

Thirty Years of Interdisciplinary Research: The Future Promise of SLSA

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I attended my first SLS conference in Albany, New York in 1988. As a Comparative Literature graduate student who had recently left a lab, I wanted to study ways of thinking that transcended fields, and at that meeting, I felt as though I had come home. The hot topic that year was chaos theory, which scholars saw in literature as well as physics. The attendees were also talking about computers, which I had just begun to use. The SLS scholars' passion excited me, especially their conviction that novels and computer models could emerge from the same kind of thought.

It makes sense that scholarship relating science, art, and literature has come into its own in the digital age. The worldwide transition from print to digital culture has been compared to the shift from hand-copying to using moveable type; I would argue that the current change is even more profound, since it involves every aspect of commerce, infrastructure, and communication. In the age of the internet, novels can incorporate directions from MapQuest, and beautiful neurons can be printed on T-shirts. Policing the boundaries between science, literature, and art makes about as much sense as building a wall on the U. S.-Mexican border.

The greatest strength of scholarship linking literature, art, and science, then, may lie in its recognition of digital media as a way to enhance thought in all three realms. Scholars such as N. Katherine Hayles have led the way not just in respecting electronic literature as art but in showing the possibilities of digital scholarship and considering how interactions with digital devices are transforming human thought (Hayles 2012). The 2016 U. S. SLSA conference took Creativity as its theme because digital technology is changing people's understanding of what creativity means. Coding and texting have aesthetic qualities and can't be excluded from literary creation. Scholars intrigued by the ways that media, technology, visual art, and literary creation intersect don't often see the digital transformation of culture as apocalyptic. Instead, we perceive new possibilities for creating art, building knowledge, and fighting social injustice. Digital technology's thorough-going transformation of world culture can't be separated from ethical concerns.

It is thus not surprising that scholars who analyze common patterns in literature, art, and science also lead the way in the "ethical turn." I have my doubts about this term, because when have the arts and sciences *not* addressed ethical questions? I have been heartened, however, to see literary scholars analyzing representations of climate change, animals, and variations of human bodies and minds that have unjustly suffered from discrimination. I wouldn't say that in thirty years, interdisciplinary scholars have shifted their focus from language to material and social reality, since post-structuralism emerged from the political activism of the 1960s. From the beginning, many studies that compare fields critically have had a political agenda. But works such as Hayles' *How We Became Posthuman* (1999) may have enabled the "ethical turn" by showing how new dependencies on technology reveal the many interdependencies that have allowed human beings to survive all along. Hayles's notion of the posthuman, which emerged from post-structuralism as well as everyday experiences with technology, shows how critical theory focused on language

can give rise to socially grounded, ethically transformative ideas. In studies that interrelate science and art, the "ethical turn" has been a renewal, not a break.

If our interdisciplinary research has had a weakness, it has been the inability (so far) to engage more working scientists. I don't mean this as a blanket statement, since many of us collaborate with scientists, physicians, or engineers; a few *are* scientists or former scientists; and others have worked extremely hard to bring scientists to our meetings. Our recent questions about artists might be applied to scientists as well. Considering the cost—in time and money—of attending a SLSA meeting, what's in it for the artists? What can they learn, and what can they gain by talking with scholars who interrelate science and art? In the past decade, the presence of artists has transformed SLSA meetings, and to me, the ideal conference would involve equal numbers of scientists, artists, and humanities scholars. The hit of the 2016 U. S. SLSA meeting was the "*Orphan Black* and Biotech" roundtable, which involved an *Orphan Black* science consultant as well as scholars from diverse fields. SLSA members' genuine interest in emerging technologies offers a bridge to engage scientists who experiment with and critically engage the technologies we study.

The question is how to draw the attention of researchers who face challenges that many humanities scholars don't: having to apply for grants and knowing that failure will affect all the researchers who depend on one; and often having to file complex IRB applications just to be *able* to do research, in addition to teaching and advising students. Attending a meeting means making a precious time investment, and we need to convince scientists that learning about thought patterns common to literature, science, and art is worth their while. No two scientists think alike, and the participation of any one of them would probably challenge our thinking as well as theirs.

In 2017, there is more tolerance than there was in 1988 for work that draws upon more than one system for building knowledge. In the 1980s, many of us in SLS self-identified as department freaks, the only people who saw Shannon in Borges or Darwin in Dickens. We were overjoyed to have found each other, and we still are, but many of us can point to others on our campuses whose interests cut across academic fields. This doesn't mean that interdisciplinary research has become generally accepted worldwide (it hasn't) or that it will always be accepted. The right to do scholarship that doesn't fall into a pre-existing academic category needs to be maintained as civil and human rights are maintained, since all of these can be encroached upon or lost at any time. In times of economic crisis such as the 2008 crash, interdisciplinary programs were often the first to get the ax. Although they had eloquent spokespeople, their purposes couldn't be identified as easily as the purpose of History or Electrical Engineering can.

When I wrote *Membranes*, I compared scientific and literary representations of identity in order to imagine selfhood that was defined through relationships rather than boundaries. I pointed out the drawbacks of thinking of cells, people, and nations as closed and under attack from the outside. I was trying to convince myself as much as anyone else, and in my everyday life, I can't say I have transcended the model of a bounded self under siege. But I continue to see the damage done in every aspect of life by thinking of concepts as under threat and in need of thicker walls. The siege mentality is especially likely to hurt academic fields that retrench rather than opening themselves to new alliances and methods. In *How We Think*, N. Katherine Hayles describes the extraordinary epistemological and creative possibilities of digital technology and warns of the consequences of dismissing them (Hayles 2012). The

greatest strength of scholars who cross-connect literature, science and the arts may be our ability to illustrate through specific examples how new knowledge can be built by combining strategies from different fields.

Scholarship that unites creative and analytical methods is growing, and in 2016, the U. S. SLSA meeting received almost 600 abstracts—more presentation proposals than we could accommodate in the hotel space we had reserved. The British Society for Literature and Science and the European Society for Literature, Science, and the Arts are thriving, and an Australian-Pacific Society for Literature, Science, and the Arts has held its first meeting. In the next decades, digital culture is likely to transform universities and academic cultures worldwide just as it has been altering so many other aspects of human life. The energy and creativity of scholars who link science with art and literature inspire me to believe that this transformation may hold more good than bad, as old ways of learning are challenged, opened, and revitalized.

Not everyone shares this view of interdisciplinary work, and challenges lie ahead. The National Humanities Alliance recently issued a warning that in the next federal budget, support for the National Endowment for the Humanities and the National Endowment for the Arts may all but disappear. In this time of terrorism and xenophobia, I see hope in the scholars—many of them young—who care enough about learning to compare insights from different fields. Responsible studies that respect diverse fields' ways of knowing are especially valuable at a time when governments are trying to exclude and silence people and their ways of learning.

Works Cited

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