Art History and the New Media:
Representation and the Production
of Humanistic Knowledge

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Since the reflections that follow will unavoidably respond to my own peculiar experiences and interests, it may be helpful to start with a quick sketch of where I came from. Educated as a historian, first of medieval economic history and then of medieval architectural production, I am interested primarily in issues of representation. In my search to represent a past that has vanished—like the snows of last winter—the relative permanence of stone buildings has an obvious appeal, while at the same time presenting a most intriguing and engaging range of problems of response and representation.

As an art historian (at Indiana, Harvard, and Columbia Universities), I have been committed to the propagation of my own field of study (medieval art); to the institutional well-being of my academic departments (two of which I chaired); and to the advancement of my discipline through teaching. I have sponsored about 40 doctoral dissertations in as many years and have taught some 25 summer programs introducing young scholars and others to the monuments of medieval architecture. I played a leading role in the introduction of the new media into art historical teaching and research in the mid-1990s.

At what point did I become aware of the power of the media to transform the way we do business? My formative experience came some 40 years ago when, with a group of fellow Oxford undergraduates, I set out to make a documentary film on Armenian church architecture for the BBC program Travellers’ Tales. Entirely without film experience, we drove across Asia Minor to Armenia equipped with a Bell & Howell movie camera that we wound up, set upon a flimsy tripod, and pointed at Ani Cathedral. The camera clicked and whirred, but our expectations that the monument would somehow do something were, of course, unfulfilled: we could have achieved
exactly the same results with a still photograph. This was the start of a powerful interest in the spatial animation of works of architecture that culminated in my 1994 Amiens Cathedral Project and my establishment of the Media Center for Art History at Columbia University under a National Endowment for the Humanities Challenge Grant.

I have chosen here to focus on the application of the new media in relation to two aspects of art history—representation and the production of knowledge. Let me begin with some reflections on the first issue.

**Representation**

Art history is about representation. It begins when an interlocutor stands in front of a work of art and talks. In the classroom, however, we make a virtue out of dealing with the absence of the work of art, which is represented by a surrogate image. For more than 100 years, this surrogate most frequently came in the form of juxtaposed images created with slides. Standing in front of two such images, the teacher might announce to the class, “The slide on the right is Autun Cathedral; the slide on the left is Chartres.” Each monument is then analyzed in terms of its essential characteristics; similarities and differences are distinguished, and the question is raised as to how, in the course of the twelfth century, we get from Autun to Chartres. In this way, the teacher’s rhetoric has tended to privilege temporal developments (from Romanesque to Gothic), and students are encouraged to believe in a story of progress from “early” to “high” and “late” manifestations. This kind of story, or entelechy—one in which the outcome is known at the start—is inherently boring. Most troublesome, however, is the notion that a single two-dimensional image could possibly “be” Chartres Cathedral, which is, of course, a space-enclosing monument, rooted in the French landscape at least 3,000 miles away from most U.S. students.

In the second half of the twentieth century, scholars of all kinds for all kinds of reasons began to reject the old art historical rhetoric with its endless accounts of stylistic “developments” and “influences.” Their discipline was animated through the infusion of notions derived mainly from social and anthropological studies, as well as from literary criticism. This first revolution, the “literary turn” of the 1960s–1980s, was followed in the 1990s by a second revolution—the new availability of an astonishing range of media made possible by the miniaturization of video hardware, digital technology, new editing and animation software, and, finally, the Internet. Oddly, however, the attitudes of many art historians toward image technology remained extremely conservative; struggles developed between those who remained committed to the intense study of the works of art themselves and those who preferred to philosophize about the discipline at a safe distance from the works of art. Those who were the most radical in their desire to transform the intellectual underpinnings of art history were sometimes the most reactionary as far as changes in image technology were concerned.
My own engagement with the media was rekindled at this time through the opportunity to make a short film on Beauvais Cathedral in association with Greenberg Associates. The film was part of the program of Art on Film launched in the late 1980s by the J. Paul Getty Foundation with the Metropolitan Museum of Art. The production team animated the forms and spaces of the cathedral by abandoning the fixed tripod and mounting the camera on a dolly moving on rails, on a crane, and on a helicopter. Participation in that effort enabled me to redeem the frustration of the earlier project to film Ani Cathedral.

We had no difficulty in allowing Saint-Pierre of Beauvais to star in his own movie, but a new question then arose: What do we listen to as we move through and around the stunningly beautiful spaces of Beauvais Cathedral, animated through the passage of the camera? The new media will allow us to create a simulacrum of the spatial envelope of the cathedral that is much closer to the original work than any slide. Given the immediacy of the images that we can now create, do we still need to hear the voice of the interlocutor with his or her interminable rhetoric? Fear of the power of a lifelike simulacrum may actually have lain behind some of the initial opposition to the new media. But the cathedral was itself created as a medium—a means of getting you from one place to another—and the words of the interlocutor might actually hinder that passage.

An animation of a work of art through film, video, or virtual reality can be a powerful tool for teachers, allowing them to bring the work into their classrooms with a new kind of force. The absence of a voice-over commentary can allow teachers to experiment with multiple viewpoints. Such an approach, employed in the Amiens Project (1994) undertaken by the Media Center for Art History to serve the Columbia Core Curriculum, certainly changed the means of representation available to the teacher wanting to bring a surrogate image into the classroom.

**Production of Knowledge**

But what about the other task identified in the title of my paper—the production of knowledge? Knowledge may, of course, be created though the systematic looking demanded by the business of representation as the inherent qualities of the work of art are elucidated through verbal description. But as the interlocutor describes the work of art, he or she will invoke not only what members of the audience can see but also what they cannot see. Thus, the affirmation “This is a Gothic cathedral” makes sense only when we relate the work of architecture before our eyes to a thousand other such buildings. In the controlled space of the classroom, the teacher contrives juxtaposed images to tell a story. It is the same with a picture: the forms and events depicted, and even the manner of depiction, take on levels of meaning when related to what is “out there,” beyond the frame of the picture.

But a problem arises when we attempt to fix the meaning of the
work of art in relation to the “out there.” At the moment when a work of art is created, a thousand different possibilities and relationships exist; at the moment of representation, however, this range may be compressed into a single path fixed on the pages of a book or into the essentially linear pattern of classroom rhetoric. The notion of context is particularly troublesome, since students will inevitably construct different contexts to accommodate their own preconceptions and prejudices.

Contextualization, then, demands a spatial, rather than a linear, environment. This is particularly true for architecture, which is itself a space-enclosing entity rooted in the space of the landscape. Henri Lefebvre (La Production de l’espace, 1974) has invited us to consider the dynamism of linkages between a range of different kinds of space: mnemonic, social, geopolitical, urban, architectural. Such thoughts are particularly relevant to the understanding of Romanesque and Gothic architecture—a phenomenon involving the production of hundreds of edifices in a context of dynamic interactions among clergy, nobility, and newly wealthy townsfolk within a cultural context of rapidly emerging national identity. To what extent did the architecture of Romanesque and Gothic result from such identities, or to what extent did it create those identities? More specifically, what was the role of Gothic architecture in the creation of France? It is difficult to answer such questions and to fix such relationships within a unified story on the pages of a book. A computer provides a better environment for the exploration of such problems.

Let me illustrate this concept with reference to “Mapping Gothic France,” a databasing project on Gothic architecture that I am currently undertaking with support from The Andrew W. Mellon Foundation.1 The idea of databasing Gothic architecture, rather than stringing the monuments along in a linear sequence or “story,” is not new: it belongs to the venerable intellectual tradition of the statistique monumental, a phenomenon growing out of the encyclopedic movement of the eighteenth century. Many volumes have been published as alphabetically arranged catalogs of monuments from particular regions of France or other European countries. We might also remember the ostensive formlessness of Viollet-le-Duc’s alphabetically arranged Dictionnaire raisonné de l’architecture française of the 1850s.

What the computer can do is to arrange a collection of monuments in the spatial environment of a map, rather than in a linear or an alphabetical sequence on the pages of a book. The space between buildings is just as important as the space inside them. Each monument should be presented with plans and sections rendered on the same scale and with some indication of raw dimensions. It should be possible to visit each monument with high-resolution photographs presented not as “thumbnails” on a “page” but in meaningful relationship to the experience of the visit—reflecting the approach to and

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1 The project is a collaborative one: my coprincipal investigator is Andrew Tallon, professor of art history at Vassar College. During the summer we traveled together to gather the data for the Web site, we were accompanied by two Vassar and two Columbia students. We also worked closely with Professor Arnaud Timbert of Lille University and some of his doctoral students.
entrance into the monument and passage through and around its spaces. The spatial integrity of the building is represented through panoramic images (QTVR) and three-dimensional models.

Such a program offers extraordinary potential in the generation of knowledge, in its application in the classroom, and in the fostering of new kinds of collaborative networks.

The new kind of knowledge may perhaps be best understood in relation to “The Garden of Forking Paths,” a short story by Jorge Victor Borges. In this story, Borges addresses the impossibility of writing a conventional book representing all the potential outcomes of all the bifurcations faced in the garden of life. In building a great medieval church, the builders certainly must have reached some kind of consensus prior to the start of work. In the half-century or more during which construction took place, however, multiple opportunities for change undoubtedly arose. The initial choices must have soon seemed old-fashioned or structurally inappropriate given the dynamic behavior of arched masonry. A procession of visiting critical experts would express their reservations about the work, attempting in this way to impose their own services (“it’s too dark; your capital sculpture is outdated; the flying buttresses are too high to be effective; it’s going to fall down,” etc.) The building accounts of Troyes Cathedral document exactly such a continuing situation.

Each cathedral construction project must, then, be understood as a kind of continuing event, embodying all the decisions made over the decades or centuries of construction. A military engagement such as the Battle of Bouvines (1214) may unfold in a single day and may imprint its outcome definitively upon history. A cathedral also continues to impose its presence, but its forms must be understood as the result of multiple choices made by human agents with different agendas in circumstances that might be quite volatile. It is not enough for teachers to tell their students of this situation: the possibility of visiting hundreds of buildings located on the map will allow them to make this discovery for themselves. We hope, moreover, to provide animated maps that will take the student back to the dangerous middle decades of the twelfth century, when the future shape of the nations of western Europe was far from clear, with confrontations between Capetian and Plantagenet, Christianity and Islam, North and South, Catholic and “heretic.” The laying out on the ground of hundreds of related buildings in this period of uncertainty was certainly a means of fixing the desired outcome.

I want to close with a reflection on the linkage between the agency of a group of people who conspire to fix a desired future in a time of uncertainty and the activity of a group of builders who lay out a great church on the ground within a space marked out by stretched ropes. Both activities may be understood as plotting. The cathedral plot, then, includes not only physical control of the terrain vague of the intended building site but also the establishment in human terms of shared desire and the logistical means to accomplish the project. My own desire, finally, is to provide an environment in which students can rediscover the astonishing implications of the plotting of Gothic France.