**Digital Technology and Practices of Humanities Research**

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**Abstract.** Our world began with an image. A leaf falls from a tree and lands on the surface of the water, carried by ripples and whirlpools to a new place far removed from its origin. There is he able to form new streams in calm water. This image is a metaphor, representing the interweaving of technology with the practices and values of humanities research, being both a point of intersection and a torrent of unexpected and predictable contingencies. Logical methods in the digital humanities lend themselves well to theory and documentation. At a level of a distinct set of defined statistical topics that can be generated using a software tool such as MALLET (Machine Learning for Language toolkit, a cross-platform topic modeling tool) rather than a set equivalent retrieved a linear normal reading process, representing the difference in degree. The methodological stake and consequences of the choice for the knowledge it creates are questioned, but taken into account and understood in scientific discussions. The falling leaf, getting into the wave, continues to move down, and the open frame of its fall can be lost, changing the path of the leaf. However, the leaf may later grow together, thus forming a barrier that affects further flows. Technology is sublimated into the fabric of scientific methods and the organization of the work of scientists is marked by a certain inevitability because of the methodological forces at work and because of the technologies that enable communication and interaction in the wide society.

**1 Introduction**

In 2013, various stakeholders came together under the auspices of the Digital Arts and Humanities Network to bring attention to agency funding and politics, how computer scientists and humanists understand and explain the changes that IT has brought to our professional lives. The meeting raised disparate and identified issues, as well as solutions and solutions to problems proposed by interested opinions, which were no less diverse. Technological research stresses in the research process and this stress is better controlled with a high degree, high with the amount of academic freedom that the scientist himself will choose the personal area within reason, evaluating research appropriate methods of solving the problem. Part of the scientific process is the consciousness of knowledge and is generally important to share. As a result, two main results meet, where the system of

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This theory divided the surface of scientific production into impacts in the digital humanities, which in turn falls into six categories, one of which is in relation to the flow of production, more specifically the paradigm of publishing in proprietary formats such as PDF documents. Posting electronic paradigms is a bad category, including extensive posting of blogs and corpus on Twitter and presented video and audio arguments. The software is a selection of methodological and educational processes. A common opinion paper has been developed aiming to find big points of view in the ecosystem. However, these results have not been officially published, but the work itself has sparked debate among funders and politicians trying to identify individuals by measuring digital research. Strong discussions have developed over the question of where humanities technology is being driven. The boundaries between informal communication and scholarship are blurred, the position of employment in personal correspondence and the line of argument in a scientific monograph are distinguishable, the spread of forms from a tweet to a blog post, advanced assistance in search, feedback from colleagues and public distribution, all this is true by testing our assumptions where the act scientific lies and what it all consists of. At the global level, birth and research approaches, for example, citizen science. The main problem was identified as a priority communicative and human science, as abilities and skills allowed in exceptional spaces and interactions. Along with digital change, fundamental cultural change is needed.

Nowadays, articles about the impact are opened and a registry of digital resources protected by certificates of high costs for their production is commonplace. And it grows over the years that nothing happens without digital resources, and this phenomenon is interesting, popular and well used. Universities believe that with the help of computers, the manager is solved faster and more economically in terms of time. Engaging in the humanities in digital ways makes them relevant, more dangerous, obvious situations in the subject and draws attention, the impact on the work is clear to the general public. Cultural heritage organizations such as archives, museums, libraries and outreach are exploring the use of social media and digital methods as a dissemination vector for the ability to increase visitor discovery. But will people really get acquainted with the cultural heritage with the help of digitized materials and will the humanities become more interesting when they are received digitally? The data are within the scope of impact assessment regardless of cultural heritage institutions or public authorities [6; 689-708]. The impact assessment process itself has many definitions and depends on the context in which it is used. Health impact assessment, coverage and environmental coverage are well established. But they do not apply to humanitarian and cultural heritage in relation to digital resources and collections [7; 37-41]. Over the past fifteen years, a lot of work has been done, developing and testing test methods to determine the values of the cultural heritage sector. These included attendance and demographics, learning outcomes, and television ratings. The frequency of detection of cases of infection in relation to digital resources remains under control. Today, project-based evaluation models are short-lived and inconsistent in producing real metrics.

## 2 Materials and Methods

Digital humanities professionals are using new digital methods and tools to help with research questions that are difficult to solve without the help of computers. Sometimes such action radically changes the nature of these issues. Advanced technologies constantly require development and thus add the aspect of problem solving [1]. The Digital Humanities is not just a divergent scientific field, it is an eloquent conceptual support for the use of new approaches to the construction of humanities knowledge for any purpose, using innovative methods of communication. Projects are mostly communicated through
databases and datasets, websites and online collections and other informal means to discover results [2]. Although DH-FILES is taking on a pioneering role by experimenting with a new communication format, there is still a problem in recognizing them as official publications. Although they can communicate valuable knowledge, similar to those in traditional printed publications. However, they do not have such authority. They are not considered the equivalent of scientific papers and books by the funding bodies and the recruiting committee, as scholars do not often rely on them as official publications or do not confidently recognize them. Books and articles have a special position due to some of the functions of official publication being in print, embodying academic fundamental values. Digital technologies cannot behave like an island with its own laws and the adoption of a new form of digital communication as an authoritative scientific product is moving slowly, justified by technological innovation in an innovative and progressive field.

When it comes to official academic publications, the practice of information technology is becoming quite traditional, as technology collaborates more intensively than the humanities in general. This applies to the research phase before publication. A publishing project requires collaborative work, as it will need to involve specialists from outside, and to create a big data set, several specialists are needed. When it comes to publication, the number of co-authored research papers on display will not increase. The number of publications explaining new methods of communication research is growing, representing an independent genre. And this genre testifies to the reflexive tendency of the field [3; 395-99]. Depending on the discipline of articles and monographs, a narrow circle of generally recognized academic official publications began to appear in edited journals and volumes. There are many other forms of communication through which academia connects with each other, introducing new ideas and discussing research findings, but such communication is called informal exchange. For four hundred years, as a result of the symbiotic development of the systematic values of science and the development of print culture, articles and books have become a special standard of academic official publication. Explicitly, these values are rarely disclosed, however, the contribution to knowledge must be original, knowledge must be available to the community regardless of the position of the author in society, knowledge should not serve anyone’s interests, in addition to being widely distributed, withstanding systematic verification [4;133-41].

David Throsby and Hassan Bakhshi considered it necessary to re-formulate thinking, where it would be possible to measure the full range of benefits that subsequently emerged from cultural organizations and works of art, but this will be difficult, since cultural actions are intangible and more complex than numerical and economic, they are difficult to explain and cannot be proven. Visitor engagement cannot be measured by instrumental values alone. If more collections are delivered digitally, the number of beneficiaries will start to increase and tracking the benefits and visitor interactions with the collections will become a challenge. LAIRAH, a journal analysis of Internet resources in the humanities and arts, shows that only a small number of digital product creators had no contact with their user base [8; 310-18]. The LAIRAH study was one of the first to be conducted in the humanities and arts by the Humanities Research Council. Over the twelve years of the existence of this project, changes have been made. Investments in digital resources have become more targeted in terms of strategy. This obligated users to participate in the next phase of the digitization project, which resulted in TIDSR, in other words, a toolkit for assessing the impact of digital resources. This was a long-awaited event, but the idea was associated with the ability to find and disseminate methods such as log analysis, web metrics, and focus groups. Metrics can show us how many people went to a particular page and how many links were made on it, but we don’t have access to what the user thinks about, what he likes and what he doesn’t, what is important to him and whether he found it. The toolkit is designed to help developers improve the resource.
The British Research Excellence Framework adopted the idea of impact, which was based on the assessment of the quality of research in UK universities. Academics didn't have to prove how their work leads to behavioral change that benefits the user community. The very concept of impact is problematic, intertwined with some of the key issues inherent in digital developments. There is still a lack of adequate means of assessing the impact on human studies, as there is not enough evidence. The memory institute is different from a group of scientists who, as part of their research, create resources. They can be seen as a service provided by an institution to visitors. Services can be partly funded by institutions, lending themselves to a more controlled process by being attached to a substantial search engine catalog. In a large university, such projects can take place in different places, ranging from faculties, libraries and computer centers. The digital landscape looks chaotic.

The GATE system, developed by the University of Sheffield, has had a major impact on the commercial practice of natural language processing, as has the SCOTS corpus from Glasgow on lexicography and the preparation of commercial teaching materials for the English language. Some projects collaborate with the software industry. For example, Linds University is working on the Cologne edition of Heinrich Böll, whose technical collaboration with the programmers-engineers at Pagina Ltd has resulted in platforms for large-scale critical releases and new software. The most unusual commercial relationship was LEGO's collaboration with the University of Westminster through interaction in the digital community.

3 Results and Discussion

In the online environment, print formats serve as informal communication, and innovative forms serve as official traditional publications, and in order to come to the concept of good scholarship in any format, a total revision of the traditional print interweaving of the function and form of publication is required. All this requires coordination of efforts and time. Distribution is the transfer of knowledge through publication, publishers and scholars distribute texts to their audiences. Publishers filter submissions by relevance and according to the interests of the market they seek access to. Through publication, the author becomes a discoverer and analyst of the object of study, especially in the humanities. Authorship is closely related to the function of identity. The authors are aware that readers value carefully researched works and publish in channels known for their rigor. The digital revolution has changed the way we think about knowledge, but change is slower than most would like.

The book represents the relationship between the production and consumption of scientific knowledge, having a special status as a privileged communication tool in the humanities. The reason for the persistence of books lies in their intellectual and epistemological advantages. Having studied the psychology of interaction between a computer and a person, it was discovered. That digital objects are of less value, since they are not particularly distinguishable and can be reproduced at a lower cost, unlike a seashell or a pencil drawing [5; 219-30]. The habits of readers of published works are changing, and in our time to publish a work, and not just report it, a short pause is needed. Scientific publications disseminate knowledge in society. Although this definition is not useful, it is used to sort out the issue of longevity and status of a work. Change in scientific communication is accepted as a two-way process of production and consumption, but consumption is of less interest.

The University of Westminster London French Project has created a digital community archive in collaboration with the British Library. The French community and information professionals, thanks to the dissemination of knowledge and the exchange of experience and connections between historical and modern life, have benefited from this. Some projects benefit teachers and students. In the animation workshop, students used digital
resources created by the Ure Museum of Greek Archeology at the University of Reading. The scientific work of the eighteenth-century writer Lawrence Sterne of the University of Northumbria helped create digital teaching material for teachers. It is used by children when visiting local heritage sites. Digital projects demonstrate that these resources do not always fall into academic categories. The REF case studies did not come about by chance, they were selected by universities. It was not necessary to introduce a case study that includes digital resources. These studies represent strong images of the genre found in any university. The impact of digital projects is difficult to prove, as they are not taken into account and are not proven. The impact of high-profile and successful projects is significant. It is impossible to establish the ratio of influential projects to the average digital resource, this can be checked by selecting digital resources randomly from a list of funded or archived projects. The studies are designed and written by the universities responsible for gathering evidence of the benefits and changes of the case study. And such a procedure is open to bias. Because the universities presented their work in the best possible light, selecting the evidence accordingly, ignoring the not-so-positive figures. And the objective method of influence when assessed by independent researchers will lead to different conclusions. It is time consuming and expensive, and it is unknown if there is demand from sponsors, scientists and governments to host such events.

The case study influences cultural heritage, the media, religious organizations, schools, the public and public policy. The results are useful for protecting the digital humanities, with limited benefit to the creators of these resources. In this information technology environment, the impact of having these resources exist in the future, in an ideal position to demonstrate their impact, must be championed.

4 Conclusions

Currently, traditional ways of communication and production are being reproduced to work in a virtual environment, and we are wondering if they negatively affect science and is it outdated? There is no difference between reader and writer. If the old economy is collapsing, the improved organizational forms of industrial production must be replaced by streamlined digital data structures. It's pointless to talk about the publishing industry, since the main difficulty is solved by publishing, making the material available to the public and ceasing to be a problem.

In order to understand the broader context of the academy, where information technology assessment takes place, it is necessary to ask a few questions: how high is the assessment of academic work and how closely is it related to our activities? D.S. Hans, H.M. Campanario and D.B. Shepherd conducted a study of cases where work was rejected that won the Nobel Prize. There is a large number of initially rejected articles, which later became one of the most cited in their fields [9; 549-65]. Works rejected in one place were accepted in other places, so this phenomenon is not surprising. More troubling is that there are complex cases of positives where authors re-submitted disguised papers in a psychology journal, which this time were accepted for publication. Most scientists do not admit that they are not able to determine quality, otherwise the peer review mechanism would have to be demonstrated. There is another factor, and that is the lack of an estimated workforce. If there are up to four hundred applicants for one academic position, the commission resorts to indirect measures to assess the quality, since the investment for a permanent position is several million dollars. The works of some applicants are often excluded because of the reference to the name of the journal where they were published, also because of unclear citation measures, for example, the impact factor [10]. This imperfect academic practice, which does not allow inconsistency between content and content, has led to a declaration in San Francisco on the evaluation of scientific research that rejects such methods. Bad books
may be published by leading university publications, or a low-ranking journal may contain a gem. The author should be able to present his work anywhere, this is a component of academic freedom. But such freedom is limited by the mechanism of indirect evaluation, concentrating material rewards on the brands of specific publications, correlating with the deficit in the ratio of candidates for positions in the university. Valuing and publishing with proxy scarce indicators works like a token economy whose currency is research artifacts that are sold through recruitment and promotion panels.

To assess the quality of the study, a publication frame centered around the individual author is used. For example, the type of frame used by a concert hall to evaluate a violinist. What is missing here is the discriminatory power of the evaluation of the same violinist who appeared in the subway. We ourselves must take part in the act of judgment, recognizing the difficulties we must face in taking such action. Such a culture gives value to specific media. By publishing journals and books, the university press demonstrates the way recruitment, promotion, and tenure commissions by virtue of making their decisions, limiting acceptable forms, and thereby creating evaluations by indirect measures. If the work being published is the type of service practice that the author is judged on, a high-profile press brand will help in career advancement. There is a large circulation of incentives for authorship and reviewers, making the changes in terms of media, through which the evaluation of scientists takes place, limited. It is necessary to pay attention to discipline, a deterrent in assessing the culture of hiring or publishing in the press.

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