THE HUMANITIES IN THE 21st CENTURY UNIVERSITY

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Abstract

This article on the humanities in the 21st century university begins with an analysis of enrolment trends in North American universities, with a particular focus on universities in the province of Ontario, Canada. The picture that emerges is one of a marked decline in demand for humanities programs at most universities, including my own Faculty of Arts and Humanities at Western University. The final sections of the article offer a diagnosis of the current situation and an analysis of the expected impact of Generative Artificial Intelligence on humanistic offerings, which should be seen as an opportunity and lever to make the necessary changes as shown in the decline in enrolment to make the programs more attractive for current and future students. In the final part, I trace some possible trajectories for the new humanities of the 21st century, using my faculty as a case study of this transformation. The humanities are desperately needed to shed light on current global changes, to provide young students with points of reference for their lives, and to begin a transformation that will sooner rather than later confront all university disciplines.

Keywords: Humanities, 21st Century, innovation, transformation, new degrees, multidisciplinarity.

JEL classification: I21, J24.

I. INTRODUCTION

This article aims to be a realistic, serious and optimistic reflection on the current status of the humanities in our universities, as well as on the avenues that are opening up for these disciplines in the universities of the coming decades. More than ever, universities are part of an economic and social context that affects them and from which they must draw to renew their social mission in the 21st century. This context is characterized by the uncertainty felt by families whose children are planning to go to university, by the strong international competition between universities, which forces them to differentiate and develop, and by the intrusion of generative artificial intelligence into intellectual, creative and research processes that have hitherto been the domain of various university disciplines, including the humanities.

This text begins with an analysis that includes a description of the historical origins of the humanities (Section II), an assessment of enrolment trends and student growth in the Ontario, Canada, university system over the past decade (Section III), an explanation of the context and status of the humanities at the University of Western Ontario (Section IV), and a hopefully realistic diagnosis of the overall situation.

Section V focuses on the disruption caused by generative artificial intelligence and how it affects not only the creation and dissemination of knowledge generated in universities, with an emphasis on the learning process rather than research activities, but also the specific skills that this technology can replace. Considering that, for several decades now, undergraduate programs have been partly oriented towards the training of certain skills that students acquire as a steppingstone to the labor market, the assessment of what can be replaced by generative artificial intelligence and the new opportunities that lie behind this disruption are two of the most urgent tasks for the humanities and the rest of the university programs.

In Section VI, the evaluation of the possibilities that open up with the emergence of generative artificial intelligence is analyzed, which must be considered as the lever to activate changes that the humanities had to make anyway.

Finally, Section VII starts from the specific scenario of the Faculty of Arts and Humanities to outline a path of innovation and evolution that, taking advantage of the constraints imposed by the context and the great opportunities for renewal that generative artificial intelligence will create, will lead to the creation of the humanities of the 21st century. The transformation of the humanities is not only about the content and skills taught in the curricula, but rather about the way of thinking and articulating the intersection between the human and the skills that will make humanities present in today's labor market. In this sense, I believe that the new humanities are more necessary than ever. My aim is for the example presented here to serve as a guide and a beacon of hope.

II. THE CONTEXT

The context of the humanities in the 21st century is marked by three main factors: their own history, the digital transformation of the human condition, and the transition to a university based on the development of skills and the professionalization of its degrees.

The origins of the humanities, or the humanistic disciplines, must be traced back to Humanism. This task, as Francisco Rico pointed out, is not easy and can be undertaken by looking at both words and things. By "words", Rico was referring to the origin of Humanism in the nineteenth century –far from the studia humanitatis associated with the Renaissance renewal of European universities- and to the layers of interpretation with which this origin has covered our understanding of the phenomenon. Thus, its origin as a term is linked to the creation of "an educational project of the early nineteenth century and only later applied retrospectively, tentatively, to the framework of a then littlestudied Renaissance" (1993, p. 12). Rico relates this birth to some characteristics that have accompanied our collective interpretation of the phenomenon up to the present day: an interpretation which includes issues as diverse as human rights, human sciences, specifically human values or humanitarianism, and other social and political movements more or less firmly linked to humanism (p. 12). Perhaps the most interesting aspect of this journey is the fact that the disciplines, the humanities, predate the identification of the intellectual movement known as "Humanism", and that this historical decoupling can be used in the 21st century to develop a humanities whose practice will subsequently lead to the formulation of a new humanism of the digital age.

When he speaks of "things", Rico is referring to the effects of an "ideal of renewal" that flourished in many fields and whose success has perhaps been one of the causes of its various declines throughout history, including this crisis in which humanism and the humanities find themselves in the 21st century. This history of humanism can be seen in the light of one of its disciplines: philology, elitist and specialized, but also part of the history of elementary education, whose essential practices of writing and reading being available to all as a source of education, humanization and citizenship, have clear origins in the

Renaissance. In this way, Rico arrives at a definition of humanism that can serve, even if only partially, as a guide for talking about the humanities in our own time:

"...it is legitimate to call *humanism* a historical tradition that is perfectly defined, a line of continuity of men of letters who transfer certain knowledge from one to another and feel that they are heirs to the same legacy and, however controversial it may often be, also linked to each other. (...) That this line starts from Petrarch's *"reflorescentis eloquentiae prínceps"* and that only *"post Petrarcham emerserunt litterae"*, is a conviction shared by Bruni and Flavio Biondo as well as by Erasmus, Luis Vives and Scaliger. So it would not even be an exaggeration to say that humanism was in many points the process of transmission, development and revision of Petrarch's great lessons (p. 13)".

The Petrarchan genealogy has many and very rich branches in its historical transit to the present day, although it is the focus on language and, specifically, on grammar and eloquence, which constitutes the key innovation of the humanities in its break with the university models of the Middle Ages. Rico describes this by echoing the main idea that "the foundation of any culture must be sought in the arts of language (...); the idea that classical language and literature (...) must be the gateway to any doctrine or endeavor worthy of esteem, and that correctness and elegance of style (...) are an inescapable requisite (...); the idea that the language and literature of the classics (...) are the gateway to any doctrine or endeavor worthy of esteem, and that correctness and elegance of all intellectual activity; the idea that the *studia humanitatis* thus conceived, by reviving Antiquity, will succeed in bringing about a new civilization" (p. 18).

Nothing has been more affected by the digital transformation of the human condition than language.¹ Thus, the transmission of traditions such as the Petrarchan and, more generally, the humanist traditions were the first to be affected by the dimension of change brought about by the digitalization of the objects of cultural transmission, bringing to life McLuhan's famous phrase about the medium being the message (1994, p. 7).² In this way, the digitalization of cultural transmission vertically, or from the past, and horizontally, or within the same generation, has meant an exponential change in the way culture is of practiced and understood, the foundation of which the humanities have placed

¹ Only the "scientific" ability to modify human behavior through digital technologies has been similarly impacted.

² "In a culture like ours, long accustomed to splitting and dividing things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message." (McLuhan, 1994).

in the language arts. With the digitalization of books, texts, images and videos, and with the networking OF the participants in any global or local culture, the hierarchy of cultural sources, and their order of priority –as we would say in legal theory -, the possibility of establishing and distributing a single or majority tradition whose practice could be universal in those same cultures, has been definitively altered. On the other hand, this torpedo of digitalization on the waterline of the humanities³ ended up even more aggressively reaching the linguistic foundation of these disciplines, first by displacing the privileged role of classical and vernacular languages -that relationship between sublime language and intellectual activity- towards programming languages; later by affecting the use of spoken and written language through social media and networks (Mcgulloch, 2019) and, more recently, by the mass distribution of the products of generative artificial intelligence (hereafter, AI) which has brought to the table both the importance of language in AI production (Bender et al., 2021) and the possibility of eliminating or reducing the friction that humans encounter in learning and using, by speaking and writing, that language that was considered to be the basis for the humanization of individuals and the creation of high culture by societies.

Finally, the digital transformation of the human condition would be complete when almost all the major elements of human life were to be presented to us and we began to experience them digitally. The digitalization of human life would thus become "the object of the greatest engineering workin human history: the digitalization of reality."⁴

In this context of permanent and very rapid digital transition, the humanities also find themselves in a university besieged by successive waves of change and disruption brought about by digitality. The transition to a new kind of university has been underway for several decades, but the acceleration of the digital transformation of the human condition and the announcement of our entry into a new industrial revolution (Schwab, 2016) have only accelerated developments in this direction. The transformation carried out at Arizona State University to create a university based on broadening access regardless of the social and economic background of future students, the constant innovation of academic organization according to design techniques and the commitment to

³ For a historical overview of the history of humanist thought beyond its university trajectory to recent posthumanisms, see Sarah Bakewell (2023).

⁴ "Digitalization does not take place only in devices and systems (that is how it began) unless by systems we mean systems of reality, nor does it take place only in the field of information, since there is no separation, no distinction between digital information and reality. In digitalization processes, digital information is reality. Therefore, the human condition, as we currently understand it, is the digital condition". (Suárez, 2023).

multidisciplinary centers and programs, seems to remain one of the benchmarks for a new university that is able to reconcile the highest possible level of access to the university regardless of the economic situation of the student, with competitiveness and innovation in the creation of knowledge and the strategic use of distance learning in a hybrid model.⁵

To understand these changes, it is best to look at what is happening now or is about to happen, rather than at the changes we have seen in recent decades. To do this, we use the analysis of Michael D. Smith (2023), who links the changes taking place in higher education to the three types of scarcity that have defined and constrained university education for centuries. For Smith these would be access, instruction and credentials.

The digital revolution and the acceleration of the pandemic have coincided to demonstrate the possibilities of a higher education in which barriers to access for economic, social or geographical reasons no longer make sense. Technological possibilities have promoted teaching models that distance themselves from, and even threaten, the traditional model of face-to-face universities, allowing a huge range of learning modes and types of knowledge to be taught in this way. The transformation in the abundance⁶ of access and instruction is accompanied by a third element: credentials. Credentials are certifications of the knowledge and skills acquired by a learner, *i.e.* of their abilities or *skills*, regardless of whether they have been acquired as part of a university degree. Many large companies now offer their own credential programs, both for their employees and for the general public,⁷ without the need for a prior degree, thus widening both access and learning opportunities for a larger number or different population than can attend traditional universities.

In addition to increasing the supply of education, credentials also decouple the degree, *i.e.* the diploma that universities continue to issue as one of their main assets, from the actual skills that any student can acquire

⁵ "...the Fifth Wave in American higher education-a league of colleges and universities, spearheaded initially by a subset of large-scale public research universities, unified in their resolve to accelerate positive social outcomes through the seamless integration of world-class knowledge production with cutting-edge technological innovation and institutional cultures dedicated to the advancement of accessibility to the broadest possible demographic representative of the socioeconomic diversity of our nation." (Crow and Dabars, 2020).

⁶ The analysis follows the idea that digitality is an economy of abundance, although it should be specified that after digital abundance at certain stages of value creation in any field also comes the construction of new gateways that allow, in this case digital platforms, to control both the access and the flow of this abundance.

⁷ For example, Google through Coursera.

without going through the full cycle and the investment of time and money that a university degree requires. For Smith, credentials help to change the system of signals on which the labor market is based, complementing and, perhaps in the future, replacing the weaker signal that a university degree sends out with the stronger and more specific signal that these credentials send out about what a candidate for a specific job knows and can do. And while, as Smith points out, there are many academic fields in which it is difficult and inappropriate to apply a credential system, credentials are an effective way of retraining certain workers, sending a clear signal to the market about what they can do, and widening access to education for traditionally marginalized or vulnerable populations.⁸

In their analysis of six new universities or university start-ups founded in different parts of the world in recent years, Penprase and Pickus (2023) identify some of the major problems associated with university education in the United States, among which they point to "a growing perception of the liberal arts as outmoded and irrelevant to the challenges of the twenty-first century" (p. 2). It is important to note, however, that while the association and even identification of the liberal arts with the humanities is commonplace, the same authors argue for a liberal arts-based definition of education that is broad and holistic and that seeks to prepare workers and citizens to think and learn independently.⁹

It is these liberal arts and sciences education that would provide certain competitive advantage and meet a need in the global and technological societies of the 21st century. The reasons for this position would be the changing and uncertain nature of work and the knowledge economy, the increasing complexity of the challenges we face both nationally and globally, and the trend towards an increasingly confrontational world due to hyper-individualism and the decline of religious norms almost everywhere (pp. 25-6)

⁸ In the context of universities in Ontario, Canada, the provincial government describes micro-credentials as follows: "Micro-credentials are rapid training programs offered by postsecondary education institutions across the province that can help you get the skills that employers need. Micro-credentials help people retrain and upgrade their skills to find new employment. Available from <u>https://www.ontario.ca/page/</u><u>micro-credentials-ontarios-postsecondary-schools</u>

⁹ "It includes a set of common courses or classes in a breadth of disciplines as well as the development of intellectual competencies that go beyond specific disciplinary content. The liberal arts purposefully inculcate problem-solving and analytical skills, the ability to listen and communicate, and the capacity to integrate and make meaning out of contending intellectual and cultural perspectives. (...) Liberal arts and science education strives to prepare graduates to make wise contributions to technologically dynamic and culturally diverse societies. *This approach contrasts most directly with the dominant method of education globally, which is highly specialized or technical and explicitly vocational in orientation.*" (Penprase and Pickus, 2023, p. 16).

In this context, the emphasis on the arts of language and literature, the link with a tradition that allows the reinvention of a social or national project around culture, and the value of intellectual activity *per se* in the university context, have lost the weight they had not only in the Renaissance, but even since the beginning of the 21st century, and especially since the revolutionary digital convergence of mobile phones and social media around 2007, the year of the launch of the first iPhone.

III. THE ONTARIO UNIVERSITY SYSTEM, CANADA

To illustrate the dilemma faced by humanities curricula and departments in universities around the world, we use the case of the province of Ontario, Canada, and conclude with the specific case of Western University.

Ontario has 23 "publicly assisted" universities, a designation that refers to what used to be considered public universities, but which the provincial government changed at the same time as it changed the funding model.¹⁰ These universities remain accountable to the Ministry of Colleges¹¹ and Universities in a context where the weight of private universities is almost non-existent. The Ontario government directly funds universities through an annual grant, the value of which is calculated based on the number of students enrolled and certain other quality criteria.¹² It should be noted that in 2017, the government decided to limit the number of domestic students¹³ they would fund through this grant, thus halting the growth in student numbers as a source of growth in university budgets in that year. In addition, Ontario also sets the tuition fees that universities can charge their domestic students, except for some professional programs for which there is some local autonomy in setting prices. In terms of tuition fees, the current provincial government reduced tuition fees for all programs by 10% to maintain them at 2019 prices until now.¹⁴ In this context, for more than a decade, universities have been redoubling their efforts to fill the

¹⁰ The Ontario Government's expenditure budget –which has the responsibility for university education, but not for research, which is the responsibility of the Federal Government– devotes 39.3% to the health sector, 16.8% to education (primary and secondary), and 9.4% to Children, Social and Community Services. In addition, Other Programs cover 19.4%. The university sector receives 5.9% of Ontario's expenditure budget.

¹¹ Colleges refers, in the Canadian context, to vocational training and trades.

¹² The government's goal is to move to a funding model less dependent on the number of students enrolled and more based on performance indicators, up to a total of 60% of the grant.

¹³ This group is made up of students from Ontario plus students from other provinces and territories in Canada (with different enrolments).

¹⁴ At the time of writing this paper Ontario had not set a position on what it would do in the 2024-2025 budget with respect to tuition or how it would respond to the Blue-Ribbon Panel on Postsecondary Education Financial Sustainability Report, available at: <u>https://files.ontario.ca/</u> <u>mcu-ensuring-financial-sustainability-for-ontarios-postsecondary-sector-en-2023-11-14.pdf</u>

budget gap left by the loss of state funding, whether through grants, research funding, internal services, especially at residential campuses, the development of undergraduate and, especially, postgraduate professional programs. One of the most important new sources of funding from 2019 onwards, in line with the country's immigration policy, is the enrolment of international students, mainly from Asia and especially China. However, the post-pandemic scenario has led to a significant decline in this source of income or, in other cases, to a freeze in its growth. In addition, the saturation of an international student market that already had very experienced players in countries such as Australia, the United Kingdom and the United States, and the role of international university rankings in student preferences, make this a highly competitive market. Finally, the climate of geopolitical tensions and realignments in groups of allies has, at various times, particularly affected Canada's relations with some of the countries that have contributed the most international students to Ontario universities. such as India, Saudi Arabia and China, Lastly, in terms of budgetary policy, all universities have attempted to reduce operating expenditures on the largest line item, faculty salaries, by freezing new positions, incentivizing retirements, and eliminating programs and degrees that were not financially sustainable.

According to the Higher Education Quality Council of Ontario,¹⁵ 164,966 students applied for admission to one of the province's 23 publicly assisted universities in the 2022-2023 school year. Of these, 92,419 were from Ontario high schools, while 72,547 were from outside Ontario. These figures are consistent with what appears to be a steady and controlled increase since the 2012-2013 school year (141,222, of which 49,592 were from outside the province). The majority of these students are non-Ontario students, including international students, whose absolute numbers and weight in the system have increased significantly over the past decade.¹⁶

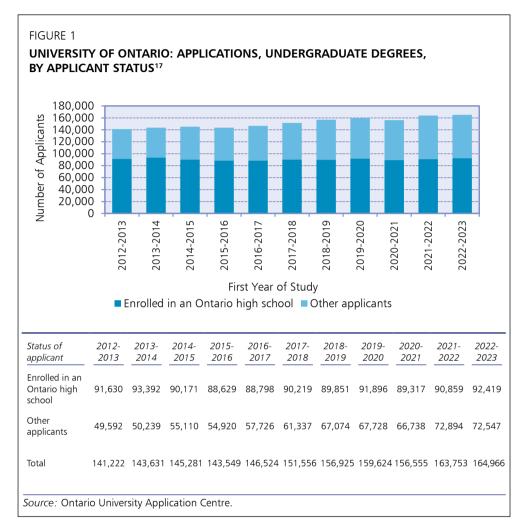
In terms of total undergraduate enrolments, Ontarian universities had 410,829 students in 2020-2021, of which 63,363 were international students.

According to the report, "from 2008 to 2021, the panel reported, university Nominal Operating Grants in the province fell from \$8,514 to \$8,350 per student", without taking into account the inflation per student. On this case, see: <u>https://cupe.ca/government-appointed-panel-confirms-massive-university-underfunding-ontario; https://universityaffairs.ca/news/news-article/will-ontario-answer-calls-for-increased-postsecondary-funding-and-tuition/).</u>

According to the president of the Council of Ontario Universities, there would be some 20,000 domestic students not funded by the provincial government (at a loss of \$175 million per year for the universities) and at least ten universities would have projected structural deficits in their upcoming budgets. On this case, see https://globalnews.ca/news/10213696/ontario-universities-funding-request/

¹⁵ Heqco.ca. It is an agency of the Government of Ontario.

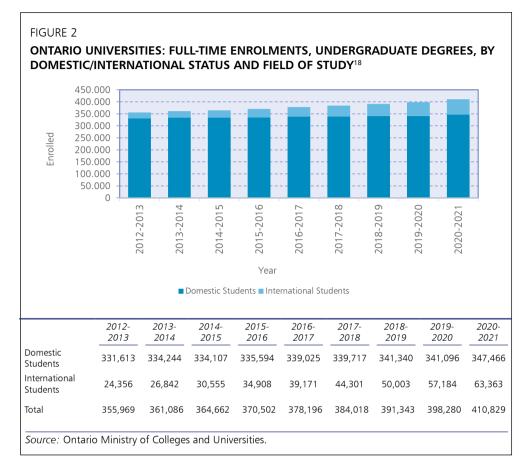
¹⁶ The only public university created in the last few years is Ontario Tech University, founded in Oshawa in 2022, with just over 10,000 students enrolled in 2021.



Again, the total increase of students in the province's universities is around 15.4% over the last decade, while that of international students is close to 160% over the same period.

The figures for master's and PhD students are similar. The increase from 2012-2013 to 2020-2021 was 33.1%, for a total of 69,518 postgraduate students across the province, of which almost 20,000 were international in the academic years 2019-2020 and 2020-2021.

¹⁷ See: <u>https://heqco.ca/data-and-resources/quick-stats/1-1-number-of-applicants-to-ontario-university-undergraduate-programs/</u>



Thus, in 2021-2022 alone, Ontario universities awarded 183,157 undergraduate degrees, of which 12,191 were to international students. In the case of postgraduate studies, the number of degrees awarded reached just over 60,000 in 2020, of which 17,301 were awarded to international students.

When we analyze the enrolments and graduates' data from the different fields of study,¹⁹ we observe the following conclusions regarding the humanities. In terms of enrolments in related programs, there has been a consistent and

¹⁸ See: <u>https://heqco.ca/data-and-resources/quick-stats/2-2-undergraduate-enrolment-in-ontario-universities/</u>

¹⁹ HEQCO uses Statistics Canada's *Classification of Instructions Programs (CIP)*. In some universities, in addition to the disciplines under the Humanities label, the disciplines of "Visual and Performing Arts, and Communication Technologies" could be considered to correspond to a version of the humanities. However, in other cases, there has been a process of specialization and distinction of disciplines that has led to the creation or maintenance of separate faculties, *e.g.* Music, or Information and Media Studies.

sustained decline in the humanities, from 51,907 enrolments in 2012-2013, with few international students, to 35,383 enrolments of Canadian students in 2020-2021, a decline of 28.6% in the domestic market. This was partially offset by the presence of 7,254 international students (42,637 in 2020-2021), but without returning to the 51,907 of 2012-2013. For postgraduate programs, the deterioration is smaller but also steady, from 3,969 students in 2012-2013 to 3,635 (613 international) in 2020-2021.

The number of students graduating with a humanities degree in this period decreased from 16,802 in 2012-2013 to 11,182 in 2021-2022 (33,448%). In postgraduate programs, the number fell from 1,147 to 938 (including 61 international students) in 2021-2022.

This means that while the total number of undergraduate students in Ontario has increased by 38.4% over the past decade, the number of undergraduate students enrolled in humanities programs has decreased by almost 17.86%. In relative terms, humanities departments and faculties now directly serve only 10.37% of all undergraduate degree demand in the province, down from 14.58% in 2012-2013.

IV. THE HUMANITIES AT WESTERN UNIVERSITY

Western University was founded in 1878 in London, Ontario. Bishop Isaac Hellmuth envisioned a university with four faculties (Arts, Theology,²⁰ Law and Medicine), a number that has grown to twelve²¹ today, with a total enrolment of approximately 36,000 students in 2023 and a goal of reaching 50,000 within the decade. There are two characteristics of Western University that are key to understanding its history and the context of the humanities in this type of university in the 21st century. One is that Western is a residential campus, meaning that a large proportion of the student population is not from London and that the university is committed to housing all first-year students in its own halls of residence.

The commitment to provide accommodation plays several roles in the context of the university: it presents the mission of the university in terms of the overall "student experience", which is a fundamental part of the brand, and it provides a source of income through the services offered to students, which extend to upper year students and graduates, albeit to a lesser extent, in all services except accommodation. On the other hand, in the academic

²⁰ *Divinity*, in the language of American universities.

²¹ There are also two university colleges (Huron and King's) affiliated with Western, as Brescia University College has been absorbed by the university under an agreement signed in 2023.

organization of the University, the so-called "Professional Faculties", *i.e.* those that offer regulated programs and/or programs that can only be accessed after a minimum of three years, have had a qualified weight since their creation and now even more so due to the number of students they serve. Thus, of the twelve faculties that make up the campus, only Arts and Humanities, Social Sciences, Natural Sciences and Information and Media Studies are not considered professional, although some of them offer professional degrees to meet specific labor market needs. Engineering, Law, Business, Health Sciences, Medicine, Education and Music²² are professional faculties and their composition and enrolment are closely linked to labor market needs, economic policy and the relevant professional bodies and associations.

In academic terms, the regulations approved by the University Senate require all undergraduate students to enroll, if possible, in their first year, in courses that will enable them to fulfil the "breadth requirement", which includes the completion of one credit²³ in each of the three categories "Arts and Humanities", "Sciences and Engineering" and "Social Sciences and Interdisciplinary Studies". This requirement is compulsory, regardless of the degree being studied, and is designed to give students access to other areas of knowledge beyond their specific discipline.

Another important element to consider in assessing the future of the humanities in the 21st-century university, as we will see in the case of Western below, is the graduation requirement known as the "essay course requirement". To understand this requirement, it is important to know that Western offers seven types of degrees²⁴ and that, depending on which degree students choose, they must complete the essay or writing course requirement to graduate. Honors Bachelor degrees (all four-year degrees) and Bachelor degrees (both four-year and three-year in duration) require students to complete two credits in courses with a significant writing component or in essay course.²⁵

²² The twelfth faculty is the one that regulates and partly administers the Graduate and Postdoctoral Studies, although it does not teach, as this is done by the respective faculties.

²³ This credit translates into two one-semester courses (0.5 credits) or one full-year course (1 credit). On this case, please see <u>https://www.uwo.ca/arts/counselling/your_degree/breadth_requirements.html</u>

²⁴ Western offers the following types of degrees: Honors Bachelor Degree (4 years) Honors Specialization; Honors Bachelor Degree (4 years) Double Major; Bachelor Degree (4 years) Specialization; Bachelor Degree (4 years) Major; Bachelor Degree (4 years) Double Major; Bachelor Degree (3 years) Major; Bachelor Degree (3 years) Double Minor.

²⁵ University Senate recommendations for these courses include "An essay course must normally involve total written assignments (essays or other appropriate prose composition, excluding examinations) as follows: Full course (1000 to 1999): at least 3000 words; Half course (1000 to 1999): at least 1500 words; Full course (2000 and above): at least 5000 words; Half course (2000 and above): at least 2500 words, and must be so structured that the student is required to demonstrate competence in essay writing to pass the course." On this case, please see https://www.uwo.ca/univsec/pdf/academic_policies/registration_progression_grad/coursenumbering.pdf

In budgetary terms, Western operates on a model of faculty autonomy, which means that each faculty has an operating budget²⁶ that depends on three factors: the number of students enrolled in its programs (which is the most important element); the number of students it teaches even if they are not enrolled in its programs, *i.e.* those who pass through a faculty's courses to fulfil its breadth or essay course requirements; and the number of postgraduate, master's or PhD students in research programs.²⁷ This budgetary model entails a number of consequences that affect all disciplines to varying degrees and that have proved particularly dangerous for the humanities.

On the one hand, budgetary autonomy implies local responsibility in the faculties themselves and their financial health depends to a large extent on the attractiveness of their degrees to students (and their families) in terms of a direct relationship with a profession or skills that will place the student in an advantageous or competitive position in the labour market. This is an argument based largely on the family's return on investment in the university and the needs of the economy for certain types of professional profiles.

On the other hand, this budgetary autonomy becomes an obstacle in cases where the economy sends out signals that direct students towards training areas that are far removed from the degrees offered by a faculty. In this case, the Faculty of Arts and Humanities remains a paradigm of the difficulty or inertia of adapting to the demands of the market. In certain cases, a prolonged trend of declining enrolments automatically generates a deficit that is difficult to correct in the short and medium term, since the item of expenditure on lecturers' salaries is practically untouchable in the case of tenured lecturers.²⁸ This budgetary imbalance can only be corrected through retirement or collective bargaining and hinders the ability to invest in these faculties in order to create new courses; to renew the professorial skills map by recruiting young professors; or to retrain tenured professors, which is complicated by the degree of specialization in the training of a professor who must also have a high level of research performance.

If, on the one hand, the inclusion of breadth requirements and essay course requirements open up opportunities internally for those degrees that are less able to adapt to market demands, on the other hand, these same

²⁶ The capital budget operates under other rules, while the research budget depends, largely but not exclusively, on grants that individual researchers can win in national competitions governed by each of the three sectoral research agencies of the Federal Government; some provincial grants; contracts with companies; and, where appropriate, grants for laboratory infrastructure and equipment, etc.

²⁷ Post-graduate professional programs are funded exclusively by student tuition fees.

²⁸ The so-called *tenure* of academic careers in North American universities.

requirements lead to guite aggressive competition between departments and faculties to win and keep a large segment of this internal market. In some cases, this service is the only justification for offering traditional degrees that would otherwise be difficult to justify in terms of current enrolment. On the other hand, the requirement for essay courses should, in principle, give an advantage to liberal arts degrees, which have always included elements such as excellence in reading and writing as features of the "liberal arts" paradigm of education in American universities. However, many of the Science and Social Science programs offer such opportunities among their courses because in order to comply with this requisite they can use the "lab reports", that are common for students in many of the sciences in the later years of their programs, or cumulative participation in debate fora, or the essays typically produced in a literature course on Shakespeare or Cervantes. The erosion of this relative advantage has become dramatically more pronounced since the launch of OpenAI's flagship product, ChatGPT, in 2023, which many students saw as a digital tool that should be included in their professional expertise to write texts and thus to fulfil the above-mentioned requirements.²⁹ As we will see below, the introduction of ChatGPT and other similar products has not only become a budgetary threat to degrees that depend in one way or another on the essay requirement at Western University, but has also provoked an existential crisis in the very foundations of the humanities,³⁰ which, as Rico (1993) pointed out, are based on reading and writing skills that are developed through interaction with specific authors and canonical works of the culture being studied.

With regard to students enrolled in humanities programs, we have a set of public data covering at least a decade.³¹ In this case, the number of programme enrolments in the Faculty of Humanities has decreased from 1,149 in 2013-2014 to 870 students³² in 2022-2023, a decrease of 24.28%. This decrease is reflected in all categories, be it first-year enrolments³³ (from 213 to 202), three-year enrolments (from 124 to 20) or four-year enrolments (from 797 in 2013-2014 to 634 in 2023-2024).

Looking at the data by department, the decline has occurred in all of them, with a few isolated exceptions in the middle of the series that do not significantly

²⁹ For the time being, their use is not recommended, and the university leaves it up to each lecturer to decide whether or not to prohibit them in their own courses.

³⁰ On the other hand, the irruption of this technology is presented as a new opportunity for the renaissance of the humanities, as in the case of Christian Madsbjerg (2017).

³¹ Western Databook 2023. Available at <u>https://www.uwo.ca/ipb/databook/ Office of Institutional Budgeting</u> and Planning, Western University

³² These data refer to students enrolled from the first year to the fourth year. Data available at: <u>https://www.uwo.ca/ipb/databook/04/auartb04.html</u>

³³ Those students who have declared their Faculty of origin upon arrival at the university.

affect the downward trend in the faculty's enrolments. Thus, Classics Studies³⁴ has gone from 126 to 78; English Literature and Writing from 582 to 420,³⁵ French from 254 to 132; Gender, Sexuality and Women's Studies from 110 to 113 (with a peak of 165 in the 2017-2018 academic year); Languages and Cultures from 152 to 80; Philosophy has fallen from 174 in 2013-2014 in several years of the series, but has managed to recover and had 174 students again in 2022-2023; Visual Arts from 257 to 189.

It should be noted that these figures refer to the three or four years of study, which means that the number of students enrolled in some of these programs varies from around 20 to just over 100 in the case of English Literature and Writing, the largest programme.

Meanwhile, the total number of students enrolled at Western University

over the five-year period from 2018-2019 to 2022-2023 has increased from 33,356 (counted as full-time equivalents) to 38,013.³⁶

 TABLE 1

 Academic Unit/Enrolled students
 2013-2014
 2022-2023
 Difference (%)

Academic Unit/Enrolled students	2013-2014	2022-2023	Difference (%)
Faculty of Arts and Humanities	1,149 (797)	870 (634)	-24.28
Classical Studies	126	78	-38.08
English and Writing	582	420	-27.8
French	254	132	-48.03
Gender, Sexuality, Women	110	113	+2.72
Languages and Cultures	152	80	-47.36
Philosophy	174	174	0
Visual Arts	257	189	-26.45

³⁴ These data include all students enrolled in programs in the respective departments.

³⁵ The Department of Film Studies disappeared as an independent academic unit in 2014-2015 and its members were integrated into other departments, primarily English Literature.

³⁶ In brackets, students enrolled in four-year degrees

In the most recent academic year, the data show that the Faculties of Social Sciences, Natural Sciences, Health Sciences, Medicine, Engineering and Business are at the top of the table in terms of most demanded degrees, while Law, which is a second level programme, *i.e.* you need to have completed a degree before, is slightly up, and the Faculties of Education, Information and Media Studies, Arts and Humanities and Music have experienced very significant declines that threaten their financial sustainability and academic mission.

One of the peculiarities of the academic organization of Western University is that degrees such as Geography, Anthropology and History occupy separate departments in the Faculty of Social Sciences. Their affiliation to this faculty is due to internal historical reasons, although in terms of the categorization of its disciplines, History is usually assigned to Arts and Humanities. In the case of Western University, History had 171 students in 2022-2023, which is significantly less than the 312 in 2013-2014.³⁷

TABLE 2				
Faculty	2013-2014	2022-2023	% of the entire university in 2022-202	
Business	1,278	1,573	5.1	
Education	2,149	3,013	9.8	
Engineering	1.502	2,618	8.5	
Health	3,170	3,958	12.9	
Information and Media	935	885	2.88	
Law	530	555	1.8	
Medicine	2,438	3,045	9.9	
Music	512	413	1.3	
Science	4,503	6,036	19.6	
Social Sciences	6,691	7,716	25.1	
Arts and humanities	1,149	870	2.8	
Total	24,857	30,682	100	

³⁷ These figures include postgraduate students, which were 5,911 in 2018-2019 and 6,646 in 2022-2023, but not students at Western-affiliated university colleges, some of whom take courses at the university and whose programs can sometimes compete with those in the Arts and Humanities. The data can be found at https://www.ipb.uwo.ca/documents/2023_five_year_enrolment_comparison.pdf

In any case, the Faculty of Arts and Humanities indeed serves less than 3% of the students enrolled in programs at the university. On the other hand, it provides a considerable general service as it offers the courses necessary for all students at the university to fulfil the B breadth requirement (1 credit in Arts and Humanities courses) and it helps many students to complete their essay course credits. Additionally, the graduate programs of this faculty have maintained considerable vitality, especially at the PhD level, while the master's programs (all of which are on research and none of them are professional) have also seen a significant reduction in the number of students enrolled.

V. DIAGNOSIS

The trajectory of the humanities at Western University follows what could be considered the general pattern of Canadian and American universities, which entails a gradual and, so far, inexorable decline in enrolments in the humanities. The decline began, with variations across countries, more than thirty years ago,³⁸ accelerated since the 2008 financial crisis, and is expected to continue, given the existential and economic uncertainty that the combination of the pandemic and the advent of generative AI has brought to the generations now reaching their university age.

The case of the humanities at Western University has some peculiarities that cannot be extrapolated to other political, economic and cultural contexts, where either legislation, the role of the university in a particular context, its institutional history, or the economic or cultural pressures give rise to different scenarios. However, these specificities are very instructive because they draw attention to the subtle self-regulatory mechanisms of the higher education market that should be considered in each case. Of course, many of the debates about the declining role of the humanities around the world have to do with the history of universities, the cultural heritage of these disciplines, the ideological controversies of recent years, but also the pressures of a global economy in permanent digital transition since at least 2007, as well as the more recent geopolitical reorganization of the world's major countries into three or four sometimes conflicting and sometimes coordinated groups. However, we must not lose sight of the fact that these ideological considerations have a specific impact in each context and in each university, and that understanding the mechanisms of their interaction at the local level is key to making a diagnosis and being able to propose solutions.

³⁸ All departments in the Faculty of Social Sciences have experienced significant declines in enrollment over the past decade, with the exception of Psychology, which maintains more than healthy activity, and Management and Organization Studies, which has been growing every year for more than a decade.

When comparing the case of the humanities at Western with the rest of the province of Ontario, it is clear that while at the provincial level the humanities still account for just over 10% of enrolled students, at Western this percentage is only 2.8%. It is true that there may be some variability in these figures depending on whether or not certain departments are part of the Faculty of Arts and Humanities, which at the provincial level may fall into the same category according to Statistics Canada's Classification of Instructional Programs (CIP). However, it is also clear that all programs within the Faculty of Arts and Humanities (with the exception of Philosophy and Gender, Sexuality and Women's Studies) have experienced significant declines in enrolment, and that these declines have been fairly consistent over the past decade.

Looking at the data for the programs attached to the largest faculty in terms of student numbers at Western University (Social Sciences), we see that Anthropology, Economics, Political Science, Sociology, Geography and History have also experienced significant declines in recent years, and that only Psychology,³⁹ with over 1,000 students, and Management and Organizational Studies, with over 3,000 students, have managed to grow and present a healthy picture. There is a fundamental difference between Psychology and Management and Organizational Studies, which is that Psychology has a much higher enrolment than any other social science degree and a large percentage of its students are international. If we look at these data for the University as a whole, only the Science and Psychology programs would manage to stay stable and grow in a local context, where all other growth is only in programs that are regulated (e.g. Engineering, by their own professional bodies) and/or have higher prices than the rest of the "normal" or "traditional" programs. In other words, only those programs that present themselves to the market as "special", "regulated" or "select", i.e. "professional", and therefore offer a competitive advantage to their students, manage to stay stable or grow. This is a process of "professionalization" of university education, aimed at shortening as much as possible the distance between university education and professional insertion in an elite labor market, which offers these professionalized workers a certain security and stability at the beginning of their careers.

This selective feature of the "professional" programs in some cases seems to mean higher tuition fees compared to other programs (*e.g.* HBA students at the School of Business pay more than 20,000 Canadian dollars for each of the two courses they take, which are third and fourth year); the direct link to a specific career opportunity (Engineering or Law); or the adaptability of Management students (at Western they are in Management and Organizational Studies in

³⁹ The fall of the Berlin Wall may have marked a moment when Western ideology based on the humanistic reformulations of the 20th century and the concepts of freedom and personal autonomy were left without an ideological rival and thus lost one of its most important social functions since World War II.

the Faculty of Social Sciences and in the School of Business) to manage and lead organizations, companies and perhaps institutions of all kinds. The question that arises in this context is whether, by promoting an internal market of competition between degrees, the university has possibly created a category of premium or luxury degrees, *i.e.* a degree that would give students some advantage when entering a market that, despite Canada's relatively prosperous context in the concert of nations, is still perceived as unstable and highly uncertain. Only the growing science disciplines⁴⁰ deviate from this analysis, perhaps because they are now embracing the traditional role of the humanities as providers of the general knowledge necessary for the economy and society.⁴¹

The promise of security and stability seems to be one of the additional but necessary elements of any university degree in a context that teenagers, and apparently their parents, perceive as based on uncertainty about the future, constant disruption, economic vulnerability, youth mental health crisis, the recent pandemic and, in the case of Canada, a housing market that is very difficult to access (Wells, 2024). In other words, a future context in which the only fixed variable seems to be uncertainty itself, and for which there seem to be no useful or convincing philosophical or anthropological explanations.

It is fair to say that providing these explanations should be one of the tasks of the humanities, and that, at least in part, the co-generation of a new worldview about the present situation could be one of the useful and attractive elements of humanities programs in the university of the 21st century. However, this is not happening and there are several reasons for this. On the one hand, the humanities –largely because this is how current lecturers have been trained– still respond to a model of the world in which the book, and in many cases the book on paper, is the artefact around which the generation of meaning and reality revolves. This is due to historical reasons linked to the origins of the humanities in the Renaissance and their co-evolution with the printing press and the book market in later centuries.

Another element that contributes to the difficulty of realizing the full potential of the humanities in a period of transition or crisis is that students arrive at university coming from secondary school having had little prior exposure to the methods, tools and questions of the humanities. These changes also bring with them a constant message on the benefits of the sciences and on how humanities belong to the realm of entertainment, or what can be done in one's spare time (Wells, 2024). In addition to the ideological consequences of these changes in secondary education and in the social

⁴⁰ Psychology has historically enjoyed large enrollments at Western, and interest in neuroscience, as well as continued investment in infrastructure and research in this area, have had the desired effect.

⁴¹ In some cases, certain undergraduate degrees serve as a gateway to medical school.

perception of the humanities themselves, this means a significant reduction in the number of potential secondary school students choosing one of the humanities degrees, even in the case of combined degrees. In other words, the size of the funnel with which these programs now begin, in terms of the number of secondary school students entering university, is in itself very small.

Finally, neither the universities nor the humanities lecturers themselves have had re-skilling or up-skilling programs that would allow them to reorient their degrees, the problems they address, or the way they do so, in a way that would be more attractive to students seeking skills and clear and direct links to the labor market. There are notable exceptions, but these have not yet brought about the expected change, at least in teaching, though perhaps more so in research. In the field of digital humanities, the University of Victoria in the province of British Columbia established a Digital Humanities Summer Institute (DHSI) in 2001, which has served as a training platform on many aspects of digital humanities for a large number of faculty and graduate students from around the world. These intensive, week-long, hands-on programs on topics ranging from text encoding⁴² and digital pedagogy to Natural Language Processing with Python, programming with R, databases for humanists, critical digital humanities, race and social issues, pedagogy for the digitally oppressed, feminist and gueer digital humanities, the semantic web, and deep learning for humanists. The DHSI operates according to a model of humanistic practice based on open digital scholarship, *i.e.* the creation and dissemination of digital knowledge in an open and inclusive way. Thus, one of the keys in its design and, in part, its success, is that the courses offered each year are proposed by interested parties and their actual implementation depends on their acceptance by future participants. This digital humanities reskilling initiative has been so successful that in recent years similar initiatives have also been created in North America, Europe and Asia in association with the DHSI at the University of Victoria.43

The digital humanities offer a possibility for the renewal of the humanities in the 21st century university, especially because of its potential for teacher retraining. However, it faces a number of challenges, such as being associated in some areas of the humanities themselves with the neoliberal university model that administrative elites are trying to impose unilaterally on North American

⁴² According to a recent study, the number of students enrolled in U.S. computer science and information technology programs will increase by 41 percent between 2018 and 2023, while enrollment in liberal arts programs will decrease dramatically. For more on this case, see <u>https://www.nytimes.com/2024/02/14/</u> <u>opinion/ai-economy-jobs-colleges.html?searchResultPosition=1</u>

⁴³ It still is one of the star courses in 2024 because it is linked to different methodologies, in this case digital methods (XML, Extensible Markup Language) and Philology and literary analysis of texts, in this case digital or digitalized. Available at: <u>https://dhsi.org/on-campus-courses2024/</u>. In the summer of 2024, the DHSI offers a total of 43 courses over a two-week period.

campuses. The digital humanities, in this analysis, would be an unacceptable imposition that would contribute to accelerating the decline of the traditional humanities. On the other hand, the impact of institutions such as the DHSI, or of the digital transition of the capitalist economy itself around the world, does not seem to have spurred a digital transformation of humanities departments and faculties almost anywhere.

This digital transformation would involve redesigning programs based on market signals about the skills that students need (rather than redesigning them based on the traditional and necessary elements of the disciplines themselves); retraining a large number of teachers in these areas, with an emphasis on those who still have a large part of their careers ahead of them; and aligning skills and disciplines to eliminate the mismatch between new skills and techniques (see the titles of the courses offered by DHSI), and the names, techniques and methods of the traditional humanities (Literature, History, Philosophy, and Classical and Modern Languages).

In the meantime, as this digital transformation takes place or not, the current situation remains alarming. According to Rob Townsend, Director of Humanities, Arts and Cultures at the American Academy of Arts and Sciences, this is an "existential tipping point" (Wells, 2024) for a large number of departments that are already clearly facing their demise.⁴⁴ Not even the elite American universities, whose students until recently had to take some form of Liberal Arts course as a mark of distinction and success, seem to be spared this process of decline. According to Townsend, in 2020 only 4% of undergraduate degrees in the United States were in one of the key traditional humanities disciplines - English Literature, History, Philosophy or Foreign Languages. According to Statistics Canada, the picture is similar in Canada, where enrolment in the humanities has declined by 50% over the past 30 years, despite an overall increase in university enrolment. Data from the Higher Education Strategy Associates' 2023 report, cited by Ira Wells, confirms all the above: in Canada, enrolments in the humanities fell by 27% in the decade from 2010-2011 to 2020-2021, in contrast to substantial increases in the social sciences and business, and huge leaps in Health Sciences, Engineering and Science (2024).

⁴⁴ The global network of partner projects in its DH Training Network includes DH Downunder; Digital Mitford Coding School; DHSI@MLA; DHSITE@Ottawa; DH@Guelph; HILT; DH@Oxford; DH@Leipzig; DH Beirut; EDIROM DH; and ZIM@Graz. In addition, the group has collaborated on the creation of a Canadian Certificate in Digital Humanities, which is open to students from Canadian universities who receive a number of credits at their universities or have credits taken at DHSI recognized. However, most of the attendees and users of DHSI and the DH Training Network are faculty, not students, in the Humanities who are trying to adapt their skills to the new situation at their universities. Available from: <u>https://dhsi.org/dh-training-network/</u>

VI. THE EMERGENCE OF ARTIFICIAL INTELLIGENCE

The emergence of generative AI in discussions about the future of the 21st century university did not take long after the release of OpenAI's free versions of ChatGPT and Dalle-2 at the end of 2022 with their immediate global adoption in the first quarter of 2023.

Beyond the actual meaning of the term "intelligent" when applied to these tools, the fact is that the accessibility and ease of use of these products has brought to light a number of vulnerabilities that affect not only the humanities disciplines, but indeed some of the fundamental tasks associated with university teaching and learning. These vulnerabilities relate to earlier discussions and calculations about the disappearance of certain professions and a large number of jobs across a large segment of the labor market due to the massive use of robots and AI systems. For example, Brynjolfsson and McAfee already pointed out in 2014 that in order to properly understand the impact on society and the economy of digital technologies –software, hardware and network, the latter perhaps the most important because of its multiplier effects-, it is necessary to keep in mind its three main characteristics, namely that it is exponential, digital and combinatorial (p. 37). However, in discussing the impact of digital machines on the labor market, they favored a position in which they would complement and amplify what workers can do. This would be the best strategic option for a number of reasons:

"Effective production is more likely to require both human and machine inputs, and the value of the human inputs will grow, not shrink, as the power of machines increases. A second lesson of economics and business strategy is that it's great to be a complement to something that's increasingly plentiful. Moreover, this approach is more likely to create opportunities to produce goods and services that could never have been created by unaugmented humans, or machines that simply mimicked people, for that matter. These new goods and services provide a path for productivity growth based on increased outputs rather than reduced inputs."⁴⁵ (Brynjolfsoon and Mcafee, 2014, p. 182).

The complementarity of machines to humans also seems to be a complementarity in the opposite direction, thus the value of workers' inputs would be higher in contexts "augmented" by the respective machines. This brings us to an unavoidable stop in the context of university education, namely,

⁴⁵ Public acceptance of this reality is often associated to the publication in *The New Yorker* of an article by Nathan Heller entitled "The End of the English Major" on February 27, 2023. <u>https://www.newyorker.com/magazine/2023/03/06/the-end-of-the-english-major</u>

to determine what are those value-added inputs that machines cannot replace, at least for the time being, although, as the new wave of generative AI has shown, they are very good at imitating. If we accept the link between value-added inputs in the workplace and the definition of the human condition in a fully digitalized environment, I think we may have a first clue as to what one of the main functions of the humanities in 21st century universities might be.

This would require starting from one of the original questions of humanism: what makes us truly human? In the Renaissance, it was answered based on the exploration of human dignity but, in the context of a technological revolution that affects all spheres of life on the planet, the determination of this sphere was very aptly posed by Chris Anderson (2008), then editor of *Wired*, in his article on "The End of Theory: The Data Deluge Makes the Scientific Method Obsolete," in which he concludes that the great question this poses relates to the need to determine what is truly human about human beings in we see them in the mirror of AI.

The humanities claim the right to teach what makes us human through the content and tools that each of them -History, Literature, Philosophy and Languages- has developed over time. This right now has a sense of urgency, as the definition of what is inherently human takes place in the context of digital and AI technologies that have transformed nearly every aspect of the human condition. The difficulty lies in the fact that, in order to reach a conclusion, the humanities have to negotiate a set of answers that would be valid at the intersection between the delimitation of the human condition and its expression in skills that can be subtracted from and complement the productive activities of machines. That is to say, the value proposition for training which is located at this intersection must be appealing in terms of the enrolments that the corresponding university degrees can attract. There is no possibility, at least not in the university of the 21st century, perhaps more so in the media, in essay writing and research, of a purely descriptive proposal outside the university market and the labor market, in the middle of which we have all university degrees, including those on humanities. The solution for the humanities to have a future must take account of both spheres: humanity in the labor market marked by digitalization and generative AI.

In this sense, the emergence of OpenAI in 2023 has highlighted some possibilities considering the violence used to present certain risks and opportunities for the mortally wounded humanities.

In terms of risks, the generative capacity to produce text, images and now high-quality video is a frontal assault on two skills that are fundamental to much of higher education, but particularly to the humanities: content creation and writing. Content creation was largely removed from the specificity of the humanities at the beginning of the 21st century because it was difficult for these degrees to undergo a digital transformation commensurate with the scale of the revolution we have been experiencing at least since the launch of the iPhone in 2007. As a result, this space for digital content creation has been taken over by information and media technology programs, which have often been placed institutionally outside humanities departments. However, writing, or the production of texts, is a specialty of the humanities, stemming from humanistic foundations, not only in terms of the efficient production of quality texts, but above all in terms of the process of humanization that the practice of writing produces in the student.

At present, it is very difficult to convince students who have not had much contact with reading and writing practices and who have an instrumental and pragmatic view of learning that it is preferable to write an essay, a short story or a marketing text without the help of ChatGPT. The values of efficiency, productivity and objectivity supposedly associated with these technologies prevail over the growth of one's own language, the development of a unique style and the moral benefits of this intellectual endeavor. Even when the personal skill at stake is creativity and its nurturing, it is difficult to make a case for young people to learn in a way that is not based on complementarity and augmentation between the learner and the machine, at least. Is writing –and reading, a practice which is essential for the development of writing skills– not one of the skills that lie at the intersection of humanity and digital technologies⁴⁶? What are the contributions or input that would add human value, and therefore economic value, to the skills learned in the 21st century university?

Well, the arrival of OpenAI in our lives has entailed not only risks, but also some possible avenues that, in this case, can help to open and colonize this space at the intersection between humanity and the economic value of the skills it promotes.

Some of these possibilities have already begun to have a positive impact on humanities degrees, though not fully or effectively. The first of these involves the world of ethics, *i.e.* Philosophy degrees, and the long series of questions that need to be answered concerning the intrusion of AI into all kinds of productive, labor and institutional processes, including issues of intellectual property, data and algorithmic bias, human, corporate and machine responsibility, discrimination, compressed definitions of efficiency, the insertion of moral values into processes of quality, equity and justice, etc. In order to be able to answer these questions and intervene effectively in the real world of companies

⁴⁶ On doubts about productivity gains thanks to the introduction of generative AI tools, see Simon Johnson and Daron Acemoglu (2023).

and institutions, it is necessary to have acquired certain skills that concern both digital technologies and the human elements of interacting with them, as well as the social and institutional systems that we have built to practice certain shared human values in our societies (Suarez and Varona, 2021).

Another possibility concerns the definition and development of human creativity: what makes it unique and, more importantly, why it is necessary for the development of full-fledged humanity, and how it can be coordinated with "machine creativity" to create a virtuous circle between workers and machines (Still and D'inverno, 2016). It should be noted that much of the humanist way of doing is based on learning from and imitating the classics or prominent figures and works of the past. In many cases, this devotion to the past and the need to imitate what we consider to be irreplaceable landmarks of our cultural history has led to the elimination of the creative development that in theory should follow the learning of the classics. For example, only two of the humanities degrees at Western University –Studio Art and Writing– are based in whole or in part on the development of students' creative skills. The polarization between the development of creativity as a fundamental part of the development of the self and its exclusive attribution to the geniuses of each human discipline, in what should be a continuum from one extreme to the other, has prevented the proper exploitation of this skill as the foundational basis of the humanities in the 21st century. However, once it is presented as a set of practices accompanied by values that can be improved and are fundamental to access the self, regardless of the professional field in which they are activated, the results in terms of enrolments in such courses with students from all faculties are undeniable. Human creativity as a skill, its exploration as a human quality, its value as a tool for personal and professional adaptation in an uncertain environment, and the open horizon in its possible combinations with generative AI systems are some of the elements that point to its key role in the new humanities.

Thirdly, generative AI products have brought to light another pressing need that the humanities in the 21st century could address by adopting a new curriculum created at the intersection of human and market skills. This is the design and management of hybrid systems in which humans and AI coexist in productive, creative, educational, service and entertainment contexts. This challenge starts with defining what is truly human and how it can be nurtured and used in such contexts, and at the same time taking into account how AI products work best in their interactions with humans. This would lead to a detailed reflection and deepening of what it means to develop human-centered AI (Shneiderman, 2022) and, in practical terms, to developing the knowledge and skills to think and act within complex systems in which evolution and hybridity are two of their main features. In this case, the ability to design as well as to manage, direct and govern these systems, which will soon be present in many previously exclusively human domains, will be part of these new valueadded skills that have to emerge at the intersection of humanization and generative AI.

Some of these possibilities have already been suggested by experts on the "future of work". In particular, Anees Raman and Maria Flynn⁴⁷ wrote a short essay in February 2024 in which they succinctly but emphatically summarized the findings of their report "Preparing the Workforce for Generative AI. Insights and Implications".⁴⁸ Entitled "When Your Technical Skills Are Eclipsed, Your Humanity Will Matter More Than Ever", the paper argued that the skills that would best withstand the presence of generative AI systems, were not the technical or data-driven skills, but rather what they called "people skills", which would be more durable than the former because they would serve to anchor these AI systems. These people skills would include effective communication. the development of empathy, critical thinking, collaboration, innovation and adaptability. Given that generative AI can or will be able to, once the systems are designed and trained with the appropriate data, perform skills – more than 500 according to the report- that until now have seemed to be protected or belonging to engineers, lawyers, financial specialists, etc., the authors ask what are our most important skills as human beings and propose a necessary revaluation of skills that have until now been associated with the humanities. They point to the development of interpersonal relationships, negotiation skills, leadership and the motivation of work teams.

Beyond the specific skills, it is true that some of them relate to humanistic studies because traditionally humanistic studies would naturally develop these skills as part of the educational process with classical authors and texts, through reading and writing. However, the university context today, as we have seen in the numbers and trends of Ontario universities, is not characterized by an emphasis on educational processes or the training of the individual –not to say that they do not occur in parallel– but by an insistence on the development of professional skills that will place students in an advantageous position when they enter the labor market and, in the longer term, on the path of economics and uncertainty in which they will live for the rest of their professional careers. In other words, we are faced with a 21st-century university which, without having completely lost its identity as an educational institution, and in which research capacity seems increasingly to be a key competitive element, has decided to move closer to the "training provider model" proposed by Raman and Flynn.

⁴⁷ I leave aside the use of generative AI to correct and mark student work, a task which is almost always cited among the activity's teachers like least but if it is separated from the basic functions of teaching, it still seems to cause an identity crisis.

⁴⁸ Respectively from LinkedIn and Jobs for the Future. See <u>https://www.linkedin.com/posts/linkedin-economic-graph_preparing-the-workforce-for-generative-ai-activity-7100171643439734786-197u</u>

The key question for the humanities in the twenty-first century, then, seems to be whether they will be able to move toward a model in which they provide not only education but also training, and in which the mix of these two components occurs at the intersection of the distinctive essence of humanity and the skills needed to thrive economically in hybrid systems and contexts. To answer this question, some elements of a potential strategy for this transformation are formulated using the case of the Faculty, Arts and Humanities, at Western University.

VII. POSSIBILITIES AND SOLUTIONS IN A TRADITIONAL UNIVERSITY: WESTERN UNIVERSITY

The use of a specific case is important for two reasons. The first one has to do with the fact that the challenge of the humanities in the university of the 21st century is a problem of radical transformation, which is digital in many respects, not so much because it has to respond to the current paradigms of the digital humanities, but because the transition is occurring at the same time asthe human condition is becoming digital and the economy is not stopping its path towards digitalization, now through generative AI. This transformation is partly conceptual and ideological, affecting the raison d'être of the humanities and requiring a reassessment of their history and a rethinking of their mission, but if we stick to the ideological dimension, the exercise of transformation will most likely result in an exercise of critique of the digital economies and societies.

Transformation must be practical, effective, and responsive to the specific conditions of each institution because the threat to the humanities at this point is not ideological, but rather a threat to the survival of its disciplines, departments, and jobs associated with them. With 4% of undergraduate degrees in the United States in 2020 and 2.8% of enrollment at Western, the situation entails a clear existential risk. These institution-specific conditions respond to their budgetary model, the needs and capabilities perceived by their students, and the fact that this radical transformation is not starting from scratch. That is, in the humanities, most universities have many lecturers with specific training, degrees from the past, and an organization into departments that responds to traditional models of the humanistic disciplines.

As in many cases of transformation in the digital economy, it is almost easier to start from scratch, without prior commitments or legacies, that is, as a start-up, than to face a transition from what already exists and has a deep history and inertia that is difficult to reverse. This should not serve as an excuse or make us lose sight of the fact that, despite the advantages of starting almost without obligations, some universities, such as IE University, have decided that the humanities are a key pillar of their future strategy, and as a result have just created a School of Humanities with two degrees,⁴⁹ while their students in all the other schools are required to enroll in a number of humanities courses to obtain their respective degrees.

In the case of Arts and Humanities at Western University, the faculty has seven departments that basically offer the four disciplines of the North American Liberal Arts tradition –Literature, Philosophy, Languages and History (embedded in the above disciplines)– with a degree of specialization that responds to earlier times when the market allowed for a much more diverse offer thanks to the greater number of students enrolled in the faculty's programs. Preserving the knowledge and experience acquired in these disciplines is key to any kind of transformation. Additionally, allowing those professional identities associated with traditional humanities practice should continue to develop, both for teachers and students, as long as the corresponding programs are financially viable.

It is more than likely that this reorganization, as a defensive maneuver, will require a simplification in order to adapt the existing teaching resources to the decreasing number of students enrolling in these courses. The reorganization per se is rather challenging because of the identity and identification processes involved in belonging to a separate discipline and a specific human group for many years. However, the reorganization is not an end in itself, but a means to an end of preserving the knowledge, resources and skills embedded in the faculty, albeit adjusted to a scale that does not threaten budgetary stability and sustainability in a context, as we have seen, of budgetary autonomy and accountability at the faculty level.

The need to adjust the scale must also be considered in the reorganization, not of the departments, but of the degrees offered, which are currently too many for the number of students. On the other hand, the proliferation of similar degrees poses a problem in terms of the positioning of the humanities "brand" for a potential market of students who do not see the differences between programs and who seek to integrate into their CV some valuable skills for the digital labor market. In this context, it would not be too complicated to create some common courses, offered in all faculties, around generative AI and its relations with humanity and/or ethics. This is the basis –more common, simplified and sustainable– on which the next levels of a strategic plan for the renewal and transformation of the humanities would be built.

⁴⁹ The report, published in August 2023 is based on the work of the LinkedIn Economic Graph. Microsoft, which is the lead investor in OpenAI is also the owner of LinkedIn. The methodology used in the report is based on both a series of questions to ChatGPT and the use of LinkedIn user tags.

The second level of transformation focuses on the creation of new degrees based on the following principles: all these degrees must be multidisciplinary (beyond the interdisciplinarity existing within the humanities themselves); skills-oriented; accessible to the existing teachers who wish to undertake them as part of their transformation; sensitive to the digital transformation of the economy and society; and their success and sustainability must be empirically proven by enrolment figures. In this sense, and regardless of the use of the brand "digital humanities", the real need is to digitalize the humanities, *i.e.* their methods, tools and ways of working and learning, and not necessarily their content, in other words, to bring the humanities closer to society on the common ground of digitalization. To this end, and given the existing resources, the necessary investments in teaching staff and infrastructure would be made in Immersive Experience Design⁵⁰ and, in a second stage, in Design and Management of Future Systems, at the pace of the corresponding benchmarks and performance marks, *i.e.* certain KPIs in enrolment numbers and student employability. Both degrees, presented here as examples only, would have the characteristics to facilitate a transition from traditional humanities to digital humanities, with a focus on Systems Design and Management skills.

The first degree, on the one hand, responds to the resources already existing in the faculty, both in terms of staff, courses (in a minor in Digital Humanities), and research infrastructure, in the form of a laboratory for immersive experiences. This degree allows to start from the reflection on the human experience –in multiple aspects, such as historical, philosophical, gender, or digital– and to focus the study programme on the acquisition of practical skills for the design of immersive experiences–, to those based on video and sound, virtual reality, extended reality, etc. The confluence of digital and experience seems to be one of the next frontiers that digitality is determined to conquer, both in terms of the design of new tools–glasses, brain implants or spaces organized by screens, as in Sphere in Vegas– and in the development of spatial computing and the adoption of business models in many industries based on entertainment and user experience, whether this experience is digital, analogue or hybrid.

The second degree responds to some of the needs and niches identified by Kimbrough and Carpanelli in their report on professions that would be augmented, disrupted, or would stay isolated by the wave of digital transformation driven by generative AI. Both Kimbrough and Carpanelli and Raman and Flynn point to the need to manage and lead teams, systems, and spaces where workers will have to coexist not only with each other but also with AI and robots. This requires a basic knowledge of how AI works,

⁵⁰ Bachelor in Humanities and Dual Degree in Business Administration and Humanities. See: <u>https://www.ie.edu/school-of-humanities/</u>

machine-human interactions and ethics, as well as skills related to emotional intelligence, conflict resolution, negotiation, oral communication and interpersonal relations. All of this would be included in a degree in which design and the skills related to its practice, as in the previous degree, play the role of a means for digital transformation.

Also based on existing resources and skills but that would have to be developed exponentially, the second area of transformation would be created around people skills. Using some of the resources and knowledge present in both the traditional or first strategic level degrees and the new degrees, and as stated in the previous cases also with the consequent controlled investments, the next degree would be People Skills,⁵¹ a tentative name taken from previous reports, which would take advantage of the need to complement the technical skills –writing or data analysis– that are common in the early stages of many careers with those that generative AI would struggle to replicate and that "come with longer professional experience, such as leadership and negotiations".⁵² The goal would be to start earlier with the learning and to develop these skills as a distinct feature of students who would enroll in this program, either exclusively or as part of dual degrees.

Finally, the third area of development is based on the resources and knowledge available in the various departments and on the unavoidable need to deal with human-induced changes on Earth, which will require the development and use of specific skills in all sectors of the economy and society. Thus, a degree in Anthropocene Studies, based on the paradigm of complex systems and methodologies associated with research on "planetary boundaries" (Rockström et al., 2009), could also be presented based on some resources already existing in the faculty, such as the area of climate change and gender, which uses methodologies more aligned with social sciences than with the humanities. The aim is that graduates of this program will be able to access positions in companies that are currently committed to sustainability, emissions and climate change, but will go beyond this and, thanks to the academic approach indicated, will be able to differentiate themselves from the inertia already created around some of these concepts. In addition, these graduates could also be destined for some of the Ontario and Canadian economic sectors identified in the introductory graphs on GDP composition. such as Public Administration or Health and Education.

⁵¹ The introduction of similar programs, for example in Interactive Design, has resulted in high enrollment success at universities such as Eafit in Colombia.

⁵² The name or brand of the degree has to reflect its objective, which is to prepare students for the evolution and future of work.

The transformation of the humanities is not only about content and skills. but rather about how we reflect upon and articulate the intersection between the human condition and the skills that make that human condition present in today's labor market. This requires that the transformation also take place in the field of teaching and learning, which, despite the digital invasion and the threat of generative AI, is still very much centered -in almost all university disciplines- on the exercise of giving a lecture -more or less modified with PowerPoint presentations and with the introduction of some additional dynamizers- and the assessment of the student's ability to repeat or replicate the content offered to them. However, both the creation of content (the lecture) and the repetition of content (the exam or essay) are two of the things that generative AI already does most effectively and convincingly. On the other hand, a misunderstanding of digitalization has led to the proliferation of digital devices in classrooms, so that while the teacher is lecturing, students are looking at their screens doing many other things –shopping, communicating, socializing, entertainment, etc.- while paying relatively little attention to what is happening in the classroom. This is a monumental waste of everyone's time that undermines the economic and social value of university learning and raises questions about the value proposition offered by universities, especially in an age and time when similar content is ubiquitous and easily accessible on many digital platforms.

Beyond the social and economic value that degrees from prestigious universities still retain, the only factors that currently distinguish university learning from other forms of digital content production and consumption are the intellectual authority of the teacher, the use of research as a tool for innovation in what is taught, and the shared experience of learning in a specific time and place, *i.e.* the learning experience that must be designed to produce the desired effects and goals, including the student's own perception and subsequent recollection of their learning in that unique and unrepeatable context.

In tactical terms, the precarious situation of humanities degrees and the disruptive impulse of generative AI suggest two directions. One is that the format of the proposed degrees –perhaps not all, but certainly those at the second strategic level– should be organized as double degrees, so that they can be taken by students who currently abound in faculties of Science (especially in pre-medicine), Business, Health Sciences, and Management and Organization Studies (in Social Sciences).

Where there is sufficient market demand to offer these new degrees separately as four-year programs, it should be considered to offer them as professional programs, so that they are marketed and branded as programs that bridge the gap between university and the new world of work, take on the air of exclusivity that works so well in the growing university-wide programs, and have a clear focus on the development of relevant skills. The degree in People Skills⁵³ would be particularly well suited to this.

Finally, the Ontario Ministry of Colleges and Universities has mandated that these institutions respond to the need for businesses and workers to adapt their skills and develop following the economy in an uncertain future. To this end, it has created a still incomplete framework for the delivery and acquisition of very practical "micro-credentials" or mini-modules that would be used for the purposes outlined above. In addition to the general uncertainty surrounding various aspects of this proposal, which affects all institutions and disciplines in a similar way, it would appear that the humanities, as they currently stand, would have considerable difficulty in fulfilling their part of this program. However, once the foundations for the delivery of the People Skills degree and skills are developed and established, they could, with appropriate investment, be redirected to meet the dire need that exists in almost all key professions in the Ontario economy, such as construction, to improve human relations and conflict resolution skills among workers.

The retraining of humanities lecturers, along the lines of the reskilling and upskilling that is taking place in many other professions, and the consequent investment necessary to face the reinvention proposed here with guarantees of success and some degree of security, would be the final pillar of this mini strategic plan for the creation of the humanities in the university of the 21st century.

VIII. CONCLUSIONS: THE HUMANITIES IN THE 21ST CENTURY

In the university context, the humanities have suffered a steady setback in recent decades so, as we enter the third decade of the 21st century, many departments and programs are now facing the existential dilemma of extinction. To preserve a tradition that is fundamental to the life of universities and that connects Western societies to their humanistic roots, the humanities must undergo a radical and accelerated transition to preserve the minimal building blocks of traditional degrees. To do so, the transition must take place in the context of a reconceptualization of what it means to learn and teach in a context of complete digitalization and the intrusion of generative AI. Moreover, the humanities need to frame their mission in terms of answering the following

⁵³ "Preparing the Workforce for Generative AI," page 11. See at: <u>https://www.linkedin.com/posts/linkedin-economic-graph_preparing-the-workforce-for-generative-ai-activity-7100171643439734786-197u</u>

question: how to practice a new 21st century humanities at the intersection between defining what makes us human today and the skills to display that human condition in a digitalized and hybrid economy and labor market? In that answer, contextualized as it is in the case of the Faculty of Arts and Humanities at Western University in Canada, lies the future or the demise of a tradition that has articulated the intellectual, social, and cultural life of the West for the past 600 years and for which, at least for the moment, there seems to be no replacement. From its inception, this tradition has embraced the idea that "the literary education given in humanism cannot be closed to any objective, either in theory or in practice" (Rico, 1993, p. 19).

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