion, but others testify to its obvious presence in their professional life. This, of course, will depend on the institution and who the players are in the administration. Nonetheless, a philosopher with teaching standards forged at the graduate level or at a four-year school will have to reflect deeply on how they can be maintained in this new context. Teaching philosophy to those who cannot or will not read a text is a difficult thing to do.
Despite all the joys and rewards there are in teaching at a two-year college, this coercion remains a possibility undermining the quality of instruction by “watering down” the subject matter.

The contrast between teaching at a two-year school and a four-year school is quite clear, even given the caveats mentioned. When we come to community service the contrast may not be as clear-cut but is, nonetheless, important to note. Typical two-year colleges are called community colleges. As noted, the mission is to serve the community. This works itself out in a number ways: sponsoring exhibits, guest speakers, partnerships with high schools, serving as a conduit for social services, programs for workforce training and development, continuing and professional education programs, and the list goes on. The familiar efforts of sponsoring speakers and exhibits of art or musical performances are certainly very much a part of four-year schools. However, the degree to which two-year schools work closely with community leaders in business and education is certainly greater and more immediate than one finds at a typical four-year school. Job training, particularly in practical areas such as welding, drafting, office technology, automotive technology, and the like, serves front-line workers. This is a far cry, for example, from a university’s offering an MBA program at night for business professionals. Drawing high school students into community college classrooms may be a strategy that four-year schools adopt, but with two-year colleges, many of which are located in rural areas, where a college may be the only higher educational institution for many miles around, the relationship with high schools can be immediate and direct. This is because the two-year school can promote itself for the sake of enrollment and at the same time provide the high school students an opportunity for advanced credit and college transfer units. It is hard to imagine that a flagship state university would need partnerships with high schools to better itself.

This point draws attention to the fact that faculty will be called upon to facilitate such outreach programs. For example, as a philosopher, one may be asked to develop a special “critical thinking” course for employees of local corporations, provide a seminar on business ethics or environmental ethics for business leaders, or give talks at high schools and senior centers. Such efforts would be independent of one’s regular teaching load and faculty take on these tasks regularly.

A related point about college and/or community service is that, at many schools, it is a very important component in faculty evaluation and promotion. A typical breakdown in the categories for promotion assessment would be teaching, service, and scholarship or professional development. Teaching would receive the most weight. Compare this with a research university where publication is given the most weight. Of course, regardless of institution, faculty are judged suitable for promotion only if satisfying all three categories. However, at two-year schools, one’s teaching evaluations, letters from students, and peer observation reports provide the foundation for promotion. Still, one must note that a candidate might be denied promotion despite being a great teacher; if one shows no interest in community service and professional development. Volunteerism is the mainstay of the service category: volunteering with the United Way (or other charitable organizations), working with Habitat for Humanity, being active in local churches, or giving time and effort to feed the hungry demonstrate one’s commitment to community service. What counts as an adequate effort will vary across institutions, but, however defined, all such efforts go into one’s promotion portfolio.

A further aspect of community service involves service to the college itself. This obligation is commonly discharged by service on committees. As usual, this depends on the school and how much faculty governance there is and what venues are available for faculty input. Some schools may have few standing committees, and others may have a lot. For example, this writer’s school usually has thirteen to fourteen committees (for about ninety faculty members) and faculty are assigned to at least one and are encouraged to volunteer for more. This writer has served on as many as four committees in a single academic year and this on top of a five-course teaching load. Of course, the amount of work a committee requires varies, but many such as promotion committees, assessment committees, and accreditation committees involve countless hours of discussion. Now on this score, four-year schools will hardly differ, although the weight of committee work figures much more prominently at two-year schools. Four-year research universities may have plenty of committees—probably more when you include both departmental and campus-wide committees—but that sort of service likely does not weigh as heavily for promotion and tenure there as it would at a community college.

With this review of scholarship, teaching, and service, the picture of intellectual life at a two-year school should be a little more in focus. So much depends, of course, on the individual—his or her energies, ambitions, career goals, etc. Given the teaching load and the community service component, one’s intellectual energies may well be spent by the end of each day. Even in this context, if one has colleagues, one will have camaraderie and quality conversation. However, in the case where one may be the only philosopher on campus, one can quickly feel isolated. There is always ample opportunity for inter-disciplinary discussions as one typically will be housed with faculty from other disciplines. Unless there is a “philosophy department” proper with its own separate building or wing of a building, philosophy will be mixed with English, history, political science, psychology, sociology, or any combination of fields in the arts and sciences.

This makes for immediate contact with a variety of fields, and that can be stimulating. Having a set of interdisciplinary colleagues can foster philosophical thinking and support one’s own activities. On the other hand, it is possible that colleagues in other fields may be suspicious of philosophy and of philosophers and will not be as open as one might wish. This does occur, and in particular, with administrators who have little patience with philosophical distinctions or analyses. So, intellectual life can be both open or closed depending on the particular school and mix of faculty.

This point is mentioned because at four-year schools, one is typically housed together with other philosophers in a department. Being a member of a department ipso facto puts you in community of philosophers. A community of philosophers (regardless of whether they all “get along”) provides a supportive environment and a context for elevated discussions. Graduate school conditions one to this. However, once one is at a two-year school, that framework (and the intangibles with it) may no longer apply. One will have to find one’s own way in satisfying one’s intellectual needs.

Having sketched these contrasts between professional life at four-year universities and two-year community colleges, we may conclude with some comparison of tenure and pay. Such career and pecuniary interests are not the least of concerns for many coming to a two-year college. While the previous contrasts may cast the community college context in somewhat negative light as compared to four-year colleges and universities, this last point of comparison certainly speaks well of two-year schools.

The very good news is that tenure can be granted in as few as three years in many cases. This depends on the school, of course, as there is no rule. Other schools may grant tenure...
after four or five years. Obviously, there are some schools that
do not have tenure but only “continuing contracts.” But even
in these cases, there is a short probationary period prior to
being bestowed with the “continuing full-time” status (this as
opposed to “temporary full-time” or the like). This contrasts
with the traditional four-year context where tenure is granted
after six years.

In some schools, tenure is purely an administrative
decision. This means that an academic dean or vice-president
will make the decision. Whether that official seeks counsel
from faculty is a separate issue, and there may be no formal
avenue for faculty input on tenure decisions. Other schools may
have a committee including faculty, or may even have a faculty
committee itself make tenure recommendations. The process,
obviously, will vary. Recalling our discussion of scholarship,
teaching, and service, tenure, like promotion, will be based
primarily on one’s teaching ability. Typically, administrators visit
classrooms and make assessments of one’s teaching.

Even better news is that salaries, while they vary, are very
competitive. Some two-year schools pay more than some four-
year small private colleges and as much as some mid-range
public universities. Generally, the premier research institutions
reflect the highest pay for philosophers. Although people
generally do not like to disclose their salary or compare notes,
one can research this through the AAUP, the Chronicle of Higher
Education, or the Advocate—all sources include a yearly review
of salaries of academics across the country. Statistics compiled
there list salaries by rank, by type of institution, and by state.
The AAUP survey can be accessed from the APA website. You
are strongly encouraged to consult this to get a good picture
of what you may likely receive as compensation. All in all,
teaching at a two-year school can be as financially rewarding
as it is intellectually and socially.

V. Advice for Job Seekers

Having said all of the above, this Guide would be remiss if it
did not include some practical advice for job seekers. We offer
advice concerning four areas of the application process: these
are the curriculum vitae, recommendations, letter of interest,
and the interviews. Remember, the advice here is general and
you may have to gauge it against your own research of the
school to which you are applying.

First, the basic document by which hiring committees first
judge an applicant is the curriculum vitae or a resume. Although
these two terms mean relatively the same thing semantically,
in practice, they are two different things. The curriculum
vitae, hereafter “CV,” is a record of education and academic
credentials. The resume is a statement of qualifications,
including career objectives, for an application for a job. One way
to draw the difference is to say that the CV is purely an academic
instrument whereas the resume is more purely a business tool.
Typically, resumes begin with a statement of career objectives
and then of one’s qualifications. A CV typically begins with a list
of one’s educational degrees (what, where, and when) and then
goes on to cite academic accomplishments such as teaching
and research. Many graduate schools help students to craft their
first CV, for that is how the game is played at the university level.
However, sending a CV to a community college may make one
appear over-qualified, especially if you have earned a Ph.D.
That is the one draw-back to a CV. A community college will
hire with a minimum of a master’s degree and, in some cases,
Ph.D.s are looked at as too research-oriented to really fit with
a two-year school. Of course, this is unfair to many Ph.D.s, but
it is probably true of many others.

On the other hand, a resume tempers the academic
background, especially if you have a Ph.D., but still communicates
your qualifications. However, the resume can short-change your
qualifications in that hiring committees are not interested in your
research and publications, but only whether you can teach. So,
a resume can be used to highlight your teaching skills in a way
that a CV may not. Although this may leave some of your other
credentials unstated, it certainly does not mean you should hide
your Ph.D. One should research the school first by looking at the
catalogue and seeing how many faculty there are, how many
have Ph.D.s, and this will give you some idea of how to proceed.
It is not that one or the other, the CV or the resume, is better, it
is just that each does different things. Knowing the character
of the school or even, if possible, the character of those who
are hiring, will help you decide which to use.

Second, recommendations can come in many forms. If
one is fresh out of graduate school, recommendations may be
shot through with ringing endorsement of your research and
your potential to publish. There may be cursory references to
your teaching ability. If anything has been emphasized in this
Guide, it is that teaching is the end-all and be-all at two-year
schools. Consequently, if one is targeting a community college,
then one should be sure that recommendations amply testify
to one’s teaching ability. Here, it is advisable to obtain a letter
from someone who has observed or directed your teaching
in the classroom, perhaps when you were a TA in graduate
school or an adjunct instructor at an area college. A letter from
a person directly acquainted with your talents as a teacher will
help move your application along.

Moreover, one should be able to supplement the
recommendations with teaching evaluations or summaries
of teaching evaluations demonstrating your teaching ability. A
hiring committee may have difficulty judging whether you are
worth an interview if nothing in the application dossier really
speaks to teaching ability. Also, for emphasis, remember that
if all that recommendations do is certify your originality as a
researcher and laud your publications, then you really have
not addressed the main job qualification: teaching. The advice
here is to know which of your recommendations speak to
your teaching and send those. If you do not have someone
who has observed or otherwise has first-hand knowledge of
your teaching, then ask your mentor (master’s or dissertation
advisor) to write a special letter of recommendation exclusively
addressing your teaching.

The trump card in your application for employment
would be previous teaching experience at a two-year college.
Consequently, if at all possible, one should try to land an adjunct
position at a community college and test the waters for oneself.
Nothing is more desirable than actual teaching experience at
the two-year level. Possessing this teaching experience further
legitimates one’s candidacy.

Third, the letter of interest is critical. If you have chosen your
vehicle (CV or resume), and if you have your recommendations
in order (emphasis on teaching), then the letter of interest has
to make those documents come to life in your own person.
Show them you are the person the recommendations talk about.
CV or resume say you are. To this end, one should have some
teaching philosophy formulated, perhaps even including that
on a single page attached to the letter of interest. But the letter
of interest needs to highlight teaching and downplay research.
You may say that you have publications, but do not waste space
elaborating on their content. If you want to make the research
somewhat visible, then link it to teaching, but it should not
overwhelm the teaching.

In giving that advice, one should also display an
understanding of the two-year college context. This Guide has
given you a start: you are now apprised of the importance of
service, the diversity of students, and the necessity of teaching
out to all students. Show the hiring committee you are ready, willing, and able to engage the whole range of responsibilities. Moreover, if you have actually attended a community college in the past, then this is the opportunity to make that known. If you have taught at a community college and you have been a community college student as well, then your letter of interest will be that much more convincing. Also, research the school and reflect some awareness of its history and current developments. Any or all of this makes for a good letter of interest. After all, if the letter does not show that you are motivated by teaching, are driven to serve, and are willing to be engaged in your community, then it will disclose that your qualifications fall short of your professed interest. In other words, you must demonstrate your support of the broad mission of community colleges in our society.

Finally, the interview is critical, and the most important part of the interview is typically the teaching demonstration. As for questions from the hiring committee, one should be prepared to respond to a variety of questions concerning teaching philosophy and techniques. Also, there might be questions about how to deal with disruptive students in the classroom. It is important to have something specific to say in response to these questions. As for the teaching demonstration, this is the part of the interview that can land one the job. The advice here is to choose something substantial and teach that to the committee as if they were students. Show them that you know how to teach by teaching them something. An energetic and substantial bit of teaching that reveals your knowledge, passion, and ability to organize material is required.

The length of the teaching demonstration can range from a normal class session to as short as fifteen minutes. When asked to teach for only fifteen minutes, the key is to resist all efforts to merely condense a bunch of material. Instead, the advice is to focus on something small, but substantial, and teach that to the committee. Choose an argument, a distinction, or some small issue that one can really get into in fifteen minutes. Perhaps a short piece of text that one intends to explicate would be good. But, whatever you choose for the short teaching demonstration, make sure that you have enough time to get into the material and show why it’s important. Don’t waste time with niceties; just dive right in.

VI. Some Statistics of Interest

Having come to the end of our survey of the professional context of community colleges, it is helpful to share a sampling of statistics that bear out what has been said here. The following selection of statistics is drawn primarily from the American Association of Community Colleges website (www.aacc.nche.edu). One may visit that site for additional information. Statistics from other sources are indicated by a footnote.

A. General

There are 1,173 public and private community colleges, and when including all satellite campuses, the total is about 1,600 campuses. This breaks down into 986 public; 171 private/ independent, and 29 tribal schools. (These numbers do not sum to 1,173, and it is not explained on the website; perhaps a typographical error with one of the numerals.)

B. Enrollment

- 11.6 million students
- 45% of all U.S. undergraduates
- 45% of all first-time freshmen
- 59% women; 41% men
- 62% part-time; 38% full-time [Full time: 12 or more credit hours]
- In four-year schools, 25% part-time; 75% full-time

C. Student Profile

- 47% of all African-American undergraduates
- 55% of all Hispanic undergraduates
- 47% of all Asian/Pacific Islander undergraduates
- 57% of all Native American undergraduates
- Average student age is 29
- 54% of all community college students work full-time
- 45% of all community college students are first-generation college students
- 47.5% of all first-year students in public two-year colleges do not return for the second year [compare to four-year schools: only 30.1% of first-year students do not return for the second year]

D. Degrees and Certificates Awarded

Community colleges award Associate of Arts (AA) or Associate of Science (AS) degrees, most recent data indicate 486,293 awarded nationwide. Certificates in specialized fields like automotive mechanics, firefighting, law enforcement, and dental hygiene, among others were awarded to 235,999 students nationwide.

- 50% of all new nurses, and the majority of healthcare workers are educated at community colleges
- Close to 80% of firefighters, law enforcement officers, and EMTs are credentialed at community colleges
- The five hottest programs at community colleges are Registered Nurse, Law Enforcement, Licensed Practical Nurse, Radiology, and Computer Technologies

E. Faculty at Community Colleges

- 67% of faculty at public community colleges are part-time
- 75% of faculty at independent community colleges are full-time
- Public community colleges have 18 full-time equivalent students per FTE faculty
- 51.2% of full-time faculty are tenured
- 35% of full-time faculty are not in a system with tenure
- 14% of full-time faculty are on a tenure track, but do not have tenure
- 32.4% of full-time faculty are very likely to retire or leave within 3 years
- 17.6% are very likely to leave for full- or part-time employment elsewhere

Degrees of Faculty

- 16% have a Ph.D.
- 65% have an M.A.
- 11.9% have a B.A.
- 4.8% have less than a B.A.
- 2.2% hold 1st professional degree

Time Allocation of Faculty

- 67.9% teaching
- 12.7% administration
- 6.4% service
- 6.0% professional development
- 4.7% research
- 2.4% consulting
VII. Conclusion
In sum, and in short, teaching philosophy at a two-year community college is both challenging and rewarding, and getting one’s foot in the door requires some adjustment from one’s graduate school days. Successfully navigating this shift from research to teaching, or effectively renegotiating the balance of research and teaching, will open up a very satisfying career track. The Committee on Philosophy at Two-Year Colleges provides this Guide as a brief primer on the professional context for philosophers at community colleges and technical schools. We hope that, with these insights, one may pursue this career track with more immediate success.

Endnotes
1. The authors wish to acknowledge the critical input of the following individuals, without whom the Guide would be much poorer: Harold Weiss, Northampton Community College; Bob Boyd, Fresno City College; Kerry Stewart, Gainesville College; Malcolm Munson, Greenville Technical College; and Geoffrey Frasz, Community College of Southern Nevada. We also thank the editors of the APA Newsletter on Teaching Philosophy for their careful comments and suggestions, which have given this document its final form.
2. Some faculty say this list is very generous, by which is meant that many schools offer even fewer courses than these. For example, one might only offer introductory Philosophy, Logic, and Ethics.
3. The Committee for Philosophy in Two-Year Colleges is in the process of compiling data on two-year college faculty. At this printing, information is rather incomplete and is not included here. However, when reliable statistics become available they may be incorporated into this document.
5. Ibid.
7. Reported by Skip Downing in On Course Newsletter, citing American College Testing (ACT)—Data through 6/1/06.

Online Discussion and the “Place” of Learning
Andrew Carpenter
Ellis College of the New York Institute of Technology
I hope to inspire philosophy teachers to explore ways of using online discussions to improve their students’ learning.

I hang this hope on my use of online discussions to improve the quantity and quality of my students’ discussions throughout the past fifteen years of my teaching life.

My point of departure, however, is not my own philosophical classroom but rather two ideas I draw from science research about online interaction. The first idea is that online discussion can create virtual communities marked by mutual supportiveness and learning. The British social scientist Brian Loader explored the idea that online discussion can create a virtual community through a qualitative study of computer-mediated social support for people with diabetes.1 Loader explored ways that the Internet provides a “space where disparate individuals can find mutual solace and exchange information within a common community of interest” (Loader 2002, 62) and concluded that the interactions in the online medical self-help communities he studied provided participants with several significant types of social support and served to disseminate, with a high degree of accuracy, evidence-based clinical advice within “a secure space where such information can be assimilated and reflexively shaped to inform lifestyle choices” (Loader 2002, 62). These results cause me to wonder: Can philosophy teachers improve student learning by using a virtual online classroom where students interact in supportive and educationally meaningful ways?

A second intriguing idea supported by social science research is that online interactions can foster strong friendships. Recent survey research indicates that the Internet can be “a catalyst for creating and maintaining friendships and family relationships” (UCLA Center for Communication Policy 2001, 8),2 and a sustained research program led by the sociologists Keith Hampton and Barry Wellman using survey research, participant observation, and qualitative textual analysis has found that online interactions can strengthen social ties.3 These results lead me to ask: Can philosophers learn how to use online discussions to build strong social relationships with and between their students, and can they do this in ways that improve student learning?

My experience suggests that the answer to each of the questions raised above is “yes.” To condense my experiences to a slogan, the virtual places where I have taught are “larger” than traditional physical classrooms in ways that philosophy teachers can exploit to help our students to learn. To explore this point, I will discuss reasons why online discussions can increase the quantity and quality of our classes’ philosophical discussions. I will also summarize one example of a successful online discussion, and I encourage readers who want to review other examples to contact me.

Increasing Quantity of Philosophical Discussion Through Online Interaction
Within an online classroom, students neither “compete for” nor “share” a limited quantity of collective discussion time: students type or read messages at any time and can work together over an extended period to construct sophisticated discussions. Put simply, an online classroom can support more total interactions than is possible in a traditional class period.

In my experience, students can almost always be motivated to take advantage of this opportunity for additional educational dialog: I have found that well-designed and well-facilitated online discussions frequently lead to intensive discussion of philosophy with a greater total number of interactions by a higher percentage of the class than I experience in traditional classrooms.

Below is some data that illustrates this quantitative advantage. These data are from two sections each of business ethics and medical ethics. Both are 300-level, eight week/three quarter credit, exclusively online courses I taught during the spring and summer of 2004.

Entire Group:
Total number of students: 64
Total comments posted: 5,946
Comments Made: Least: 4, Most: 345, Median: 87, Average: 93
Comments Read: Least: 9% of total, Most: 100%, Median: 99%, Average: 78%

Students Who Attended Class Entire Term* (*9 students were “unofficial drops”)
Total number of students: 55
Total comments posted: 5,884

— 9 —
The first problem is discussions dominated by a few, which often are less effective than discussions that benefit from the perspectives and insights of many. While discussions with greater inclusiveness are not necessarily stronger than discussions that exclude more students (for example, greater inclusiveness may well be less valuable in discussions of highly technical topics where teachers need to dominate to keep the discussion on track), I have found that inclusive discussions typically are stronger and especially so when each contribution is of relatively high quality, as is possible when participants in online discussions take advantage of the greater available time to prepare substantive contributions.

Inclusive, high-quality discussions are especially hard to achieve when, as is commonly the case in philosophy classes, students perceive course topics as dauntingly difficult or as irrelevant to their lives. While philosophical topics are no less challenging when discussed online, the time-limited nature of traditional classrooms exacerbate those two problems: the pressure to engage in rapid oral give-and-take can intimidate some, and requires all to formulate and express their points rapidly. While some students are adept at making insightful points quickly, many are not. Participants in online discussions, by contrast, can benefit from the opportunity to read, reflect on, and respond to others without the time pressures that are inherent in scheduled class sessions.

The final problem that occurs in many oral discussions but less frequently in online discussions is unwelcome student conformity and fear of constructive philosophical disagreement. In applied ethics classes especially (but in others too), philosophy teachers often expect their students to engage in open and honest assessment of each other’s perspectives and values. Learning how to do this without defensiveness or rancor, however, is a significant challenge, and I have found that there typically exists less social pressure to conform in online discussions, and have observed that this seems to make it easier for students to disagree with each other in thoughtful and respectful ways.

A Successful Online Philosophical Discussion

Online philosophical discussions are much more likely to promote high-quality learning if philosophy teachers design them carefully. To illustrate this, I will summarize the design of a successful discussion in one of my online classes.

The discussion I will summarize took place in a January 2004 section of my 300-level exclusively online undergraduate philosophy of technology course. The discussion occurred near the middle of the course, during the first of two weeks devoted to discussing Richard Sclove’s Democracy and Technology.

To provide more context, these are the course texts and outcomes:

**Course texts:**
- Langdon Winner, *The Whale and the Reactor*
- Aldous Huxley, *Braze New World*
- Richard Sclove, *Democracy and Technology*
- Ursula K. Le Guin, *The Dispossessed: An Ambiguous Utopia*

**Course Outcomes:**
- Use philosophical discussions by Langdon Winner and Richard Sclove to better understand the role and significance of technology and technological change in contemporary culture.
- Use literary portrayals of fictional cultures by Aldous Huxley and Ursula K. Le Guin to better understand and evaluate the central scientific, technological, and political values of contemporary culture.

---

**Increasing Quality of Philosophical Discussion Through Online Interaction**

The greater time available for participation in online discussions is a significant advantage that allows online discussions to minimize three problems that frequently lower the quality of discussions in traditional philosophy classrooms.
• Understand the leading ideas and practical relevance of several different perspectives on technology and technological change, including moral perspectives, political perspectives, and perspectives that focus on practical benefits, economic consequences, and risk assessment.

• Discuss some of the most important interrelationships between technology, technological change, political liberty, and social justice.

• Debate the extent to which specific technologies promote or retard the development of freedom, justice, and democracy.

• Explain and defend your own perspective on the political and cultural significance of technology and technological development.

These are the weekly lesson’s learning outcomes and learning activities:

1. Lesson 5: Democratizing Technology
   a. Purpose:
   This lesson explores Richard Sclove’s passionate call for the democratization of technological design and practice. Sclove observes that citizens rarely (if ever) participate in the development of new technologies or public policies that address technologies’ social impact. Sclove’s central idea, that we ought to develop procedures and institutions that let citizens deliberate the creation and development of new technologies and oversee and regulate their use, is also discussed.

b. Lesson Objectives:
   After completing this lesson, you should be able to:
   1. Compare and contrast the different approaches to technology presented in Sclove’s case studies
   2. Understand Sclove’s definition of technology
   3. Discuss Sclove’s vision of strong democracy
   4. Debate whether and to what extent Sclove’s democratic approach to technology and technological development can be realized in our society

c. Lesson Assignments include:
   Read Chapters 1-3 in Democracy and Technology
   Participate in Synchronous Seminar on Democratizing Technology
   Complete Second Paper Rewrite
   Participate in Six Asynchronous Discussion Questions

Finally, here is the prompt for the online discussion under consideration:

Discussion Question 1:
   Compare and contrast the different approaches to technology in the Spanish village of Ibeica and the Old Amish community in Ohio. Be sure that your answer makes judicious use of textual evidence from Democracy and Technology.

All seventeen students participated in this discussion. The smallest quantity of discussion was one comment, and four students typed two or fewer comments. The greatest quantity of discussion was fourteen comments (two students made ten or more comments), and the average number of comments per student was five and the median was six. The discussion extended from the first day of the lesson (a Monday) to the last (the following Sunday). In total, there were ninety-three comments consisting of 7,498 words (an average of eighty-one words per post). Ninety-one of the posts were from students and two were from me. I consider this discussion successful because so many students were able to construct a serious and sustained discussion of philosophical material and because the members of the class accomplished this without much assistance from me. Although I noticed the misspellings and unclear use of language that plague most undergraduate student writing, I observed few responses that thoughtlessly mischaracterized the author’s or other students’ perspectives. The discussion also included these actions:

1. Asking questions of the professor;
2. Asking questions of another student;
3. Quoting the text directly, usually with citation;
4. Applying on the assigned topic;
5. Applying relevant material from other courses;
6. Referring to earlier readings in the course;
7. Referring to other forms of interaction in the course;
8. Building on one another’s posts analytically;
9. Respectful questioning of each other’s perspectives;
10. Challenging the consistency of another’s analysis;
11. Offering encouragement and support;
12. Connecting discussion topic to one’s own life;
13. Using technical terms correctly;
14. Expressing humor, irony, or wit;
15. Critically assessing the author’s perspective;
16. Discussing connections with popular culture;
17. Crafting in-depth responses of over 300 words;
18. Crafting incisive responses of under twenty words;

The discussion also included a tangent where students debated the limitations and strengths of online versus oral discussion; while such a tangent was not unexpected in a course on the philosophy of technology, I found it interesting and worthwhile.

As an educator, this discussion strikes me as an immensely fruitful educational experience for undergraduate non-majors, and I believe this discussion illustrates claims I have made about the quantitative and qualitative advantages of online interaction. Some online discussions fail, but I believe that the advantages of online discussions I have discussed here explain why philosophy teachers can hope to achieve successes like this if they are inspired to learn how best to use the extended discursive pedagogical space available online.

Endnotes


4. The source of this data is grading records maintained by the instructor, Rebecca L. Carpenter, associate professor of English at McDaniel College.

5. A "synchronous seminar" is a real-time facilitated online chat.

6. An "asynchronous discussion question" is non-time-limited online discussion of the sort discussed in this article.

7. The discussion transcript runs thirty-six pages and is too large to analyze here. I would, however, be willing to share and discuss with interested readers a version of the transcript with all identifying references removed.

Teaching Algebraic Term Logic
George Englebretsen
Bishop's University

My observations over the past four decades of teaching logic have convinced me that most teachers of mathematics at the high school level as well as college level for non-mathematics majors intend that their students take away from such instruction not only certain mathematical skills and ways of thinking but an appreciation for and an ability to reason logically. But it is almost as certain that they do not actually teach directly any system of formal logic. There are two reasons for this. First, there is simply the presumption of most mathematics educators (and most mathematicians, for that matter) that learning a sufficient amount of elementary mathematics, unaided by special instruction, will inculcate (perhaps subliminally) a proper sense of how one reckons logically. Second, there is the suspicion (mostly correct) that the standard system of formal logic now in place is simply too complex and difficult to be introduced too early. I believe that there is no good reason to think that just because a student has mastered a good portion of mathematics he or she has, ipso facto, mastered the techniques of formal logic to a satisfactory degree. But I also believe that the kind of logic now taught in universities offers little hope to anyone who would teach formal logic to students at any level. The standard system of formal logic is the first-order predicate calculus (which includes the logic of propositions and, usually, the logic of identities). This system is often referred to as MPL— modern predicate logic. MPL has dominated logical studies for more than a century. It was initially developed to serve as the foundation of all mathematics, and though that claim has long been abandoned, there is no gainsaying its power as a tool for accounting for a very large range of kinds of deductive inference. MPL has achieved this logical power at the expense of being both unnatural and complex (thus making it difficult to learn). Before the advent of MPL, and going back all the way to Aristotle, who first formulated a system of logic, there was a different version of logic, traditional formal logic—TFL. Unlike MPL, TFL was both natural and fairly simple; however, it was also far less powerful. As it happens, these are not the only systems of logic from which to choose. During the past thirty years a small group of logicians has developed a system of formal logic that makes use of a number of insights of the nineteenth-century British algebraic logicians (e.g., Boole, De Morgan, Jevons), rests on a theory of logical syntax that is close to that of natural language, is armed with a symbolic algorithm that is both perspicuous and simple, and (importantly) matches the power of MPL. This system of logic, ATL—algebraic term logic—makes use of a notational system that is virtually identical to that of standard algebra. It is a system that I believe can be taught easily, and in only a few weeks, as an instruction module in any standard course of algebra. As well, it can provide the main content of a full semester introductory course in formal logic at the college level. Since most of these students will already have a familiarity with algebraic language and techniques, ATL will offer them a far less imposing introduction to logic than does MPL, whose notational system and techniques are not at all familiar and are certainly not natural. Moreover, the syntax of ATL, unlike that of MPL, is close to that of natural language. Consequently, while MPL requires "translation" from natural language into its symbolic formulae, ATL generally requires nothing more than straightforward transcription. In the remainder of this essay, I offer a brief sketch of what that system looks like and indicate how it would be both appropriate and useful for teaching the techniques of formal reasoning.

We begin with an exceptionally simple formal language consisting of uppercase letter variables (A, B, C...), a unary sign of negation (−), and a binary sign of addition (+). We use a variety of parentheses, brackets, etc., to group expressions in the familiar ways. Our variables stand for terms. We can say that a term is any expression that can be used to signify a property or relation. Thus, in English, 'red', 'happy', 'wise', and 'loves' are terms. We can also treat proper names as terms (e.g., 'Socrates', 'Mars', and 'Hamlet'). Finally, as we will see, any sentence or sentential clause can be treated as a term (called a "sentential term"). Any pair of terms can be combined by interposing the + to yield a new (syntactically more complex) term (sometimes called a dyad). Any term, simple or complex, can be negated by prefixing – to yield a new term. An infinite number of complex terms can be formed in these ways. Our sign of addition was chosen because it shares with arithmetic-algebraic addition two important formal features: it is symmetric and associative. Thus:

\[ A+B = B+A \]
\[ A+(B+C) = (A+B)+C \]

As well, our negation recalls the familiar usage of unary negation in algebra, where it can distribute into an addition:

\[ (−(5+2)) = (−5 + (−2)) \]

Thus:

\[ −(A+B) = (−A + −B) \]

So far, the system is extremely simple—but extremely weak. We can derive new terms from previous terms by virtue of the distributivity of negation and the symmetry and associativity of our addition. But that’s it. We can increase the power of our little algebra by defining two new term formatives. First, we define a unary plus as follows:

\[ A+ = df \quad −A \]

As in arithmetic and algebra, we will generally suppress unary plus signs, taking (from now on) unmarked terms to be implicitly positive. We do this in English as well, though there are some exceptions where we overtly mark positive terms (e.g., massless/massive, hopeless/hopeful).

Next, we define a binary minus (subtraction):

\[ A−B = df \quad (−A+B) \]

Notice that our subtraction, just like algebraic subtraction, is defined in terms of our unary minus and binary plus (cf. 7−5 = (−7)+5), where subtraction is defined in terms of negation and addition). The introduction of a binary minus is important because it provides us with a formative that is not symmetric or associative, as addition is, but does have the formal features of reflexivity and transitivity. Thus:

\[ (A−A) = 0 \]
\[ (A−B)+(B−C) = (A−C) \]

This last, in particular, represents an important augmentation of the system’s power since it permits the formation of a new dyad from two other dyads, neither of which is equivalent to it.

We now have a formal system of terms, either negative or positive (indicated by our unary minus and unary plus), and
formatives for combining those terms to form more complex terms (using our binary plus and our binary negation). We have, in effect, a very simple algebra. But to what end? It turns out that a number of natural language expressions share certain formal features with our unary and binary formatives. In English, for example, we use expressions such as ‘not’, ‘non’, ‘un...’, ‘it’s not the case that...’, etc., to negate other expressions. And, while these natural language expressions have many semantic and pragmatic features not attributable to our unary minus, they do share with it its formal features. Double negations cancel (‘His coat is not unbuttoned’ = ‘His coat is buttoned’), and negation is distributed (‘She is not untidy and dirty’ = ‘She is tidy and undirty’). [Note that in this last, taking ‘dirty’ = ‘unclean’, ‘untidy’ = ‘un-unclean’, which, by double negation, equals ‘clean.’] Expressions such as ‘and’ share the formal features of our binary plus (‘The moon is low and full’ = ‘The moon is full and low’, ‘Sam drinks wine and Edna drinks milk’ = ‘Edna drinks milk and Sam drinks wine’). But what of our defined formatives? Do we find anything like them (formally) in natural language?

In English we say things such as ‘Sam drinks wine only if Edna drives’. Now ‘only if’ has the formal features of our binary minus. It is both reflexive (‘Sam drinks wine only if Sam drinks wine’ is tautological) and transitive (from ‘Sam drinks wine only if Edna drives’ and ‘Edna drives only if the roads are dry’ we can derive ‘Sam drinks wine only if the roads are dry’). There is more. When Aristotle first formulated his system of logic (called Syllogistic), he put the sentences of the arguments he was analyzing into a small number of standard forms (called categorical forms). He did this by paraphrasing the natural language (Greek) sentences. His four categorical forms (in English now) were: ‘P belongs to every S’, ‘P belongs to no S’, ‘P belongs to some’, and ‘Non-P belongs to some S’. Notice that in each case the sentence consists of a pair of terms, P and S, and some phrase that comes between them. The terms were terms literally, in that they were the termi, the end points of the categorical sentences. The phrases in the middle were logical copulae, they came between pairs of terms and tied, bound, glued them to form a complex term—a dyad. Close inspection of the four categoricals reveals that the copula ‘belongs to’ shares the formal features of our binary plus; ‘belongs to every’ has the formal features of our binary minus. Since ‘belongs to no’ can be paraphrased as ‘Not:...belongs to’, we could define the other two categorical forms in terms of the first two and our unary negation. Scholastic logicians of the Middle Ages gave each of the four categorical forms a name derived from the first two vowels of the Latin words for ‘I affirm’ (‘affirmo’ and ‘I deny’ (‘nego’). Thus, even today they are known as the A, E, I, and O forms respectively. We can symbolize them in our system as follows:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: +P+S</td>
<td>Some P are S</td>
</tr>
<tr>
<td>E: –(P+S)</td>
<td>Some P are not S</td>
</tr>
<tr>
<td>I: P+S</td>
<td>No P are S</td>
</tr>
<tr>
<td>O: –P+S</td>
<td>No P are not S</td>
</tr>
</tbody>
</table>

In doing this we needed only our undefined formatives (unary minus and binary plus). The scholastic logicians had a simple, but non-algebraic, way of formulating these: PaS, PeS, PiS, and PoS, using the vowels as binary formatives. Here, the second and third are symmetric and the first is transitive.

So where do we stand now? We have a simple algebraic system that can be used to model some kinds of expressions (terms, complex terms, sentences) in a natural language such as English. Rules and definitions governing the formatives of the algebra can then account for some of the kinds of equivalences and inferences we make in the natural language. The system is simple, but it is still not very powerful, and it certainly has a way to go before we can call it natural. The simple fact is that we rarely, if ever, say things like, ‘Beauty belongs to some paintings’. What we do say is, ‘Some paintings are beautiful’. The categorical form, with their terms at the termini, are unnatural in English. They were just as unnatural in Aristotle’s Greek. And they were unnatural in the Latin of the scholastic logicians. But they had a solution. Recognizing the awkwardness of a sentence such as ‘Rationality belongs to all men’, they reformulated it step by step as follows. First, they split the sentence into two parts: ‘Rationality belongs to /all men’. This involved splitting the logical copula into two parts: ‘belongs to /some’. Each term then had a part of the copula that was now joined exclusively to it. Next, they reversed the two parts of the sentence: ‘all men rationality belongs to’ (still bad English—and equally bad in Latin). Then they reversed the order of the second half of the sentence: ‘all men belongs to rationality’. Next, they replaced Aristotle’s ‘belongs to’ with a grammatically appropriate form of ‘to be’ (still today called, all by itself, a “copula”) and put the terms in appropriate grammatical form: ‘all men are rational’. That’s what we say. ‘All men are rational’ is our natural way of saying, ‘Rationality belongs to all men’. The scholastics’ trick in going from Aristotle’s categoricals to our natural sentences was simply splitting the copula. Each part of the split copula was given a name. Expressions such as ‘all’, ‘every’, ‘some’, ‘at least one’, etc., are called quantifiers; expressions such as ‘are’, ‘is’, ‘were’, etc., are called copulae. A categorical sentence (and a very large number of natural sentences can be formulated as categoricals) consists of a quantified term plus a qualified term—a subject and a predicate. It is essential to keep in mind, however, that even after splitting the logical copula is still a simple logical formative; it is simply expressed in two discrete parts.

Split copular sentences are the norm in natural language. Sentences of the form ‘Some...are...’ share the formal features of our binary plus. Sentences of the form ‘All...are...’ have the formal features of binary minus. Consequently, we can split our two binary formatives. Each such formative will now consist of a pair of plus and minus signs (a sign of quantity and a sign of quality). Our four categorical forms are then:

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Expression</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: –A+B</td>
<td>Some A are B</td>
</tr>
<tr>
<td>E: –A−B</td>
<td>Some A are not B</td>
</tr>
<tr>
<td>I: +A+B</td>
<td>No A are B</td>
</tr>
<tr>
<td>O: +A−B</td>
<td>No A are not B</td>
</tr>
</tbody>
</table>

Note that by applying a unary minus to I and O and then distributing we get E and A, respectively, showing that I and A are negations of one another, as are O and E.

Our formal language is now much richer. It includes two unary formatives and two binary formatives, each of which has both a split and unsplit version. We will introduce no other formative expressions into our formal language. Every formative element will either be a plus sign or a minus sign. In each case our motive for amending or augmenting the system was to render it a better model for natural language. It’s time now to say something more about terms. From an ATL point of view, every non-formative expression is a term. We tend to think of nouns and adjectives, maybe verbs and adverbs, as terms. And of course they are. But the term logician takes combinations of terms to be terms and, most importantly, entire phrases and sentences as terms. Moreover, every term is either a (formally, i.e., syntactically) simple term or a dyad, and every dyad is the result of joining a pair of other terms (one or both of which may themselves be dyads) by means of a split or unsplit binary formative expression. Any natural language is ripe with formative expressions. We have lots of quantifiers, qualifiers, negators, split and unsplit binary formatives (for both terms and sentences). Sometimes we have both split and unsplit versions...
of a binary formative along side one another. For example, we say both, 'If Sam drinks wine then Edna drives' and 'Sam drinks
wine only if Edna drives'; we say both, 'She is both neat and
clean' and 'She is neat and clean'. In each such pair we use a
split formative expression in the first case and an unsplit one
in the second. Moreover, we have in our language a number of
formative expressions that, while not directly symbolized in our
formal language, can be defined so that they are formulable.
For example, 'or' (and its split version 'either...or...') might be
defined as 'not both not...and not...'. Thus: 'He is British or
Canadian' = 'He is not both not British and not Canadian'.
We have seen that what are to be construed as terms are all
kinds of non-formative expressions, including phrases and
sentences. But two kinds of expression are worthy of special
attention: singular terms (e.g., proper names) and relational
expressions.

A major reason for the establishment of MPL to replace TFL,
in addition to the need for a foundation for mathematics, was
the failure of TFL to account for reasoning involving sentences
containing singular terms, sentences involving relational terms,
and sentences constituted by other sentences. MPL treats
singular terms very differently from general terms (basically
all other non-sentential terms, which it calls “predicates”).
Compare the two sentences 'All men are rational' and 'Socrates
is rational'. In MPL, '...is rational' is a predicate (in their
sense, not ours) and contains a gap. Like functions, predicates need to
have their gaps filled by arguments (viz., names). 'Socrates' is
a name, and thus is suited to fill the gap in ...is rational'. Predicates
are usually symbolized by uppercase letter, argument names
by lowercase letters; so the second sentence is formulated in
MPL as: ‘R(s)’. On the other hand, there is no name in the first
sentence. The MPL logician paraphrases it as 'Every thing is such that
if it is a man then it is rational'. [Notice that the transitivity
of the A categorical is now guaranteed by the transitivity of the
'if...then...' embedded in this paraphrase. ] Now '...is a man
and ...is rational' are predicates with gaps. There are no names,
but there are pronouns (the two tokens of 'it') that can fill these
gaps—pronouns are seen as variable names. The expression
'Every thing is such that...' is construed as a quantifer (in their
sense, not ours) prefixed to the entire 'if...then' sentence and
"bounding" the variables (which are usually marked by lowercase
sentences such as x, y, z). Ultimately the whole sentence is
formulated as: (x)(M(x) ⇒ R(x)), where 'Mx' is the quantifier
and 'x' is the sign for 'if...then...'. A comparison of this formula
with the one for 'Socrates is rational' (i.e., R(s)) reveals the
difference in formal treatment in MPL of singular sentences
and general sentences. Our own system sees little formal
difference between the two (nor is such a difference to be found
in natural language). The A form 'All men are rational' can be
formulated using our split logical copula to yield: "M+R. What
now of 'Socrates is rational'? It would seem that here we have
a quantifier (the second half of our split copula) but no quantifier
(the first half). To see how we can supply a quantifier, consider
the following sentences: 'Babies cry', 'Babies are crying downstairs', and 'Baby is crying'. In natural language we often
suppress quantifier expressions (they are simply understood).
We say 'Whales are mammals' meaning 'All whales (not just
some) are mammals'. Thus in 'Babies cry' the hidden quantifier
is 'all'. We often say 'Babies are crying downstairs' meaning
'Some babies are crying downstairs' or 'There are babies
crying downstairs' (here we don't take the hidden quantifier
to be 'all'—imagine that!). In our third case 'Baby' is being
used as a name of a particular baby. In using that sentence we
surely mean, at least, that there is such a baby—and that it's
crying. When the subject term of a sentence is singular, 'Baby
crying', 'Socrates is rational', we omit the quantifier, not
because it is understood that the suppressed quantifier is 'all' (as
is the whale example), not because it is understood as 'some'
(as in the example of the babies downstairs), but because it
just doesn't matter which quantifier it is. Referring to 'some
Socrates just is referring to every Socrates; it just is referring to
Socrates. Thus, in the cases of natural language where we use
a singular term like 'Socrates' in referring to a single thing, we
simply use no explicit quantifier at all. However, from a formal
point of view, there must be a quantifier, suppressed or not.
When we formulate the whole sentence we supply the missing
quantifier ('all'), when we formulate the babies downstairs
sentence we supply 'some', when we formulate the Socrates
sentence we are free to supply either quantifier (an idea first
adumbrated by Leibniz). In our formal language we will use
the sign * for the quantifier attached to a singular (call it a
"wild" quantifier)—we can read it as a plus or as a minus
depending on which is required.

Identity statements (e.g., 'Ali is (identical to) Clay', 'The
Morning Star is the Evening Star') presented a challenge to
both the proponents of TFL and MPL. Since the logical syntax
underlying the predicate calculus is modeled on that of
functions and arguments, there was a question of just what the
predicate (function expression) of an identity statement might
be. Such statements typically consist of a pair of singular terms
(e.g., proper names) florring some form of 'is'. But the early
authors of MPL were insistent that 'is' is logically inert. It plays
no (logically) essential role in a predicate such as '...is rational'
'nal rational' does all the work. But in an identity statement there
is no other non-singular term to "do the work." The solution
was to posit two kinds of 'is', one that is logically useless and
another that is of exceptional logical import. This so-called "is of
identity" is taken as a predicate with two gaps. Superficially 'Ali
is strong' and 'Ali is Clay' are pretty similar. Each says something
about Ali. But a presumption of MPL is that, while general terms
('...is strong') can be treated as logical predicates, singular
terms ('...is Clay') cannot. Since every well-formed sentence
must consist of a predicate and enough singular terms to fill its
gaps, the only thing to do with identity statements is to raise the
normally insignificant 'is' to the lofty logical status of predicate.
With the promotion comes a special sign in the formal language
(=), special restrictions on interpreting formulae containing
that sign, and special rules governing inferences involving such
formulae. The result is "identity theory," a special appendage
to the first-order predicate calculus.

Since ATL is not bound by the presumption that singular
terms cannot be predicated (i.e., qualified in our system),
indeed, treats all terms on a par logically, the term logician
has no need of a special theory of identity. Identity statements
are simply treated as any other categorical with a singular subject
term. The two sentences 'Ali is strong' and 'Ali is Clay' would
be formulated as "A+S" and "A+C". No formal difference.
Identity is recognized as an equivalence relation (it is reflexive,
symmetric, and transitive). MPL guarantees this by fiat. It simply
claims that the 'is' of identity has those formal features (and it
reminds us of that by using a sign for identity that looks strikingly
like something we all take to be an equivalence relation).
Nonetheless, it is easy to show that an identity statement such
as 'Ali is Clay', formulated in the termist way as "A+C", is
reflexive and transitive (since it can be read as an A categorical
and all such categoricals are reflexive and transitive) and
symmetric (since it can be read as an I categorical and all such
categoricals are symmetric).

TFL treated every sentence that is of logical interest as
having a categorical form. Categoricals always consist of a pair
of terms bound together logically by a logical copula (split or
unsplit). Consequently, the traditional logic had no ability to
account for sentences containing relational terms. Consider the
sentence, ‘Some authors read every book’. We can try to make this look more like a standard categorical by paraphrasing it as, ‘Some authors are reading every book’, but, while we can see a split copula here (‘some...are...’), we seem to have both an extra term (‘book’) and an extra quantifier (‘every’). It was TFL’s inability to deal with the logic of such relational statements that accounted most for its severely restricted power. MPL was able to supplant the old logic in such a relatively short period simply because it could provide a uniform account of relational statements with ease. As we have seen, the syntactical theory of MPL requires that a sentence have a predicate, which contains one or more gaps, and enough singular terms (arguments) to fill those gaps. So, not bound by the one-subject-term-and-one-predicate-term restriction of TFL, its rules of formation (syntax) could permit a uniform treatment of all sentences. The only difference between a sentence whose (monadic) predicate has one gap and a sentence whose (polyadic) predicate has more than one gap is the number of singular terms needed to fill the gaps. A sentence such as ‘Paris loves Helen’ is treated by MPL on a par with ‘Paris is brave’. Each is construed as a predicate plus the necessary number of singular terms: ‘L(p)(h)’ and ‘B(p)’. The sentence ‘Some authors read every book’ is then easily formulated using copulae and variables as ‘There is at least one thing such that it is an author and every thing is such that if it is a book then he/she reads it.’ (symbolized: \((\exists x)(A(x) & (\forall y)(B(y) \Rightarrow R(x,y)))\).

ATL achieves what TFL did not. It incorporates relational sentences into a logic based on a termist syntax. It does this by taking every term to be either simple or dyadic. This means that a categorical sentence (always consisting of a pair of terms logically bound by a split or unsplit copula) might well have a dyad as one (or even both) of its terms. Further, every well-formed dyad is itself simply a pair of terms logically bound by a copula. Our sentence, ‘Some author reads every book’ (paraphrased as ‘Some author is reading every book’) is taken to be an I categorical whose predicate term is an A categorical. The sentence is, logically, a dyad constructed from a pair of terms, the first of which is simple, the second of which is itself a dyad (symbolized: +A+(R–B)). Before leaving the topic of relational sentences notice the form of the predicate term here, ‘reading every book’ (R–B). The logical copula joining ‘author’ with this term is split, ‘some...is...’, but the copula joining the terms ‘reading’ and ‘book’ is just the unsplit ‘every’ (our defined binary minus). This mixing of both split and unsplit copulae is ubiquitous in English. Some of our constructs like ‘every’, ‘all’, ‘some’, etc., are quantifiers (parts of split copulae), others (viz., those found in relational dyads) are just unsplit copulae. Consider: ‘Every man who owns a dog is a man who has a friend’. We formulate this in ATL as ‘–((M+(O+D))+(M+(H+F))).’ The sentence has the form of an A categorical with a split copula (‘every...is...’), but all the other copulae here are unsplit. Thus, ‘who’ here is symbolize by the unsplit binary plus because it is symmetric (‘Greek who is a warrior’ = ‘warrior who is Greek’). And ‘a’ is simply a version of ‘some’, ‘at least one’, etc., read as an unsplit binary plus. Since, in effect, the scholastic logicians treated their a, e, i, and o as unsplit copulae, they might have (but did not) formulated our sentence as ‘(HIf)[M][a(OiD)M]’; our author sentence might have been rendered as ‘(RaB)iA’. Finally, it must be noted that a later stage of the development of ATL introduces numerical subscripts for term variables in order to indicate the ‘voice’ (active/passive) for relational expressions. Consider, for example, the two sentences, ‘Some dog bit a man’ and ‘Some man bit a dog’. We might formulate these as ‘+D+(B+M)’ and ‘+M+(B+D)’. However, the commutivity and associativity of + would make these two equivalent. ATL preserves the inequivalence of the two sentences by giving a numerical index to each non-relational term and then subscribing each of these to the relational term in an order that indicates the voice of the relational verb. Thus, the two sentences would be formulated as ‘+D1+(B12+M2)’ and ‘+M1+(B12+D2)’. The passive of ‘Some dog bit some man’ is ‘Some man was bitten by some dog’, which would be formulated as ‘+M2+(B12+D1)’, or even as ‘+M7+(B37+D3)’.

MPL treats the logic of sentences and compounds of sentences (their negations, conjunctions, disjunctions, conditionals, etc.) as basic and foundational for the logic of predicates. It is obvious that one must understand the logic of, say, ‘pr q before coming to understand, say, ‘(xy)(A(x) & B(x)).’ The so-called sentential calculus is the basic part of the predicate calculus. Suffice it to say, there is no such hierarchy for ATL. From the terminist point of view, entire sentences are simply terms; and compound sentences (conjunctions, conditionals, etc.) are simply dyads. Moreover, we have already seen that the natural language expressions we use to compound pairs of sentences always share the formal features of either our binary plus or our binary minus. Thus, they can be treated on a logical par with expressions in the rest of our formal language. For example, a conditional sentence shares the logical syntax of the A categorical, and a conjunctive sentence shares the logical syntax of the I categorical. If we agree to symbolize unanalyzed sentences (sentences whose constituent terms are either unknown to us or of no concern to us) by lowercase letters, then ‘–p+q’ and ‘–A+B’ share a common logical form, as do ‘+p+q’ and ‘+A+B’ (examples of each of the four forms are: ‘if it’s peaceful then it’s quiet’, ‘All authors are bookworms’, ‘(Both) it’s peaceful and it’s quiet’, ‘Some authors are bookworms’).

Thus far I have tried to indicate (albeit sketchily) that a terminist logic such as ATL can analyze a range of natural language expressions at least as broad as that analyzable by MPL. But of course the essential task of any system of formal logic is, having once provided a theory of logical form adequate for such analyses, to account for the formal validity or invalidity of inferences and provide a means for proving validity. Suffice it to say, the procedures for determining validity/invalidity (decision procedures) required by MPL are distinct for the sentential calculus and the predicate calculus, and in either case are often not simple. And the same can be said about MPL procedures for proof. In stark contrast to this, the (single) decision procedure for ATL is quite simple. An inference is valid just in case both premises have a uniform treatment of all sentences. The only difference is that a categorical sentence (always consisting of a pair of terms logically bound by a split or unsplit copula) might well have a dyad as one (or even both) of its terms. Further, every well-formed dyad is itself simply a pair of terms logically bound by a copula. Our sentence, ‘Some author reads every book’ (paraphrased as ‘Some author is reading every book’) is taken to be an I categorical whose predicate term is an A categorical. The sentence is, logically, a dyad constructed from a pair of terms, the first of which is simple, the second of which is itself a dyad (symbolized: +A+(R–B)). Before leaving the topic of relational sentences notice the form of the predicate term here, ‘reading every book’ (R–B). The logical copula joining ‘author’ with this term is split, ‘some...is...’, but the copula joining the terms ‘reading’ and ‘book’ is just the unsplit ‘every’ (our defined binary minus). This mixing of both split and unsplit copulae is ubiquitous in English. Some of our constructs like ‘every’, ‘all’, ‘some’, etc., are quantifiers (parts of split copulae), others (viz., those found in relational dyads) are just unsplit copulae. Consider: ‘Every man who owns a dog is a man who has a friend’. We formulate this in ATL as ‘–((M+(O+D))+(M+(H+F))).’ The sentence has the form of an A categorical with a split copula (‘every...is...’), but all the other copulae here are unsplit. Thus, ‘who’ here is symbolize by the unsplit binary plus because it is symmetric (‘Greek who is a warrior’ = ‘warrior who is Greek’). And ‘a’ is simply a version of ‘some’, ‘at least one’, etc., read as an unsplit binary plus. Since, in effect, the scholastic logicians treated their a, e, i, and o as unsplit copulae, they might have (but did not) formulated our sentence as ‘(HIf)[M][a(OiD)M]’; our author sentence might have been rendered as ‘(RaB)iA’. Finally, it must be noted that a later stage of the development of ATL introduces numerical subscripts for term variables in order to indicate the ‘voice’ (active/passive) for relational expressions. Consider, for example, the two sentences, ‘Some dog bit a man’ and ‘Some man bit a dog’. We might formulate these as ‘+D+(B+M)’ and ‘+M+(B+D)’. However, the commutivity and associativity of + would make these two equivalent. ATL preserves the inequivalence of the two sentences by giving a numerical index to each non-relational term and then subscribing each of these to the relational term in an order that indicates the voice of the relative verb. Thus, the two sentences would be formulated as ‘+D1+(B12+M2)’ and ‘+M1+(B12+D2)’. The passive of ‘Some dog bit some man’ is ‘Some man was bitten by some dog’, which would be formulated as ‘+M2+(B12+D1)’, or even as ‘+M7+(B37+D3)’.

It is easy to see that all but the second of these is valid by our test. (2) satisfies (i) but not (ii). Examples of invalid inferences satisfying (ii) but not (i) are trivial.

Proof in ATL (as was also the case in TFL) rests on a key principle, which the scholastic logicians called the dictum de omni et nullo (the principle of all and none). The dictum has
been formulated (not always clearly) in a very large number of ways over the centuries. In ATL it is formulated as a rule of substitution.

**DON (dictum de omni et nullo): If a term \( M \) occurs with a negative quantifier in a formula, then the rest of that formula can be substituted for \( M \) in any other formula in which \( M \) is not in the range of an odd number of minus signs.**

Note that the antecedent of this will hold when \( M \) is the subject term of an A or E categorical. Consider the following simple argument: ‘\( \text{Every } M \text{ is } P \) and some \( S \text{ is } M \), therefore some \( S \text{ is } P \)’. We can formulate it as: ‘\( \forall M=P, \exists S+M \cdot +S+P \)’. Here, \( M \) occurs in the first premise with a negative quantifier. Thus the rest of the premise, \( +P \), can replace \( M \) in a premise in which \( M \) does not occur in the range of an odd number of minus signs, viz., in the second premise, yielding the conclusion. Our proof, then, is simply a single application of DON to the two premises to achieve the conclusion. The only other rules of proof necessary for ATL are rules that allow the derivation of a formula from a given equivalent formula on the bases of the formal features of our formative signs. For example, since our binary plus (split or unsplit) is symmetric we have the following rule:

**COM (commutation): Any dyad using a symmetric connective can be converted, i.e., its terms can be commuted.**

Thus, for example, from ‘\( +M+S \)’ we can derive ‘\( +S+M \)’. We can formulate a number of other rules as well. For example, by IT ‘\( ...S... \)’ can yield ‘\( ...+S+S... \)’ and ‘\( ...+p+p... \)’ can replace ‘\( ...+p... \)’.

**IT (iteration): Any term is equivalent to its conjunctive iteration, (each can replace the other).**

As well we might formulate rules based on the associative feature of our binary plus, double negation, and the ability of our unary minus to distribute into a dyad. The following sample indicates how proofs proceed in ATL:

\[
\begin{align*}
1. \quad +A+(R+B) & \quad \text{Premise} \\
2. \quad -(+E+D)+(-B+C) & \quad \text{Premise} \\
3. \quad +D+E & \quad \text{Premise} \\
4. \quad +E+D & \quad \text{from 4 by COM} \\
5. \quad -B+C & \quad \text{from 2 and 4 by DON} \\
6. \quad +A+(R+C) & \quad \text{from 1 and 5 by DON}
\end{align*}
\]

[Note that in line 5, the term being replaced, via DON, is the complex term (dyad) ‘\( +E+D \)’.

Suffice it to say, ATL is a rich and powerful system, able to give perspicuous analyses of a very wide range of kinds of sentences and inferences involving them. In this very brief sketch I have not even touched on such topics as reflexive and personal pronouns, logical diagrams, and other logically important topics, all easily managed by ATL. The simplicity which this system enjoys relative to MPL is due in large measure to the fact that it requires no special theory of identity, no division between the logic of unanalyzed sentences and the logic of terms, no division between the logic of singular terms and the logic of general terms. Moreover, this simplicity, and the greater ease with which it can be taught to novices, is augmented by the fact that it can trade on a simple symbolic algorithm that is very similar to one that is already familiar—standard elementary algebra. A final, personal note. I have taught ATL over a number of years to three different types of students: those having no prior knowledge of formal logic, those who have already completed at least one course in MPL, and to those who follow the course as a supplement to a course in MPL. The results have been uniformly gratifying. Nearly all students have said the system was easy to learn and use, and every student who had knowledge of MPL said that ATL was by far easier and more natural, and the reasons given for this were always the same: the notational language of ATL is much simpler (requiring transcription rather than translation) and the incorporation of algebraic notions and techniques are familiar. Needless to say, any logic instructor contemplating the use of TFL in the classroom needs to be fully familiar with the full scope and power of the system and requires assurance that the system has the characteristics claimed for it. These issues are well addressed in the works cited below.

**Bibliography**


---

**BOOK REVIEW**

*Expanding the Palace of Torah: Orthodoxy and Feminism*

Tamar Ross (Waltham, MA: Brandeis University Press, 2004).

Reviewed by Mark Zelcer, City University of New York

**I. Orthodox Judaism and Its Law**

Contemporary Orthodox Jewish practice reflects over two millennia of rabbinical discussions of Biblical injunctions, rabbinic decrees, and accumulated custom. As a way of life, Orthodox Judaism is circumscribed by strict adherence to the Law. Although Orthodox Jews are all committed to Jewish law, Orthodoxy is not monolithic. There is no central authority to set a uniform practice. Consequently, independent communities with autonomous histories have arisen, with diverse laws and customs.

Many have claimed that the status of women is Orthodox Judaism’s greatest legal concern today. For example, no issue in Jewish law bothers the average Orthodox Jew more than the problem of agunah (literally, “a chained woman”). Jewish marriages are governed by both religious and civil laws that give certain crucial powers to the husband. If a married Orthodox couple is civilly divorced, the woman must still obtain a religious divorce (known as a get) from the husband. Should the husband of a civilly-divorced couple refuse to grant a get to his wife, his “ex-wife” may not unilaterally obtain one so that she may remarry consistent with Orthodox Jewish law. She remains, according to Jewish law, married (“chained”) to a husband who is (theoretically) free to remarry. Despite religious bans against polygamy, there are few sanctions against it. In addition, since a divorced Jewish woman who has not been given a get by her husband remains married under Jewish law, any subsequent offspring she may have by other men are legally bastard children.

There can be no “top-down” solution—say, by prohibiting rabbis from performing marriages of divorced men who have refused to give a get to their former wives—because by Jewish law, marriages are not affected by pronouncements of rabbis but rather by specific acts of a man and a consenting woman (or her representative) in the presence of two witnesses, as,
for example, the giving of a ring. Considerable Jewish legal ingenuity has gone into solving the agunah problem, albeit without permanent success.²

In addition to the issue of the agunah, a new feminist consciousness within the Orthodox community has given voice to issues that might be characterized as social rather than legal, or at least on the cusp between the two: how to give women influence in the educational sphere and in synagogue life, how to discourage Orthodox writers from removing women’s accomplishments from the literature,⁴ and how to encourage the inclusion of women in Orthodox literature. Questions have been raised about accommodating more variety in female spiritual expression, a problem seemingly intractable, given the many gender-specific rites and laws. Jewish feminists find that the opportunities for religious expression are not only different for men and women but also unequal.

The recent call for change regarding the place of women within the Orthodox Jewish community comes, naturally enough, from within. It is not true that Orthodox Jewish feminists believe that there is no hope for change and that feminist criticism of Orthodox practice has its source mainly in disgruntled former members (or total outsiders). Tamar Ross, in her Expanding the Palace of Torah, speaks from the inside of Orthodoxy, and gives us a sophisticated treatment of the theological and legal issues surrounding the confrontation of Orthodox Judaism and feminism.

II. Philosophies of Jewish Law

Two broad approaches have been traditionally taken by Orthodox thinkers toward Jewish law: the “preservationist” and the “adaptive.” Preservationists believe that the Law is divine, having been given, literally, by God to Moses, to which was added a set of oral interpretations for transmission from generation to generation. These interpretations were given written form in what is now the Talmud. Each generation is tasked with understanding this body of codified law and preserving it. To be sure, correction of earlier errors in interpretation is occasionally required, as well as clarifications with respect to how the Law may be adapted to modern situations, but this is all in service of an undeviating stance toward meticulously adhering to the Law and the received tradition. God, the all-perfect giver of the Law, gave man rules that have no need of change. Times change, but this means only that we must fit the new situations into the timeless categories of the Law. “Adaptive”-minded Orthodox Jews are motivated by an awareness of the evolving history of Jewish law¹ brought about by the contingencies of living in the changing world. The Law as practiced by its followers has, as a matter of empirical fact, been subject to change throughout history and is sufficiently flexible to absorb change. Each side to this dispute has support from textual sources, precedent, and reason. The preservationist must account for the changes that have actually occurred within the Law. The adaptive-minded must avoid assuming the position of legal instrumentalists for whom the Law is merely a tool to promote particular goals, a position seemingly opposed to the Law’s divinity.

III. Ross’s Approach

Ross attempts to obtain the advantages of both the above positions. She advocates a nuanced position of moral contextualism and a negotiation with previous readings of legal texts that does not undermine their foundational status or formal authority even while changing their import. Hence, her approach (in part IV) goes beyond standard legal strategies and demands a radical rereading of Jewish tradition. Ross suggests that Jewish texts must be reread in a new light by each generation. This rereading gives authority to the reader and to the interpretive community rather than to some particular tradition of interpretation. She is aided in this new way of understanding Jewish texts by insights from post-modern hermeneuticists like Stanley Fish and Hans Gadamer.

Ross’s approach is centered on her notion of “cumulative revelation.” This concept describes a non-static divine revelation of the Law, and allows each generation its own interpretation of it. A famous joke about quantum mechanics has three umpires discussing their respective philosophies of umpiring. The first says, “I call them as I see them.” The second says, “I call them as they are.” The third announces, “Until I call them, they aren’t.” Ross has the community in the position of the third umpire. God’s Law stays divine but it is created by the community of those who follow and interpret it. They (and not God or previous interpreters) set the law.

On Ross’s account, God’s revelation originates divinely but “unfolds” as the community that privileges the text interprets, interprets, ignores, or reprioritizes the approach of prior interpretive communities. There is no objective meaning to God’s uninterpreted text. The normative meaning of the text exists only in the interpretive community. Just as God’s original revelation at Sinai was heard by Moses and selectively transmitted to the Israelites, all subsequent transmissions are similarly impacted by their respective contexts.

The Talmud asserts, “The Law speaks in human language.” Ross’s claim approaches the view that the Law is what human language speaks, and its authority is rooted only in the community. The community provides a religious context in which those who practice the religion and experience the tension between practice and the modern reality in which they live can effectively be interpreters of the Law with equal authority as the hegemonic establishment. Ross allows the consensus of the community to interpret the divine text. Thus, if Orthodoxy can come to terms with a version of feminism, it can be compatible with its interpretation of religions texts. No doubt, ample precedent exists for revisiting the relationship between people and the divine text. The Bible advocates scientific and moral positions (e.g., the Earth’s four corners, slavery) that the most zealous Orthodox Jew eschews, and biblical criticism moved the text even farther from God’s hand. Patriarchy, Ross claims, demands similar reconceptualization.

Unlike earlier attempts to merge a feminist philosophy with Orthodoxy, which Ross dismisses as either un-Orthodox, inadequate, or non-feminist, her inspiration comes from agadita (non-legal teachings) and schools of Jewish mysticism, especially those of Rav Kook, each of which has a methodology compatible with an observer-dependent interpretation of the text. This cumulativist approach lets Ross advocate for a notion of revelation that does not depend on previous (male/rabbinic) interpretation, allows the Law to be human-interpreted and also divine, and avoids problems endemic to preservationist and adaptivist schools.

IV. Criticism of Ross’ approach

Can the interpretive strategy of cumulative revelation address Orthodox Jewish feminists’ concerns? It seems, first, that it cannot, since we account for the state of the Law and its evolution by appealing to the self-understanding of the religious community, and yet there is great resistance in that community to change; indeed, change is rejected by its current self-understanding. The existing paradigm asserts that there are [to be] no paradigm shifts in Jewish law. So if the current self-understanding of Jewish law is that revelation ought not to view itself cumulatively, then that is today’s cumulative revelation. Thus, there is a danger that the Orthodox can concede Ross’s point that revelation is and should be considered cumulative, and still insist on the patriarchal interpretation. By Ross’s own
standards, her feminism would be in the awkward position of having to acknowledge the legitimacy of patriarchy within the tradition for as long as the community delegitimizes alternate accounts. Thus, other interpretations are outside the bounds of Orthodoxy, a suggestion that Ross would want to avoid. The plight of the feminist then legitimately is ignored.

Second, Ross’s approach is motivated by concrete concerns, such as we mentioned above, that impede her efforts to address feminist concerns in Orthodoxy. She is clear that previous approaches are ameliorative, but for feminists they come with unacceptable prices. Though her book is not intended as a manual for feminist change, her theoretical solution may still not go far enough in demonstrating that it can solve the problems Orthodox women face. The argument that including women into the greater dialectic of Jewish law (or adopting a feminist hermeneutics) will inevitably lead to resolutions of women’s concerns seems weak, as is Ross’s suggestion that her approach will lead Orthodoxy to de-emphasize legal formality in Jewish law (p. 241). The sympathetic reader would benefit from the establishment of some mechanism that will allow us to pass from a reinterpretation of texts to an alleviation of problems.

Finally, Ross traces the Jewish roots of cumulative revelation to a small part of Orthodox theology (pp. 200-207), namely, aggadic and kabalistic writings. But those are not Judaism’s normative writings, they are only perspectives; and while not marginal to Judaism, they are not central either. This is especially true for the writings of Rav Kook, on whom Ross relies, but they are rarely read outside a circle of Israeli religious Zionists. Her arguments would be strengthened if they came from a more central position in Orthodox thought.

V. Lessons

In addition to becoming part of the discussion of women in Orthodoxy, the book is an excellent guide to the nature of Jewish law and the variety of Jewish legal philosophies as they apply to women and to Jewish feminism. The book’s conclusion is well thought out, despite questions regarding the ultimate acceptability of its major thesis. The book’s value lies in its argument. Showing the form a plausible merger of feminist thought with Orthodox theology might take is a significant achievement from the perspective of Orthodoxy and feminism.

The early days of feminism saw Orthodoxy dismissed as anti-woman. Ross begins with the distinctive feminist position of reconciliation and consensus, and constructs a dialogue between Orthodoxy and feminism in a way that conveys her deep attachment to both. Though one may be tempted to criticize her reconciliation efforts from the Orthodox end or the feminist end, it is an important approach for those trying to understand and justify the sentiments of those who value feminism.

Endnotes:

1. “Orthodox” here refers to the denomination of Jews who go under names such as frum, religious, or charedi.
2. Jewish Law is commonly known as halacha, literally, “the way.” Historical and philosophical literature on Jewish law addressed to the non-specialist is sparse. One introduction is An Introduction to the History and Sources of Jewish Law, edited by N. S. Hecht, B. S. Jackson, S. M. Passamanerneck, D. Piattelli, and A. M. Rabello (New York: Oxford, 1996).
6. I would like to thank Tamir Ross, Kathy Pence, and the editors for helpful comments.

LETTER TO THE EDITOR

To the Editors:

I’ve just come across the review by Mark Zelcer of my edited book Fundamentals of Philosophy (Routledge, 2003), which appeared in the APA Newsletter 2006. While pleased to get a review, and a generally favorable one, the review contains a piece of misinformation, and misreading, which apparently leads you to conclude that the Introduction is the weakest section in the book.

Mr. Zelcer writes:

Then there is a taxonomy of philosophical topics such that logic, epistemology, and metaphysics are located at the core of philosophy; ethics, philosophy of science, language, and mind are in the middle; and everything else, including history of philosophy, is at the periphery. The expansion outward is taken by the editor to represent increasing generality. But this seems (to this reviewer) to be somewhat dubious and, at the least, needs defending. (Why is philosophy of science or ethics taken to be more general than metaphysics?)

In fact I say just the opposite in respect of generality! If you read page 4 of the book you’ll see that I say: “The relation between these subdivisions of philosophy is not one of difficulty but one of generality, with lesser generality as one moves away from the center.” Lesser. Making philosophy of science and ethics less general than metaphysics. I then go on to explain this. I don’t see how I could have been clearer. I don’t in fact see how you could have thought I be claiming the opposite.

There is a similar taxonomy in Ted Honderich, Oxford Companion to Philosophy.

Yours,

Dr. John Shand
The Open University
Manchester

The editors note that Mr. Zelcer concedes to Dr. Shand in this matter, and regrets the misreading.
LIST OF BOOKS RECEIVED

**Cambridge**

**Hackett**
Steven M. Cahn (ed.). *Classics of Western Philosophy* (7th ed.). 2006.

**Harvard**

**Oxford**

**Penn State Press**

**Routledge**

**Thomson**
Steven M. Cahn and Maureen Eckert (eds.). *Philosophical Horizons*. 2006.

ADDRESS OF CONTRIBUTORS

Eric Brandon
Cape Fear Community College
411 N. Front St.
Wilmington, NC 28401
Ebrandon@cfcc.edu

Andrew Carpenter
Professor of Philosophy
Ellis College of the New York Institute of Technology
1290 Laurel Lane
Westminster, MD 21158
philosophyandrew@gmail.com

George Englebretsen
Department of Philosophy
Bishop's University
Sherbrooke, Québec
Canada J1M 0C8
genglebr@ubishops.ca

Gerald Mozur
Lewis and Clark Community College
Main Campus
5800 Godfrey Road Godfrey, IL 62035
Gmazor@lc.edu