

Literary and Textual Studies against a changing ICT background: Grand Challenges

Please read this before the first session on Wednesday, 31 May (on the tube, on the way to the meeting, is fine!) Discussion may begin with the points raised in this paper.

The impact of ICT: outline

The current state

While almost all humanists in these areas make wide use of standard ‘personal’ computer tools (as in word processing, internet browsing, bibliographic databases and email), very few make any use of ICT tools beyond these. The prevailing model for literary and textual scholars is:

1. To carry out research, using traditional print materials, supplemented on occasion by materials in digital form and digital methods (bibliographic databases; electronic journals; email contact with colleagues; internet searches) — *primary research*
2. To distill the research into a word-processed file — *research output*
3. To pass the word-processed file to a publisher who turns it into print for publication — *research dissemination*

How ICT changes this: the stages

Each of the three stages listed above may be transformed radically by ICT methods.

Several projects have already shown this. For example:

1. *Primary research* — this may involve deep involvement with digital methods, in three phases:
 - a. finding research materials in electronic form
 - b. creating new research materials (e.g. images, transcripts, collations) in electronic form
 - c. using computer tools to interrogate digital research materials: to discover patterns, to make new connections
2. *Research output* — the simple model, of a single print-ready object, has been immensely extended. Where the output is itself digital, it may be expressed in an infinity of forms: as print, as a database, as sophisticated interactive browser interface, as input to other programs, and many more.
3. *Research dissemination* — the availability of tools for transformation of digital data and the ready portability of this data to the web makes possible publication on a scale and of a sophistication as never before.

How ICT changes this: the entire process

Even more radically, ICT has the power to alter the entire research process. Thus:

1. The distinction between stages 2 and 3, research output and dissemination, may disappear entirely. Output direct to the web, in various forms, means that scholars may publish without any kind of intermediary, and may publish immediately as material becomes available

2. The availability of the primary research materials and tools in digital form means that they too may be published: readers may have access not only to the research results, but to the same basic materials as the researchers.
3. The acceleration of the whole process means that only seconds may pass between the creation of research materials, its analysis, and publication: this in contrast to traditional print, where a single scholar may spend years on a piece of research before publication
4. The networking of everything opens up the whole process to partnership, making possible large collaborations as never before.

Consequences and issues

Many consequences arise from this. Thus, in no particular order:

1. The rise of ‘self-publishing’, and the reluctance of people to pay for materials in electronic form, has led to the withdrawal of the scholarly publisher from the digital arena. What are the costs of this? Does this matter?
2. The youth of the digital media means that we lack accepted interface models (no two electronic editions are the same). Does this matter?
3. This youth also means that scholarship using ICT may not be valued – or may be overvalued, or valued for the wrong reasons. How heavily do these weigh?
4. The plethora of forms and the transience of the medium raise serious questions about preservation and sustainability. What will last of this digital scholarship and what will be lost?
5. The penetration of digital methods is very uneven in terms of discipline. Some areas within literary and textual studies (notably, the making of scholarly editions) have taken great advantage of ICT; others (notably, literary critical monographs) have been little affected. Does this matter? What can be done about it?
6. The penetration of digital methods is very uneven in terms of institution. There is a sharp divide between digital ‘haves’ (a few institutions with high degrees of digital competency, in terms of infrastructure and expert support) and ‘havenots’ (the many where individual scholars are left to work it out for themselves). How do we bridge this gap?
7. In association with this: a gap has arisen between ‘humanists who know about humanities’ and ‘humanists who know about computing’. Does it matter; what should we do about it?
8. It can be argued that the actual achievement of ICT in our area is far below its promise. Is this correct? If so: how do we change this? Is it a problem of the tools available; of the culture of our subject; of scholarly infrastructure?
9. When should we cooperate; when should we compete?
10. How many times must we reinvent the wheel?
11. Is ICT making a fundamental shift in our discipline? (see next)

Thinking out of the box

It is our fortune to live in an age of paradigm shifts: unexpected events which change everything. ICT has initiated two such shifts in our profession: the onset of the web in the early 90s, and the appearance of Google in the late 90s. Can we see other such paradigm shifts breaking upon us; should we work to effect such a shift?

To put the question another way: what single change would most transform our discipline? Candidates might be:

1. Fundamental change to the copyright laws
2. The arrival of the universal wired world: everyone is connected, all the time, with everything available everywhere
3. Digital images of every primary textual source (every inscription, manuscript, rare book...) in Great Britain (Europe, the world...) available to everyone, free over the internet
4. The success of institutional repositories
5. The arrival of the killer humanities application
6. Any other candidates?

Priorities

Certainly, we do not lack opportunities: and e-science may be the largest to come our way. Questions to be addressed in determining priorities include:

1. Should resources go into addressing the impact of ICT on the three distinct stages of the research process, or into addressing the impact of ICT on the whole process? (Is this a real opposition?)
2. Should resources be targeted to particular areas ('picking winners') or should they be spread as widely as possible ('support the whole field')? Or: do we give a lot to a few, or a little to many?
3. Everyone agrees that there is an e-publication crisis. Do we address this directly (e.g. by direct funding of an e-science library for the humanities; or by expanding the remit of the AHDS, etc.) or seek other solutions?
4. Should we be targeting tools development .. resource development .. upgrading electronic archives .. training scholars?
5. Should we look to expand existing centres of excellence / create new ones – or look to distribute expertise beyond specialist humanities computing officers to humanists at large?
6. Should we concentrate resources on projects/tools enabling collaboration, or on projects/tools empowering individual academics?
7. What balance should there be between 'responsive' and 'pro-active' funding?
8. We do not live in a vacuum. Should we target resources to projects collaborating with groups outside academe (even, with commercial partners); to projects collaborating with academic groups outside our speciality?
9. To what extent should we seek to adapt solutions developed outside the humanities, or should we develop specific solutions for our particular needs?
10. Can we think of any answers beyond: give me more money?

Peter Robinson (following conversations with Luke Blaxill), 23 May 2006