COMMENTARY

Toward the Unification of Disciplines

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How frequently have we heard arguments between geologists and physical geographers as to the differences in their disciplines? As scientists, we should be addressing similarities and forgo the folly of academic preeminence of disciplines. Recurrently, physical geographers encounter geologists who acknowledge certain areas of physical geography as being "geology related," but vigorously refuse to recognize those physical geographers as colleagues in the same disciplinary field. Moreover, we frequently hear that physical geography is "this" while geology is "that." Many geologists are past due in recognizing the fact that geography is not necessarily memorizing the states and their capitals nor is it a watered-down version of geology, somehow lacking any analytically systematized approach to research and scholarship. Likewise, physical geographers need to recognize that geology is not necessarily memorizing rocks and minerals, and geologists, too, use a spatial (geographic) approach for understanding our planet.

The disciplines of physical geography and of geology are multifaceted earth sciences. It is correct to say each discipline constantly paraphrases the other. Geology has several specialty areas that are removed from physical geography and vice versa. However, numerous topics not only overlap, they are, by literal definition, exactly the same subject. That subject, from both a physical geography perspective and a geology perspective, is the study of the Earth—geology. To suggest that physical geography and geology are not comparable is to limit both disciplines and their disciples to a select set of preprogrammed information, which creates academic tunnel vision and hinders our understanding of planet Earth.

This professor has endured several arguments by many geologists (and, to a lesser extent, physical geographers) in their unbending endeavors to keep these disciplines separate. Those geologists or physical geographers who disagree typically argue some insubstantial point in an effort to keep the disciplines divided, unequal, and splintered. That bias splintering only serves to create shards of renunciation and impairment to the geoscience field and many of its partisans. I feel confident that a number of hard-core, old-school, proverbial geologists (or geographers as the case warrants) are now spouting platitudes of dissension at this philosophy; however, their platitudes will neither change these facts nor change the definitions. Those geologists who continue to oppose these disciplinary definitions remind me of the spiritual aficionado who churns out the notion that if you "don't do what I do, think what I think, and know what I know, then you are not worthy"; in this case, to be called a geologist. I am comfortable with welcoming geologists into the world of physical geography. It is my most sincere hope that the reverse will develop into reality rather than remain idealism. For a geologist or geological organization to deny this right to physical geographers seems noticeably prejudicial.

During fifteen years of ongoing college and university level teachings of both physical geology and physical geography, I continue to encounter copious opportunities to read and review a profusion of geology and geography textbooks along with their numerous definitions. For instance, geomorphology, a geography specialty area, is defined as the science of geology dealing with Earth's surface. Physiography is defined as physical geography. Physiography is also defined as geomorphology. Therefore, physical geography is geomorphology, and geomorphology is geology. If you are a physical geographer, who specialized in geomorphology, it is not only a specialty of geology, it is geology, and you, then, are a geologist. The generally accepted definition of physical geography is *the study of the physical systems of the Earth with emphasis on humans.* Amusingly, environmental geology is accurately defined as *the study of the interactions of the physical systems of the Earth with emphasis on humans.* Sounds like we should redefine environmental geology as physical geography. As a matter of definition, physical geography offers a more complete understanding of the study of Earth (geology) because it includes more of the earth systems such as the atmospheric sciences and phytogeography along with all those other subjects geologists like to claim as their own (e.g., glaciology, volcanism, tectonics, fluvial processes, hydrology, coastal processes). Only a few geology texts cover the atmospheric sciences. The inclusion of the atmospheric sciences in geology is a developing trend in many college and university geology departments. I direct the reader to Virginia Polytechnic Institute and State University or Penn State University, or James Madison University for verification (to name a few). Meteorology and climatology (originally geography) are now being offered for dual geology/geography credit, as are Geographic Information Systems (GIS) and remote sensing (also geography).

To have completed much coursework in physical geography does not make one a lesser geologist. Rather, he or she is a specialized geologist and should be recognized accordingly. Physical geography is, unmistakably, geology. I invite the reader to ponder this quote from the June 1990 issue of the *Times* (London): "Geography is queen of the sciences, parent to chemistry, geology, physics and biology, parent also to history and economics."

GSA's well-developed, perceptive new vision and matching logo accurately

embrace more areas of geology by including physical geographies such as the atmospheric sciences and phytogeography. This is a superior move with regard to changing times, and obviously demonstrates exceptional judgment, which is incontrovertibly a step in the right direction for unifying these disciplines. GSA's judgment is visibly above and beyond the geoscience norm.

Sources

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The Times, 7 June 1990, p. 13.

Letter . . . . . .

Dear *GSA Today*:

Subaru is a Corporate Sponsor of GSA, and runs advertisements in GSA publications. Subaru is also engaged in what I consider to be unsavory business practices to manipulate the Clean Air Act, by making superficial modifications to the Subaru Outback sedan so that it falls under the Federal fuel economy classification system as a light truck (21.2 mpg rather than 27.5 mpg). So my question to you is this—does GSA have any criteria by which we (the membership) evaluate selecting or continuing to select corporate sponsors? Thank you.

James E. Evans

GSA responds:

Subaru reports that the Outback was reclassified as a light truck in response to customer requests for higher vehicle clearance and tinted windows. As for changes in mileage performance, the Subaru Web site shows mileage for the 2004 2.5 liter Subaru Outback (automatic transmission) at 22/28 for city/highway conditions. This reflects no change in mileage performance, and a few reports from Subaru owners we talked with support this.

We are pleased to report that GSA does have mechanisms for evaluating corporate sponsorships. Contracts are reviewed first by staff at Headquarters, and then approved by Council. If members, upon learning of a particular issue that causes them concern, wish to influence such approval, they can and should raise this with their elected Council Members. It seems to us that more direct evaluation options by individual members is impractical, given that we have more than 17,000 members.

Rob Van der Voo, President
Jack Hess, Executive Director