Abstract: Authors and other creative workers today are faced with the (r)evolution of digital technology and media that slowly change and challenge the way they create, disseminate, and preserve their work. The purpose of this paper is to explore the attitudes, habits, and practices of contemporary Croatian writers in a small-scale sample in terms of the creation, organization, and preservation of digital documents and various literary forms. Data was collected through semi-structured interviews with nine contemporary Croatian writers and examined through narrative analysis of the interview transcripts. The research highlighted areas that need to be more thoroughly considered when we are dealing with issues of personal digital archiving, digital legacies, and the preservation of digital cultural heritage in general. In-depth interviews with respondents indicated one particularly important issue: that preserving the context of their work is as important as preserving the work itself.

Keywords: Personal Digital Archiving, Preservation, Digital Literary Legacy, Croatian Literature, Croatian Writers

1 Introduction

"Adventure without risk is Disneyland."
(Chapter title in Douglas Coupland, Generation X: Tales For an Accelerated Culture, 1991)

In 1962, Marshall McLuhan stated that all media, as extensions of humankind, cause deep and lasting changes and that they transform culture and society as a whole. This is especially true in the digital age of immediate communication and momentary experience which translate our ideas, thoughts, environments—even actions and relations—into the browsable, modular, timeless, and spaceless world of digital information where technology and media influence how we experience and understand, and also how we represent and express ourselves as creative producers of culture and heritage. The infinite possibilities suggested by technology and media revolutionize the process of cultural production, including the creation of literary works.

Digital technology and media offer new ways to produce literary works, but they also require writers to develop different styles, techniques, skills, methodologies, and conventions of communication, between themselves and their readers, and also between themselves and their work. Authors and their public in the digital era are inclined to move towards new forms of literacy by building awareness and skills for digital writing and digital reading. Though the rise of digital technology and media has been liberating in many ways, it has also resulted in a massive accumulation of information and scattering of ideas and thoughts throughout the digital landscape. Writers should be aware of the importance and urgency with which they need to manage their digital legacy and should take control of their digital assets—e-texts, digital data, and documents. Since technology and media are constantly developing, the world of writing literature also becomes a story about born digital literary works that are being created explicitly as a literature to be consumed and interacted with through computers, other devices, and the Internet. Authors are becoming increasingly visible (e.g., the Electronic Literature Organization). So authors must now take increased charge of their creative process and the literary works they produce.

Taking charge means raising awareness of, and developing the right attitude towards, the issues of managing their digital texts. This particularly refers to writing on the Internet since it implies a different distribution of content and lack of control of that distribution (Musburger, pp. 265–66, 275). Besides that, authors face more practical issues like getting to know digital technology and media and their strengths, opportunities, and liabilities, mapping and organizing their digital assets, backing them up, securing the information while
protecting their own privacy, choosing the right format of information that will ensure its sustainability and availability for the future, and applying good preservation practices that will determine the digital fate of their literary works.

2 Previous Work


Every new medium and every new tool has changed the art of writing and changed the text itself, from pencil and printing press to typewriter and computer. They have all required authors to learn to trust them, to discover new genres and new practices, and to find new ways to evaluate these types of texts (Baron, p. 136). Digital technology and media create a new digital culture and heritage that can provoke the same emotional, cognitive, sensory experience in those who consume them. One of the aspects of that culture and heritage is electronic or digital literature.

Above all, we want to emphasize that our research includes all literary forms behind the concept of e-text or e-book and electronic or digital literature, which implies other digital literary forms. One of the basic ideas proposed by Montfort and Wardrip-Fruin is that computers and other electronic devices can become places for new literary works that use their capabilities (Monfort and Wardrip-Fruin). If we exclude digitized print literature, then we can define e-literature as “digital-born literature,” created with the help of digital technology and media, literature that employs a wide spectrum of aesthetic strategies and is meant to be read on the screen of a computer, e-reader, mobile phone, or some other gadget. This means that the source code is an immediate and specific factor in the literary and technical production of electronic texts (Hayles, pp. 26–29) and without it those e-texts could not be accessed. E-literature also includes literature “born” on the Internet, in the Cloud, or with the help of social media. Though we speak of new forms of literature, most of them still borrow some of the essential features from the paperback, such as a logical structure and contents or form, all of which make it hard to define e-literature and e-books without reference to print books (Vassiliou and Rowley).

To understand the aesthetic strategies and possibilities of electronic literature which occur as a result of human thinking and machine execution, Hayles claims that one needs to understand the “intermixture of code and language on which recombinant flux depends and to perceive electronic literature as collaboration between the creative imagination of the (human) writer and the constraints and possibilities of software” (p. 26).

New technologies and media have changed the concept of literature itself, and they have changed the sociocultural perspective of the whole process of writing and becoming an author. Martin and Tian call for a redefinition of books as places where readers, and sometimes authors, congregate (p. 40). Also, some predictions have been made regarding the individual dimension of authoring and reading books, claiming that both will be replaced by a true communal collaboration of authors and readers. The author and the story need to reside beyond the book. This disruption may seem difficult at first, but it may lead to increased creativity and innovation affecting all aspects of the literary world—production, distribution, and the use of digital literature (Wilson).

In the literature review we reflect on four groups of issues: creating literary works, long-term preservation, the digital literary legacy, and personal digital archiving.

3 Creating Literary Works

When it comes to writers’ habits and practices in the digital environment, several issues need to be addressed. First, digital environments enable authors to develop new writing practices and to become true cyberauthors who produce, publish, and market their work. Technology has also changed the way authors and writers interact with e-texts and e-books. As Marshall concludes, they use different hardware and software and different annotation systems, they tend to scan and navigate through texts, and they use bookmarking solutions and various content representation tools (Marshall, pp. 51, 62, 67–68). Technological development has fuelled some of the most considerable differences between the analog and digital author and their work process, especially when it comes to creating and publishing the work and manufacturing and distributing the work—when it comes to the perception and reception of the author—and when it comes to the survival and preservation of the work (Velagić and Hasenay, http://www.informationr.net/ir/18-3/colis/paperC19.html#.VqSPV16j5D8).

Furthermore, this not only affects professional authors. As technology becomes more affordable and user-friendly, everybody can become a writer of some sort—as we can see by the number of blogs, webpages,
and social media sites that publish texts and literary works of different kinds. And it does not stop there, for digital technology and media continue to blur the roles of creators, producers, consumers, publishers, and readers. As Caroll states, these new digital media and information spaces emphasize the different roles of the writer so that s/he becomes an organizer of information and interpreter and communicator of messages who must obey the rules of interactivity, multimedia, credibility, and space-building (Brian Carroll, pp. 23–24). The author in a digital environment must be able to work with information and media of all kinds while being aware that technology and authorship become intricately entwined (King, chapter II., https://janefriedman.com/the-design-of-authorship/, ch. II.).

Second, digital technologies and new media are able to provide writers and authors with instant readership so they have to be ready for the expansion of their “fandom” and community of followers. New audiences are easily engaged with the author’s work and it is no longer necessary for authors to desperately seek an audience, especially when it comes to Web-based literature—“if you write, they will come” (Baron 137).

A further issue is that the digital environment becomes a fertile ground for the seeds of new digital and virtual genres—network fiction, interactive fiction with more game elements, immersive three-dimensional fiction, webpages, blogs, etc. Each genre has its own structure, conventions, underlying code, and standards, as well as a community of users. And because they are code-dependent, some of the genres have become known in relation to the software that was used to create or reproduce them (Hayles, p. 5). Some 20 years ago there were predictions (e.g., Umberto Eco) that because of their interactivity and hypertextuality, new genres would allow authors to practice their art/craft in an increasingly free and creative way.

Since online reading and reading of e-texts differs from reading offline, writing should differ too. It should comprise the principles of scan-ability, readability, and providing context, even brevity, if we speak of information on the Web (Carroll, p. 31). Bruce, Jones, and Dumais concluded through their research that people use several common methods to organize and preserve their digital information for future use: from bookmarking and sending e-mail to oneself or others to printing things out. When it comes to finding the information, people usually organize their personal collection so that the required information is readily at hand.

Advances in technology and media have provided many tools for preserving and organizing all of one’s personal and professional media, new and old (Baldridge, p. 16). Yet as much as new digital tools make the whole process of creation easier and available to many, they also encourage the mass production of a staggering amount of cultural content, raising the question of selection criteria: what should be protected, how, and by whom. Regarding the selection process, Velagić and Hasenay emphasize two important criteria, the first arising from users’ needs and the second from critical judgment based on the value and individuality of the work.

So when it comes to digital literary assets, we and others need to be able to access them and that sometimes requires a complex set of system protocols. One solution, proposed by Burrows, may be to store them in a repository that can manage access in a subtle and trustworthy way (Burrows, “Personal Electronic Archives”). Since e-literature today comprises not only e-texts and e-books but also complex Web activities that surpass conventional images of writing, one needs to consider other technologies as well as cultural and economic mechanisms, habits, and predispositions to keep canons and collections of work safe (Hayles, p. 42). When it comes to the categorization of the work, Marshall suggests using a clear and understandable metadata system, whether it is an intrinsic description, implicit records of reading, or activity data, intentional but unselfconscious records of reading or intentional user metadata developed as a result of focal activity. Liu et al., as well as Montfort and Wardrip-Fruin, suggest various ways to create long-lasting e-literature and their recommendations include using open systems and community-directed systems, adhering to good programming practices through commenting and consolidating codes, choosing plain-text over binary formats and cross-platform solutions over a single system, documenting the work early and often, maintaining metadata and bibliographic information, backing up and copying content onto durable media, and using XML as

4 Long-term Preservation of Data

The dynamic nature of the digital landscape, especially the ephemeral nature of web 2.0 data, poses complex challenges for digital document curation and preservation. Of course, technology can become obsolete or outdated, but the issue of preservation is not merely a technical question. It comprises a well-developed strategy, specifically developed criteria, and a quite determined approach (Roland and Bawden). This also applies to writers’ habits and practices for organizing and ensuring the long-term preservation of their literary data and other documents.
a standardized method to describe and represent works. All this could contribute to effective preservation, dissemination, and archiving of electronic and digital literature.

We live in a world of information and digital data, but there are still limits to what our computers and other devices can do and what they will be able to do in the future as they become a 20- or 30-year-old piece of hardware or software. This is why we need strategies, standards, concise planning, and, as some authors suggest, the right technical approach—migration or emulation—that comprises new conversion techniques and tools that are developed to achieve the required transformation (see Borghoff, et al., pp. 131–32).

5 The Digital Literary Legacy

We live in an almost all-digital culture in which most of the content is created and stored in digital form. In such a culture it is important for writers to become familiar with the concept of the digital literary legacy and all the concerns and engagement it implies. Most authors’ digital legacy is their personal digital library or collections of work that need to be accessible even when the author passes away. This means, as Carroll and Romano concluded, that we need to address all the new challenges surrounding the digital legacy, such as awareness, access, ownership, and preservation (Carroll and Romano, pp. 75–83).

After defining what one’s digital legacy actually consists of, that is, what an author wants to pass on to the future from her personal digital estate, one needs to plan and organize this estate; that is, authors need to name and authorize a digital executor in their legal will (Perspectives on Personal Digital Archiving). The first step is to make an inventory of every digital object stored offline and online and the second step is to research any rights issues that may impede her heirs from accessing the digital estate. One can also consider “downloading all of his online digital possessions and backing them up with his personal archives” (Perspectives on Personal Digital Archiving, p. 30).

Williams, Rowlands, and Leighton found that while managing their digital legacy, people exhibit various archiving practices, and although most of the producers of digital information today are aware of the importance of digital preservation, they all exhibit varied levels of awareness and even idiosyncratic strategies of engagement. Authors’ collections need to be well organized, maintained, and searchable; to achieve this, authors can choose from today’s sophisticated software for organization and document management and from a range of retrieval tools that can provide effective searches even when there is a lack of organizational strategy (Beagrie).

6 Personal Digital Archiving

One final issue that arises when we think of digital authors and electronic literature is the question of writers’ attitudes toward the importance of organizing and safekeeping their personal digital documents and collections. Producer, composer, and host of the podcast Radiolab, Jad Abumrad states, “Change cannot be planned, it can only be recognized” (Abumrad). We cannot plan for what awaits us, but we can recognize it when it comes and act upon it. To reach their readers and to serve the market, authors need to study and follow technological changes and convergence as well as changes in distribution methods (Musburger, p. 279).

When it comes to the preservation of electronic literature, there are no specific mechanisms, unlike those that are used to preserve and archive print literature. What makes things even more difficult is the fluid nature of digital media and technology (Hayles, p. 39). Yet preserving e-literature and ensuring its availability in the digital environment is essential for cultural improvement, which is why authors need to be concerned with identifying the possibilities and conditions of its long-term preservation and access. Many see digital technology as the key solution but some (Brown and Boulderstone, p. 115) assume that, despite all the attraction of having a text or book accessible at any time and on any screen, technology still fails to live up to that expectation. Others (Martin and Tian) think that “technological and media outcomes” are usually far less revolutionary than expected and that they may not deliver the anticipated innovation (Martin and Tian, p. 149). Thus, today, we have authors (Karanikolas and Skourlas) who suggest a more contemporary approach to self-archiving and managing the “life of information” which is based on low-cost tools and user-centered approaches.

It is important that authors can return to their works, assured that they will still be available in a readable form. In this regard many issues need to be considered. Texts stored in formats created using proprietary software or stored on older media may not be accessible in the future. The writer must keep up with and get to know the technology and media in her field of work and to use it in creation, as a means to advocate for the work and to put it in front of readers. Martin and Tian conclude that for
an author to have a realistic chance of success, adopting technology and media must involve user-friendly strategies. This must be done with one fact in mind: authors are simply creative workers who use machines and tools for writing and we should never mistake them for writing machines or writing programs (Martin and Tian, p. 51). Liu et al. confirm that the long-term preservation of digital works requires the labor of authors, their readers, editors, publishers, librarians, and others involved in the creation and distribution of e-literature and e-books. The most important thing is to create standards, especially open-source standards, that will establish a standard-based framework for electronic literature and its authors.

All this has many implications. Authors sometimes need to find the courage and the motivation to create outside the norms and forms of approval—theirs, their community’s, and their market’s. It is up to them to enter boldly into the electronic frontier of writing, replacing their pencils with computer keyboards. A saying among communities of authors of all kinds is that the greatest enemy of creative success is the attempt to fortify against failure. This can also apply to integrating new technology and media in their work. Authors must be bold in using new tools in their creative work without fearing that it may bring them failure. They thus become (and remain true) pioneers of creativity and storytelling. For digital technology and media are not here to replace authors or their work. They are here to place things into a new perspective and perhaps even to bring a little bit of uncertainty, as one of the things that fuels authors’ creativity and makes writing “that easy and that hard” (Gaiman).

7 Aim and Purpose of the Study

We have discussed many issues above. The aim of this study was to explore the habits, practices, and challenges that the chosen sample of contemporary Croatian writers face when they use digital technology as a tool for creating their literary works and as a tool for managing and preserving their e-texts and collections for the future. While conducting the research we wanted to identify the following:

- Writers’ habits and practices when they create digital literary works
- Writers’ habits and practices when organizing their data and ensuring its long-term preservation
- Writers’ familiarity with the concept of the digital literary legacy and all the concerns and engagement it implies
- Writers’ attitudes toward the importance of organizing and safe-keeping their personal digital documents and collections.

This research aims to identify the level of writers’ awareness of the intersections of the creative process of pre-writing, writing, and post-writing on one side and digital technology and tools on the other. It also aims to identify how supportive writers are of the concept of electronic literature and the use of digital technology and media in their work. Finally, the research aims to identify how and to what extent writers mobilize digital technology and media to build their literary legacy and how familiar they are with all the possibilities and trends in electronic literature.

8 Methodology

A qualitative study was used to investigate experiences, attitudes, and practices of contemporary Croatian writers who used digital technology and media in their work, whether in certain stages of their creative workflow or during the entire process—for pre-writing, drafting, writing, post-writing, publishing, and preserving their e-texts.

Data was collected through semi-structured interviews that were conducted with nine interviewees in July 2015. Interviewees were selected taking into account two main criteria. The first is their cultural and heritage association and the significance of their work; the selected interviewees are the members of the Croatian Writers Society or the Croatian Writers’ Association. These associations choose their members based on the quality and number of works published. In their articles of incorporation, these criteria are explained: to become a member of the society a person must have published two literary, literary-scientific, or nonfiction books that have received serious critical reception and are contributing to the development of Croatian culture. The membership in these associations was a starting point for evaluating significance of the interviewees and to avoid subjective speculations on the issue.

The second criterion of selection was the writers’ geographical relation to a particular region of the country. All the writers live and work in the eastern region of Croatia. Although this may not be as solid a criterion as the first one, it enabled us to focus on a specific socio-economic milieu in which the writers have been creating their works and to give us a good understanding of the background of their responses.
Interviewing was chosen for this study to allow the participants to deeply express their opinions and discuss their practices related to the research issues. Although the research was conducted with a small sample, the characteristics of the respondents and the in-depth analysis of their answers enabled us to glean relevant insights into the research issues. The aim of the applied method was not to collect data that would be representative of the entire writers’ community. The aim was to reveal some contemporary issues and indicate broad areas for future research.

The interview consisted of 19 questions exploring writers’ habits when they use digital technology and media to produce their work, and exploring the challenges of organizing their manuscripts and notes, writing and finalizing their works, and managing and ensuring long-term access to their e-texts and digital collections. The questions appear below in Appendix I. The final selection of the questions was left to the interviewer’s discretion and adjusted during each interview. Questions were organized into four distinct areas: (1) the literary creation process in the context of digital technology and media; (2) the organization and long-term preservation of literary works in the context of digital technology and media; (3) managing the digital literary legacy; and (4) the level of writers’ familiarity with various concepts in the context of electronic literature and digital technology and media. All the questions were open-ended, enabling participants to elaborate precisely on their creative work using computers or hand-held devices. Data from the interviews was analyzed using narrative analysis of interview transcripts and thematically grouped according to the four groups of issues addressed in the literature review: creating literary works, long-term preservation, the digital literary legacy, and personal digital archiving.

For the first group of questions, we examined technologies employed in writing, along with the programs, applications, social media, and content-managing systems used. Depending on the level of interviewees’ information literacy, we explored respondents’ attitudes and preferences towards open-source or non-open-source solutions, how they use them, and to what extent they believe the technologies they used while writing influenced the final outcome—along with the reception—of their work.

The second group of questions focused on finding out whether the respondents thought about the organization and long-term preservation of the digital documents they created. They were asked about their practices of protecting personal data and access to information on their computer and similar devices used for writing, whether that information was stored in a thought-out way, and whether other people are aware of it and able to access it if need be.

We gathered information on their attitudes regarding the importance of taking care of the digital documents they created, along with their preferences regarding formats. Further, we were interested in their habits of documenting and saving information about the development of a literary work throughout its creation. Among those who store multiple files at different phases of the creation of a literary work, we tried to understand the logic behind those actions and the different approaches to this issue, namely the methods used to mark them, and differentiate them, and the frequency with which they carry them out. Along with that, we inquired about the organizational practices used for storing digital content on respondents’ devices. Are there any attempts made in that direction? Do they create backups or migrate their content when the need arises? We were interested in these and related issues.

The final group of questions related to the digital heritage of Croatian writers and consisted of questions on the extent to which they were informed about this concept, their attitudes towards it, and any attempts they made to preserve their heritage. Their inclination toward these practices was of interest, along with their wishes regarding the possibilities technology offers in adding value to the interpretation of their works for future generations, for example, in the form of comments and similar content linked to the primary content. Last, we explored respondents’ opinions regarding the maintenance of their user profiles by bots or by other means that are offered on the social media in which they are active.

The respondents were asked for their general attitudes about the nature of technology in their creative process, its usefulness, and the difficulties it poses. They were asked if they are aware of the phenomenon known as “information overload,” and whether they have experienced it. Their satisfaction with their skills regarding technology was also investigated.

9 Research Findings

The survey was conducted on two female and seven male respondents aged 38 to 63. Given the small size of the sample, and the fact that the findings were not intended to provide a generalized view of the attitudes of the entire population of Croatian writers, we did not delve into an analysis of how those attitudes and responses were determined by age, gender, education, work experience, or other demographic categories. Although the respondents live and work in the eastern part of the country, we did not find a correlation between that and the way it affected
their use of technology, opinions, or practices regarding organization and preservation of their works, or attitudes towards digital legacy. The size of the sample prevented us from drawing conclusions regarding the authors’ predisposition to a specific literary genre that might have been determined by cultural or socioeconomic factors. However, it was noticeable that the level of engagement with technology in their day-to-day jobs influenced the respondents’ habits and use of technology in their writing.

10 Creating Literary Works

Among the respondents, the most frequently mentioned medium for writing is, understandably, a computer. The respondents used a laptop or a desktop computer, but given the possibilities of accessing files over various devices, a combination of devices is commonly mentioned (e.g., a laptop and a smartphone, a work computer and a private one, a laptop, tablet, table-top [PC] computer and a smartphone). Interestingly, most of the writers point out that they still do some of their writing on paper, claiming that they find it practical:

If the computer is turned off, I use a pen and a paper. In other words, simply for practical reasons, so I wouldn’t have to turn on the computer (A4).

Only one respondent claimed to do all his writing with pen and paper, and then later keyboard it into computer when he was satisfied, to a certain extent, with the text. He says: “The first technology I use is pen and paper. Everything starts there. I can’t [remember] ever writing a song, a story, or any kind of text without having a sketch worked out on paper first. So that is always the first step. A pen and paper” (A2). It would appear that this combination of media used for writing is still present among the writers in question. Partially, of course, out of a habit the respondents all claim to still be accustomed to writing by hand. Taking notes is much more practical with a pen and paper and, it would seem, it is still common for writers to carry around a notebook rather than a laptop. “For some sort of a visual element it is easier for me to express myself visually on paper” (A5).

While it is easier for some to have a visual representation of parts of their texts on paper, for others it is easier to express themselves through technology:

When I sit in front of a laptop it just flows somehow. As if it focuses, filters my thoughts (A6).

Though computers seem to be used the most for creating, one person mentioned her smartphone in this context: “Regarding technology, I have a computer I’m deeply tied to. It’s a laptop with an additional keyboard and numerous add-ons such as a hard disk and so on. I even use two smartphones that are linked to the computer” (A1). However, even here it is evident that other technologies are used and are connected to the computer which, in most cases, is the main medium for writing. The situation is quite similar when it comes to the programs and applications used. A certain default option is usually preferred and used most often. Furthermore, not much thought is given to whether a particular option is open source or not. One respondent gave a reason for this, saying that “I’ve always felt intimidated in a way that it’s for more skilful people” and “I’m afraid to switch from one thing to another; I fear something won’t be compatible” (A6). Therefore, Windows operating system is the most widespread, and, consequently, MS Word is the most commonly used. Two of the respondents had some experience with CMS systems (A6, A7). Some also stated that they used social media and other tools during their creative process. Most often, acquiring information for their work, they browsed the Internet, managed their webpages, or had someone do it for them, and used online e-mail services such as Gmail, Jumbomail, and tools which are already incorporated in the word processors of their choice. External discs were also mentioned, but mostly in the context of backup, along with one mention of a blog (A5) which is used during the creation process and as a sort of backup. This will be elaborated on below.

Most of the respondents are also on Facebook. Some even emphasized that they have private accounts (A3) whereas others are present as public figures (A1). Respondents using social networking sites claim that it helps them with their research, with the reception of their work, and as a means of communication with their audience and the public. One of them finds Facebook useful and attractive for its user-friendliness and intuitiveness, but at the same time notices the lack of possibilities to export content generated on that platform into a document, and the inability to search it effectively; “I would find it useful if it would be possible to export the contents from Facebook to a document of sorts, which would enable browsing by keywords or creation date” (A1). The same respondent adds that it is important to her to access past events when she needs them by scrolling and searching, but she feels her webpage is superior to Facebook in that respect. However, she notes that it is easier to update
her Facebook profile than it is her webpage and she finds Facebook more user-friendly.

Whereas it is almost inevitable that the creation of literary texts is done with the use of technology, mostly computers, as previously stated, all but one respondent have not formed opinions on the effect that technology used for writing might have on the reading experience. Two of the respondents firmly believe that technology used in the creative process does not influence the reading experience (A5, A7). Writers did, however, agree that the medium used for reading a certain text influences the reader a great deal. “I am much less patient while reading on a laptop and more prone to switching from one part of the text to another. In other words, I don’t read the text, I scan it” (A5).

The same respondent notices how he has begun to use these patterns for reading print as well. He says he has developed the habit of reading several books at the same time and recognizes the same patterns he applies when browsing the Internet. Another respondent points out that different principles of reading apply in a digital environment, and claims it induces multitasking which makes him process what he reads less deeply than is the case with reading printed materials (A4).

11 Organization and the Long-term Preservation of Data

As a general rule, all respondents will agree that it is important to take care of their digital documents, but some emphasize how it was not an issue high enough on their list of priorities before they began to participate in this research. At the same time, the decision to preserve their data relies to a great extent on how they perceive themselves as writers and the importance of their work. Following are their comments in this regard. “I haven’t given it [the need for the long-term preservation of digital documents] much thought for a long time because I didn’t take myself seriously enough” (A3). “I am not a person of such significance that I should engage with organization of that sort” (A4).

In relation to organizing and preservation practices, most participants protect their devices with a password. Only one respondent uses no password on his device, asserting that he doesn’t “have such delicate materials” on his computer, and only one of the participants in this study mentions the encryption of folders and files (A7). However, none of them uses any system for organizing and managing user data. Two participants have a file on their computer with a list of passwords, one keeps a notebook containing such data written down and safely stored, and two of them have custodians who can access password-protected data if need be.

The predominant formats for saving files are DOC formats, that is, the default option when they use MS Office tools, and PDF for dissemination. With the exception of a previously mentioned case where a respondent expressed a desire to start using Libre Office, none of the participants pay much attention to open source. The same applies when it comes to the choice of format. The process of saving a file is not itself considered important, and the respondents do not seem to be aware of a correlation between the format of a file and its longevity. However, they do consider accessibility, and one of them emphasizes the importance of the accessibility of different formats of his texts on his webpage: “At the moment it’s [available in] HTML., next year it will be e-pub, PDF format and mobi as well, for Kindles. So, more or less, whichever device you use, smartphone, computer, tablet, or an e-book reader, if you're interested in reading my books—I want to enable that to my audience. It’s important to me in that sense” (A2).

More attention is given to documenting the phases of text development during a writing process and to organizing content on a device. The participants mentioned all the conventional methods of organization, grouping by content into folders, and assigning names to files in accordance with the type of content, or adding the number of the version. Sometimes the date of creation is added as well (A5, A6, A7). “I mark each version of text with a number, so I know which is which, and add the date. So, ver1, ver2, ver3 and so on. The dates represent when a specific version was created” (A5). One of the writers, however, does not document texts through phases. “No, my way of writing doesn’t demand that approach since I write for picture books and thus the form in which I create doesn’t change later on” (A8).

Each of the participants uses a unique combination of methods when it comes to organizing their digital belongings and everyone has a slightly different approach to it. Safety copies or backups are created in some form by all of the participants. On the other hand, migration is seldom practiced. Sometimes, that contents are that scattered presents a problem, even worse than the migration problem. The contents are usually revisited only when writing is in progress, except when the text can be “recycled,” reused for another project. All writers delete old files, depending on the level of importance assigned to
each file. The criteria remain unclear, it would seem, even to the authors themselves.

The migration of content from old media to new media is also an issue that not all of the participants consider. One of them offered one criterion for migration which is, at the same time, a sort of answer to why it is so: “I’m modelled by how much time I have” (A3), she said. Another one feels it is up to memory institutions to deal with the problem of technological development with regard to migration (A2). He says: “Heritage institutions are already engaged in those activities in a way. Now, I know it’s a challenge and, I mean, it will always be a problem to migrate all the gathered legacy. That is, all that sunken heritage, so to speak. But yes, I believe those institutions are doing their jobs” (A2).

Respondent A3 said she “doesn’t really” practice migration, even though she has a lot of experience when it comes to alternative storage formats such as CDs and DVDs. When it comes to backing up files, the participants in this study seem to be quite conscientious. Respondents use USB sticks, DVDs and CDs, and external disks, and they send e-mails, save as drafts using e-mail services, or save on a second computer. Respondent A6 mentions viruses as a reason for abandoning USB sticks in creating backup. Respondents A1 and A2 mention enabling open access and using other channels primarily intended for different purposes as promising forms of backup. They both made their work available over their webpages, and consider such channels as a sort of backup. “All the notes and references to novels with short fragments and summaries are available on CROSBI.” All the reception-related activities are advertised over Facebook. Lastly, I have a webpage where I put some reception related [text] and some works of authorship I find valuable” (A1).

The notion of starting one’s own webpage as a means of backing up as well as increasing the visibility of one’s work seems to be spreading: “One of the reasons for starting my webpage is to create a sort of an archive on it” (A6). When the writers were asked whether they use a Cloud service for creating backup, the responses were mostly negative in a way that respondents either did not use it or were thinking about it but were still sceptical towards it—with the exception of respondent A8, who says she finds them “reliable enough.” The only case in which they are inclined to store a copy on someone else’s devices is when sending files via e-mails for backup, which they all mention doing. Mostly, they are more prone to doing all those actions by themselves. The one exception is maintaining and updating their Web and social networks pages. Only respondent A3 admits to feeling a lack of knowledge when it comes to creating a backup, for which she uses the help of her children. They seldom delete out-dated files; some even make a point of not deleting anything (A5). Participants A5 and A8 are the only ones who claim to use no help whatsoever with personal digital archiving in any form.

Respondent (A2) used different e-mail providers prior to opening a Gmail account. This highlights a problem of fragmentation, using different services as technology while content remains tied to them and texts are mostly never migrated to the new services. This places an expiration date on everything that goes onto these services to the day when a new more attractive one appears on the market.

12 The Digital Legacy

The concept of digital legacy is broad and vague, and it is particularly important in the context of the creative processes of contemporary artists and writers. As they play an important role in the contemporary cultural landscape, it is important that their work and the context in which they create are preserved for the future. With all the rapid technological advancements and the development of different tools and options for the enrichment of texts, and also with new options of prolonging the illusion of a person’s presence through technology even after his or her death, new possibilities emerge for defining what their digital legacy really is and what they actually wish to communicate to the future. Digital legacy seems not to be seriously considered by many people. “I thought about it, but I haven’t done anything yet” (A9) seems to be a common stance.

When asked about their opinions, the participants in this study mostly appear to be in the initial phases of thinking about the meaning of their legacy and the options that technology offers. One person mentions his age as the reason for this: “I still haven’t had that phase to go and dig through my textual history so as to set it up somehow. I consider myself a young author, so I don’t have the need to ‘look back’” (A6).

In response to the question about their digital legacy, every person perceived the question a little differently and reacted accordingly. This shows the vagueness of this subject and the wide spectrum of problems it covers. It also points out just how new this

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1 Croatian Scientific Bibliography (CROSBI) which stores scientific papers.
phenomenon is and how there is still a lack of consensus over what it really represents to a person. Respondents who expressed no interest in adding comments to provide context for future researchers of their work said that they find the literary value of the text much more important and so do not see the need for communicating biographical or any other information alongside it (A2, A4). One of them also stated that he does not consider himself important enough (A4). One respondent admitted that she has not given the subject much thought prior to our conversation, but now that she has, she realizes the importance of it (A3). Another writer stated that even the comments themselves would be subject to misinterpretation: “It’s disputable how it can be done and how successfully since without a living person and their opinion everything is subject to accurate or inaccurate interpretation” (A7).

However, the respondents agreed on the view that they are not the ones to comment on the content they create. Respondents A1, A2, and A4 also point out that the information they wish to communicate is provided to the public through footnotes and the texts they write. Respondent A1 has already given some thought to specific actions that she might also undertake in preserving her digital legacy. She raised some interesting ideas:

I’ve started an Institute with some of my colleagues (...) I would strive to leave all my contents and all my work to it or to a similar association that has similar goals and missions. And those are works on cultural heritage and, really, preserving cultural identity (A1).

Another respondent (A8) is also favorably disposed towards leaving her digital heritage to a memory institution.

When it comes to the idea of computer-generated content that would recreate literary voices, the respondents revealed two positions. One is extremely sceptical towards the idea and even finds the role that is given to technology irrational and somewhat disturbing.

It’s as if these Facebook profiles [which remain active even after their owners’ death] enable the coexistence of our material world and ‘the beyond’ (A3).

Another reason that has been given for the negative attitude toward such options is the following:

The writing I do, I love to do it. I love the inspiration that it gives me. So that [computer-generated content] wouldn’t make much sense (A6).

One author was more enthusiastic and open to experiment, but not before he receives some assurance in advance:

I think it’s a very interesting idea ... I’d even be open to some sort of an experiment. I would definitely like to make sure of the stage that software is in first, whether it can generate literary text and similar thought, but after that, why not (A5).

Finally, the participants were asked to comment on the role that technology plays in their lives, whether they felt its availability makes their creative process easier or raises new difficulties. They were also asked if they were familiar with the phenomenon of information overload and whether they were content with the skills they have regarding the organization and preservation of their digital literary texts. “I don’t think technology is connected to creativity; creativity is connected to the idea in your head, and technology is the tool which facilitates the realization of that idea,” said respondent A8 on this matter. All our respondents agreed that technology made their creative processes easier insofar as it made them quicker. However, they also said:

On the other hand, technology is a big obstacle, since it not only enabled those who are not supposed to write to write, but also [it enabled] the massive generation of content in general. This causes a massive saturation of readers and everybody. (A5)

The process of creating [a text] is facilitated. However, preservation becomes an issue. Authorship becomes an issue. You can send a text to someone who can, without effort, remove your name from it. And you will have to prove it’s yours. (A3)

These changes that technology brings, and the speed in communication and dissemination of information it enables, have resulted in a unanimous claim that they all have to deal with information overload, with the over-satiation caused by the amount of information that surrounds everyone and is made possible by technology. They have mentioned some ways of coping with this problem, for example, through a sort of selection. One respondent coined the expression “self-inflicted information diet” (A2). “I avoid wandering about virtual spaces that tire me and could create information overload too much.” (A1). “There is no other solution but to close the laptop. And at a certain point, simply to move away from it all” (A5). These statements and the terms used—avoiding,
distancing oneself, and so on—imply just how negatively this phenomenon affects people, and the extent to which it is widespread. It is, therefore, no wonder that all respondents agree on another point. All have expressed their willingness and eagerness to continue to learn and to advance their skills. Some were content with the level of the skills they already possess, whereas others felt their knowledge was quite unsatisfactory, but they all generally agreed on the necessity of always advancing and developing those skills. Still, the readiness to improve those skills varies. When asked whether they felt the need for knowledge in this field and are willing to develop their skills, they said:

Well, yes. It is not a problem for me to follow new trends. As we are in the midst of a media revolution, all information is desirable. (A4)

I would like to have that knowledge. But, at the same time, I’ve become insolent in that matter; I want everything to be right now. And not for it to be a process. (A3)

One of the respondents wisely concluded:

It is important that technology doesn’t become the one that dictates the tempo, but that human intelligence, emotionality, and awareness help [me] navigat[e] in the digital constellation. And that these lighthouses and guidelines we set for each other are built on ethical, moral, and scientifically responsible levels. (A1)

14 Discussion

In some respects, the development of technologies brings a substantial relief and facilitates the work of a writer, but, at the same time, it presents a new set of challenges. Based on one’s skills and mind set, it is possible to add value to one’s own work, and it is also probable that certain actions might facilitate the understanding of contemporary art and culture in general for future researchers. The participants of this study seem to have accepted technology as an inevitable part of their creative process and have, thus, more or less conscientiously taken on the task of organizing and preserving the work they create in a digital environment. Four aspects of this research can be emphasized.

14.1 Writers’ Habits and Practices when Creating Digital Literary Works

Although authors still write a certain proportion of their work on paper, they all use technology in their creative process and have to organize the digital documents they create in order to manage their work. As they often use more than just one method and device during that process, they inevitably encounter fragmentation, which has to be resolved each time they write. Writing on paper also remains a habit because it seems to enable them to create sketches that they manage better than digital files, and it is still more practical to carry around the equipment (paper and pens) than it is to carry around computers which require hardware and electricity. However, all the respondents agree that once these requirements are met, the speed of computers offers an advantage with which paper cannot compete; but at times it is still much quicker to take a pen in hand and write ideas onto paper than it is to start a computer. This is why it is widespread among the people who write to do some of their work on paper, for example the initial phases of creating a literary work, or sketching out plots, characters, or their relationships.

Aptness and simplicity dictate the options they choose for creating their works. Program, applications, and services, in general, are chosen without particular deliberation. Respondents do not seem to be conscious or sufficiently aware of the choices regarding open source options and alternative tools to the ones that are most extensively used. Furthermore, although they are aware of the benefits that social networks bring, they remain sceptical about their reliability and mostly use them as a means of communication, not as one of their tools for creation or storage. Although they do not attach much importance to the role that the technology used for writing might play from a readers’ perspective, they are quite aware of the difference it makes when it comes to the device used for reading a text.

14.2 Writers’ Habits and Practices when Organizing and Insuring the Long-term Preservation of their Literary Data and Documents

Most writers stated they do not feel the need to extensively protect their work. They use basic passwords for protecting access to their devices, but none of the participants in this study used encryption or other forms of protection. The same applies for managing their passwords. Most of them memorize their passwords and rely on their memory to ensure access to their information for as long as they need it. At most, they keep passwords written down in a document on their computers, but this also requires them to log in first and might even be something
of a hazard in itself. Systems for organizing and managing user information are not used among this group even though some of them have expressed the need for help and better organization when it comes to password management. A definite opportunity for progress exists in education about file formats, available tools, and actions that would facilitate and improve access, preservation, organization, and browsing. The respondents clearly strive to improve the accessibility of their work to the audience, and that preservation, organization of digital documents, and related actions are often simply a side effect. However, they all create backups of the files of their work, as they find them important, and they have experienced the loss of data that contained their work. Incidentally, there is no distinct strategy for the organization and preservation of the works of even a single author in this study, much less among them all. This issue on a global scale points to the need to provide further opportunities for raising awareness and increasing education in this area.

14.3 Writers’ Familiarity with the Digital Literary Legacy and all that It Implies

The digital literary legacy is not discussed often enough, and this itself is reflected in the level of consideration it receives from the creators of literary works. Seldom did the writers who were questioned about this concept have previously formed opinions on issues that arise from it. The respondents have different understandings of what digital literary legacy is. While some consider only the preservation of their texts for future generations and are mistrustful of developments that new technologies bring, others are much more interested in what technology enables, and they disregard the simpler aspects of preservation. The two should, however, be reconciled through education and systematization. This challenge is imminent for everyone in the age of technology, and it should be a priority among this specific population. A further point is the taboo of pretentiousness that some writers fear. If they take extensive care in saving their writing for the future, they reason, they may be seen as merely promoting their work. Many of our respondents do not do anything to preserve their texts for fear of not being the appropriate one to evaluate their own worth. In the context of digital legacy, the first priority should be insuring the preservation of their work. Modesty should not be an issue. These writers seem to be reluctant to add commentary and other forms of additional value to their texts for this very reason.

14.4 Writers’ Attitudes toward Organizing and Safe-keeping their Personal Digital Documents and Collections

According to our participants, technology has, without a doubt, facilitated their work. On the other hand, it has also brought challenges. A new set of skills is necessary for a writer to benefit the most from technology. As technology plays an important role in the life of a writer, it is imperative to educate this group about what it offers. Since they encounter many obstacles during their writing, they are quite aware of the constant need to deepen their knowledge of technology, and few are content with the extent of the knowledge they already possess. Whereas these nine writers are aware of the benefits that technology brings them (e.g., the speed it enables and the options it offers), they often feel it brings a new set of difficulties.

Finally, these writers have all agreed that they deal with the problem of information overload to an even greater extent than does the general population. Technology is ubiquitous and it is almost impossible to create a literary work without using it today. This means that they spend a great amount of time in front of a computer or typing on a similar device. These technologies are already surrounding writers in their everyday lives. Communication, work, entertainment, education, and many other demands require the constant use of technology, possibly resulting in satiation. For all of this, they agree on the need to deepen their understanding of technology.

15 Conclusion

“We demand rigidly defined areas of doubt and uncertainty.”


As it is becoming less and less of a practice to create and write using traditional, physical materials such as paper, the responsibility for the organization of one’s documents and, consequently, their preservation is increasingly in the hands of their creators. When it comes to the digital products of human spirit and creativity, ensuring their persistence for future generations is becoming an important issue that needs serious discussion. It is no longer sufficient to simply store a document or a physical medium to ensure longevity. The practices and methods of preservation are in a new phase of development, and the huge amount of data that memory institutions are left to deal with is creating an uncertain landscape for insuring longevity of texts.
Therefore, a significant role in preserving the important elements of human culture lies with the people who create this culture. The preservation of one’s own work may be left to the individual. It is also his or her responsibility to find out what new possibilities the technology offers to enrich the works they create. Authors must educate themselves about technology and must determine the extent to which they use new media. In some respects, the development of new technologies facilitates the work of a writer, but, at the same time, it presents a new set of challenges. Based on one’s own skills and mind set, it is possible to value one’s own work, and it is also probable that certain actions might facilitate future researchers’ understanding of contemporary art and culture. For these reasons, it is important to understand the creative process, the technologies used, and the organizational methods of a contemporary writer. Our research has precisely that in mind: to shed some light on the state of these issues in Croatia, among the writers whose work is recognized as important for this country today—writers who are creating our cultural heritage.

The results of this small pilot research study have been presented in this paper, but because of the small size of the sample, the conclusions cannot be generalized to represent the views and practices of the entire Croatian writers’ community. Existing research on the subject regarding writers from other parts of the world was not comparable to our own, given cultural differences, differences in the approach to the subject matter, and the individual nature of the interview as a method. This is why it was not possible to compare Croatian writers and writers from other parts of the world.

The research did, however, point to areas that need to be more thoroughly researched when we deal with issues of personal digital archiving, digital legacies, and the preservation of digital cultural heritage in general. In-depth interviews with respondents indicated one particularly important issue: a lack of awareness that contemporary authors have about today’s cultural landscape and that they themselves should be involved in preserving the context of their work, which is as important as the work itself.

References


Appendix I: Interview Questions

a) The way you create

1. Which devices (technologies) do you use to write your electronic texts? (e.g., PC, laptop, tablet, smartphone, or other)

2. Do you use computer programs, apps, social media and/or online services in creating your electronic texts? (e.g., word processors, such as MS Word, Libre Office, etc.), blog, website, software or an app, or desktop publishing software etc.)

Secondary question: Do you prefer closed-source systems (programs, apps—e.g. Windows, OSX, MS Office), or open source ones (such as Linux, Libre or Open Office, Calibre)? Do you prefer commercial (proprietary) or free systems (programs/apps)?

3. How do you use them? For instance, do you use them to plan your story, keep notes, brainstorm, develop your story, interact with the audience/readership, write the first draft of your manuscript, write the final draft of your manuscript, etc.?

4. Does the technology you use to create your content affect the way it’s read and received by the audience?

b) Organizing and storing your data

1. Do you protect your devices in any way? (E.g., do you use passwords, encryption, etc.)

2. How do you protect the user credentials (username and password) for your devices, software, apps, and social media profiles?

3. Does anyone besides you have access to the user credentials (username and password) that you use to access your devices, social media profiles, and other writing programs/apps?

4. Do you think it’s important to manage the digital files you create?

5. Do you document every stage of creating your electronic text? If you do, how often do you do it while working on a single text?

6. Do you try to organize the digital content you store on your devices?

7. How do you store the files from your computer, mobile devices, USB drives, etc.?

Secondary questions: Do you backup your files? How many copies do you make? Do you check the data stored on your PC? Do you move the digital content from devices you no longer use (e.g. CD, DVD or floppy disk) to new ones? Do you use social media to store your files? Do you use a Cloud service (such as Dropbox)? If you do, do you consider them reliable? Do you keep copies of your electronic texts with someone else (a family member or a colleague?) Does anyone help you with the “logistics” of writing or do you do it yourself? Do you delete dated files or files you no longer have use for?

c) Digital legacy

1. Have you given any thought to what will happen to your digital literary output after your death?

2. Would you allow for the electronic texts you published on social media (i.e., the Internet) to be permanently and freely available to the public after your death?

3. Would you attach content which would facilitate the future study of your life and work to your writing?

4. How do you feel about the idea of a service of maintaining your social media presence (blogs, websites, social network profiles) after your death?

d) Wrap-up

1. Do you consider contemporary digital technology something that can facilitate the creative process or is technology completely separate from the creative impulse, to the point of even hindering creative effort?

Do you follow technological “trends” in the fields of e-books, electronic literature, self-publishing, etc.?
2. Do you ever feel information overload, i.e. mental strain caused by overexposure to the information and content that is continuously generated and published digitally?
3. Do you consider yourself informed and skilful enough to organize, store, and protect your digital literary output effectively?
4. Is there anything you would like to add?

Bionotes

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