

A Petrology of the Liberal-Arts Curriculum: Keystone Versus Capstone

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Over the course of developing a proposal for our new environmental studies major at Lewis & Clark College, the concept of an integrative culminating senior seminar was discussed and approved. Senior seminars are a very common feature of today's liberal-arts curricula and are widely referred to as "capstone" courses.

In thinking about this course, I have become increasingly dissatisfied with the metaphor of the capstone. For me, the term capstone calls up the image of a heavy block sealing off the top of a structure with an impermeable lid to keep out the elements and to protect and immobilize the stones beneath. By definition, no further extension of the structure is envisioned or permitted. The capstone marks the top and implies finality; nothing can be built upon it. Since the senior seminar marks the top or culmination of the undergraduate major, it is easy to understand why the term has achieved near ubiquity.

But wait – is the senior seminar really the ultimate intellectual pinnacle? Certainly not if one goes on to post-graduate study. However, that is not really my point. I believe that most people, especially those in academe, would agree that, at any stage, an individual's intellect and understanding of a discipline or an interdisciplinary field, must be considered a work in progress. We are fond of saying that learning never ends. If we agree on that, then should we not agree also that the capstone metaphor is not a particularly accurate representation of our thoughts on education and intellectual development?

Thus, I began to ponder other possibilities. To one who has long been fascinated with rocks, it seemed that a lithic or petro-metaphor would be highly suitable. A new metaphor not greatly different from the popular one in current use might gain relatively easy acceptance.

Several common stones come readily to mind. My *Shorter Oxford Dictionary* defines "touchstone" as: "a thing which serves to test the genuineness or value of anything." That's pretty good. Perhaps every major should have a touchstone course somewhere along the line. Or, perhaps, a touchstone course, taught in an interdisciplinary manner, naturally, ought to be a required part of the general-education program of every liberal-arts college. It is surely appealing to think that our students would, by taking such a course, gain the ability to "test the genuineness of anything!" In a sense, this is one of the outcomes of a liberal-arts education fervently to be desired.

Exploring the array of available petro-metaphors further, another kind of stone presents itself: the cornerstone. Not a bad metaphor for a crucial part of the curriculum either. Quoting the dictionary again; the cornerstone is “an indispensable part or basis on which something depends.” Generally, we would expect to find cornerstone courses at the introductory or intermediate level (a research-methods course, or an introductory survey, for example) of the curriculum of an academic major. A cornerstone course would be definitely a good thing to have, setting, as a cornerstone does in a building, the style as well as providing a solid foundation or connection to the foundation. Cornerstones, however, are generally found near the base of a structure. Thus, this metaphor, while useful, does not answer.

The architectural component that I believe provides the most apt metaphor for the senior integrative seminar is the keystone. The keystone is the block without which the structure is not whole; it receives and joins forces of upwardly-reaching members of an arch and creates a structure that soars with lightness yet with solid integrity and strength. The integrative strength of the keystone is a natural one that does not depend for its function on massiveness but rather works because everything falls into place around it and is strengthened and brought together by it, making all the components work together. A keystone is synergistic, yielding a structure that is stronger than the individual parts would be if they were merely stacked together, one on top of the other. It exists to unite structural elements rather than to be the final “capping” element in a linear sequence.

But most importantly for me, a keystone, in contrast to a capstone, does not imply finality; an arch readily serves as the foundation for further development of a structure. And, of course, because the fit is so natural and synergistic, a keystone confers a lasting strength on the structure of which it is a part. One only has to look at an ancient Roman aqueduct or a Medieval gothic cathedral to see the clearly-apparent truth of this in architecture. An additional benefit is that the keystone has obvious centrality; without it, the arch is not an arch. The absence of a capstone would not be such an obvious structural void.

Getting back to the curriculum, I maintain that the important courses for seniors mentioned in the first paragraph play the same role as the keystone. This concept could be the basis (the key?) for better recognizing and emphasizing the importance of the senior keystone course/project/seminar. In fact, one could use these three types of architectural stones to lay out a structure for a general-education scheme: the cornerstone course for new students, the touchstone course (metaphor for methodology courses?) at the intermediate or advanced level and finally, the keystone course for seniors. Have we perhaps gone to the quarry a bit too often? No matter.

Nevertheless, because the message is so important and because the metaphor should convey the intended message accurately, permit me to suggest that we discard the descriptive word capstone and term these courses for what they really are; keystones acting as essential courses joining the various structural members and components of our respective academic majors; courses which, in the final analysis, serve as strong, elegant, foundations for further intellectual endeavor.