Charles H. Smith, the science librarian at Western, isn’t short of ideas. He’s just completed three large projects he has been working on for “years and years.” These efforts focus not only on science, his major interest and Ph.D. area, but also on music and the social sciences.

Dr. Smith completed these studies while also carrying out his more regular duties, which include serving as the library liaison for nine Ogden College departments and providing general reference services in the Helm Library. The projects cover quite a range of subjects like history of science, classical music education, and biological science, and have resulted in two large World Wide Web sites and a book.

“I’ve always liked keeping involved in a variety of subjects,” he said. “I have a pretty broad educational background, and I enjoy using that experience to identify new kinds of approaches to old subjects. Some of these subjects I have more initial knowledge of than others, of course, but I’ve found that one can always manage to discover new angles even when working within your limitations.”

Smith’s history of science work has produced a website concerning the thought of Victorian polymath Alfred Russel Wallace (1823-1913), a person who especially interests him. Wallace worked independently of Charles Darwin to develop the theory of evolution by natural selection and is also considered the father of biogeography, Smith’s main academic field of study. Further, he was a significant social theorist and critic. Smith spent years searching for material by Wallace, especially in hundreds of magazines, journals, and newspapers, and in 1991 published an anthology and bibliography of his writings for Oxford University Press.

“A closer examination of his work was long overdue,” Smith said. “I found three or four hundred items that had been lost, that people no longer knew about.”

Many of the works were found in the journal Nature, a bimonthly magazine. Smith went through every page that was published between 1869 and 1913, and located dozens of lost writings. He also searched through all the issues of a weekly socialistic newspaper that came out over a nearly twenty-five-year period ending in 1913, the year Wallace died, and
found another fifteen new writings.

“That second search was a real pain, believe me, because it was all on microfilm,” Dr. Smith said.

The work paid off though, according to many of Smith’s colleagues from around the world. The book received universally excellent reviews after it came out, and now the website has built on that foundation.

“Charles Smith does everyone a great service by providing online information and publications for Wallace,” said Jim Mallet, a biologist and expert on protective mimicry (one of Wallace’s special interests) working at University College in London. “So now Wallace’s as well as Darwin’s works are available to everyone. I think that this is a very useful service for the evolutionary and history of science community.”

Martin Fichman, a humanities professor at York University in Ontario, Canada, agrees. He said he considered Smith’s book to be the authoritative introduction to Wallace’s shorter writings and that he also finds the website useful.

“I regard Prof. Smith’s website on Wallace as one of the best scholarly websites on the Internet,” Fichman said.

Earlier this year Dr. Smith also published a book called *Biodiversity Studies: A Bibliographic Review*. Not only did Smith identify, list, and index nearly 6,000 items on the subject, he incorporated some novel features into these individual item entries that elevate them beyond being mere bibliographic citations. These enhancements (such as indicating the relative number of times the item was later cited elsewhere in the general literature) help give researchers some idea of how influential that particular work has been.

Why did Smith do that? He thought it would help make finding the best information easier.

“Let’s say you’re a biologist who has some graduate students who want to focus on some aspect of bio-diversity studies and who need to read up on the subject. You’re not going to just hand them a book and say, ‘here’s a list of 6,000 works, get to it,’” he said. “You want to give them some means of prioritizing the information, of getting some idea of which works are the most important.”

The book is an outgrowth of Smith’s education as a geographer and ongoing interest in bibliography and what is termed “bibliometrics,” the statistical analysis of literature citation and other bibliographic data.

Dr. Smith’s most recently completed effort is a service he calls *The Classical Music Navigator*, a website devoted to a new kind of treatment of classical music composers and their works, styles and influences. Smith’s approach, based on the “points of familiarity” model, stems from his belief that most people explore their musical horizons simply by first happening onto some piece of music they take a liking to and then trying to find other music that is similar to it.

“But when you are first introduced to a work that grabs your interest, you might very well not know what it is about that piece that attracts you to it,” he said. “Maybe it’s the sound of the piano, or the orchestra, or the general style of

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music, or some peculiarity of the composer."

By listing the influences and works for each composer and then providing several kinds of comprehensive indexing, the Navigator makes it easier for users to identify styles and genres that might appeal to them. "Let's say you have just heard Ravel's piano concerto for the left hand on some radio broadcast, been impressed, and wish to investigate. This service makes it possible for you to very quickly identify Ravel himself, other significant works by Ravel, other piano concerti, other works for piano in general, other concerti in general, other works by French composers, other works by composers sharing his general style (Impressionism), composers who influenced Ravel, and composers whom Ravel influenced. In short, it helps you identify new connections that you might not have stumbled upon otherwise," Dr. Smith said.

While many of the 444 composers featured in the service are well known, most of them aren't. Smith said he compiled the database by researching more than a thousand biographical, analytical, bibliographic and reference sources to determine which artists' names and works came up the most — which were by consensus the "currently most relevant." So, the results are based largely on statistical inference rather than subjective opinion.

"I wanted this to be a legitimate reference source as well as an education service, so using my personal likes and dislikes just wasn't going to cut it. Besides, I have no formal training in music. When it comes to classical forms, I'm just a listener — and generally, I can't tell one key from the next. When I started this project, moreover, I had never heard of a good number of the composers who ended up being treated in it."

Dr. Smith said he hoped the service could be applied not only to individual use but in high school and college-level music appreciation classes where students might use it to help compare and contrast different styles of classical music or trace the influences on and from particular composers to other composers.

These three sets of results have come after years of work, six of them at Western. He started some of his projects between jobs and between degrees — the New Hartford, Connecticut native has four of them from four different universities. The projects occupied not only some of his regular work time but also a lot of his personal time. Smith said he works a pretty full workday most days, including taking work home. Further, he hardly ever takes a full day off — weekend days included.

"This is not only what I get paid to do, this is what I like to do," he said.

Smith may not take much time off, but he gets his rewards in other ways. "Librarians are in the main facilitators — information liaisons. People are genuinely pleased when you can help them find something they want or need — and this is true whether you are sitting at a reference desk and entertaining a relatively routine class assignment-related question, or helping people explore new horizons through a World Wide Web service. Over the past year the maintenance of my two websites has led to several hundred email exchanges, and I've made a lot of good new acquaintances."

Smith's efforts have received both national and international attention. Apart from various positive reviews and website awards, some of the Wallace site is being incorporated into an English university-produced CD-ROM on historical research methodology, while the Navigator is being translated into Dutch for inclusion in a Belgian CD-ROM product.

Try out Dr. Smith's Classical Music Navigator at http://www.wku.edu/~smithch/music/

So what's next for Dr. Smith now that the three main projects that have been occupying so much of his time are finished? "Well, actually, the Wallace work in particular is never really done," he said. "Ever since the site went up in January, I've increased its size by nearly fifty percent, adding several new features and a lot more of Wallace's writings in full-text. I've also begun another book on Wallace, this one analytical in nature. Perhaps I may even get back to some theoretical studies I had to shelve for the time being a number of years back."

We trust that whatever the choice may be, Smith will manage to keep himself well occupied.