Article

The idea of university in Van Rensselaer Potter and Jürgen Habermas: new looks at university in the digital age

A ideia de universidade em Van Rensselaer Potter e Jürgen Habermas: novos olhares para a universidade na era digital

La idea de universidad en Van Rensselaer Potter y Jürgen Habermas: nuevas miradas sobre la universidad en la era digital

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ABSTRACT

The university is part of the process of "social digitization" and shows itself as a space for discursive interaction. The idea of university derives its meaning from its establishment in the form of a project of integral and citizen formation. The aim of this article is to analyze the concepts of university and their implications in the context of digital technologies based on the theoretical frameworks of Van Rensselaer Potter and Jürgen Habermas. This investigation consists of a philosophical study and bibliographic research through a thorough and comparative analysis of the theoretical references. Potter understands that the university environment is the space for the prospection of humanity's future and the guarantee of its survival. Potter's bioethical view roots the university in its project of serving society through the resolution of global problems. In Habermas, the idea of university shines the space for communicative action in human formation. In this context, the university in the digital era projects its training activities and constitutes an open and plural environment for strengthening the democratic foundations of society.

Keywords: Bioethics. University. Digital Society. Van Rensselaer Potter. Jürgen Habermas.

RESUMO

A universidade está inserida no processo de "digitalização social" e coloca-se como espaço de interação discursiva. A ideia de universidade tem o seu sentido a partir de seu estabelecimento na forma de projeto de formação integral e cidadã. O objetivo deste artigo é analisar as concepções de universidade e suas implicações no contexto de tecnologias digitais com base nos referenciais teóricos de Van Rensselaer Potter e Jürgen Habermas. Essa investigação constitui-se em estudo filosófico e pesquisa bibliográfica por meio da análise minuciosa e comparada dos referenciais teóricos. Potter compreende que o ambiente universitário é o espaço para a prospecção do futuro da humanidade e a garantia de sua sobrevivência. O olhar bioético de Potter enraíza a universidade em seu projeto de servir à sociedade por meio da resolução de problemas globais. Em Habermas,

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a ideia de universidade resplandece o espaço para o agir comunicativo na formação humana. Nesse contexto, a universidade na era digital projeta sua atuação formativa e constitui-se em ambiente aberto e plural de fortalecimento das bases democráticas da sociedade.

Palavras-chave: Bioética. Universidade. Sociedade Digital. Van Rensselaer Potter. Jürgen Habermas.

RESUMEN

La Universidad es parte del proceso de "digitalización social" y se sitúa como un espacio de interacción discursiva. La idea de Universidad tiene su sentido desde su constitución en forma de proyecto de formación integral y ciudadana. El objetivo de este artículo es analizar los conceptos de Universidad y sus implicaciones en el contexto de las tecnologías digitales desde los marcos teóricos de Van Rensselaer Potter y Jürgen Habermas. Esta investigación consiste en un estudio filosófico e investigación bibliográfica a través de un análisis minucioso y comparativo de referentes teóricos. Potter entiende que el ámbito universitario es el espacio de prospección del futuro de la humanidad y la garantía de su supervivencia. La visión bioética de Potter arraiga a la Universidad en su proyecto de servir a la sociedad a través de la resolución de problemas globales. En Habermas, la idea de Universidad hace brillar el espacio de la acción comunicativa en la formación humana. En este contexto, la Universidad en la Era Digital proyecta sus actividades formativas y constituye un ámbito abierto y plural para el fortalecimiento de las bases democráticas de la sociedad.

Palabras clave: Bioética. Universidad. Sociedad Digital. Van Rensselaer Potter. Jürgen Habermas.

INTRODUCTION

The 21st century university is going through a deep transformation in its conception as an institution and its continued interaction with social issues. The digital revolution allowed for knowledge to no longer be centered in institutions. The many forms of knowledge and knowing may be accessed, shared and built among subjects who are not in the university environment. University has inserted itself into the digital mode in order to maintain its ability to analyze and investigate issues with scientific rigor and truth (UNESCO, 1998). The informatization process of society demonstrates the need for a new paradigm in higher education: interactivity among areas and knowledges for the formation of citizenship and development of research (Sônego, 2015).

University education must rethink its forms of teaching-learning within a context of digital culture (Damas, 2001). Digital teaching tools may favor student engagement. Educational technologies are constituted in a way that fosters the process of teaching-learning with quality in higher education because educational applications enable the development of wide abilities and competences. They emphasize the competence of students in developing the formative process with autonomy. Thus, teaching must be centered in students' ability to develop skills in line with the digital tools which better adapt to their learning characteristics (Perrenoud, 2002; Zabala and Arnau, 2010).

The university in the 21st century will be online and have no geographic borders. It will retain the function of guiding societies responsibly into the future. The quality of higher education will have the ability to bring students closer to each other and introduce them to social issues through digital teaching tools and by sharing the digital culture. The teaching practice in higher education is being restructured for the appreciation of interactive and dialogical relations between teachers and students in the process of knowledge construction and application to everyday life. This process of reconstruction of abilities as

a teacher leads to rethinking the teaching identity and the search for new teaching strategies to enable authentic learning contexts. This new teaching practice contributes to the application of the ideal of the university as an institution which acts in the fields of learning, research and extension. Students realize the interconnection betwen theory and practice and act as critical citizens.

This investigation conducts a phylosophical study and bibliographic research on the conceptions of university under the bioethical perspective of Van Rensselaer Potter and the communicative action of Jürgen Habermas. This theoretical reference contributes to a better understanding of the university as a space of communicative interaction and concern with the problems that ail society. In this comparative study, the works of Van Rensselaer Potter and Jürgen Habermas guide the reflection on the function and purpose of the iniversity in the 21st century and the way technological innovations in education may foster a dialogical and critical society. Likewise, the theoretical reference allows thinking of the meaning of the university within the context of social digitalization and its ability to influence the teaching-learning process.

The bioethical reference of Van Rensselaer Potter questions the university's stance regarding the future of society and humanity. Bioethics instigates reflection on the new forms of teaching action which prioritize the resolution of problems according to ethical principles, the "knowing to be" and "knowing to live". Bioethics, as a form of subject and interdisciplinary knowledge, proposes to develop the reflexive and critical skills of students by associating ethical values and scientific knowledge in a holistic formation (Potter, 2018a). The development of bioethical reflection in the university context follows a didactic sequence that is meaningful, dialogical and collaborative. Bioethics invites the students to reflect upon their co-responsibilities in the decision-making process in a case study. Teacher action carries out a "brainstorming" at first, in order to diagnose students' previous knowledge and stimulate research of the study topics and central concepts of the discipline. Later, the problem situation is presented and the teacher acts as an intermediary in the development of competences and case resolution.

The teaching work is reshaping itself to promote students' protagonism. The university is constituted as an interactive space for the fulfillment of its social function of teaching, research and extension. Bioethics provides the investigation of problem situations and the implementation of pedagogic mediation through the collaborative capacity between teacher and student.

Reconstruction of the meaning of the Uuniversity based on Jürgen Habermas'theory of communicative action will complement discussions on the university environment as the space for public debate and communication aimed at a humanistic formation in the digital society and the resolution of problem situations.

In that sense, reflections will be presented from the bioethical conception of university in Potter, its function and purpose, aiming to emphasize the plurality of knowledge and social practices in the digital society. Afterwards, the theoretical-critical reflections of Habermas will help us think of the university as a public sphere and citizen formation and consider its retrieval of the value of communicative interaction in the teaching-learning process.

BIOETHICAL REFLECTIONS AND THE ROLE OF THE UNIVERSITY IN VAN RENSSELAER POTTER

> In 1970, Van Rensselaer Potter, inspired by Aldo Leopold's concept on the land ethic, coined the term "bioethics". In his first book, *Bioethics: bridge to the future*, Potter described this new field of study and action located at the border between biology an humanities. He named his second book *Global Bioethics: Building on the Leopold Legacy* (Whitehouse, 2018, p. 192).

Van Rensselaer Potter is considered to be the pioneering founder of studies in bioethics in the 1970s, in the United States of America. He gave meaning to the neologism "bio-ethics" by conceiving it as being "the science of survival" and directing reflections toward care of the land (ecological issues) and care of human beings (social, sanitary, economic, educational issues, etc). Bioethics is the analysis on the complexity of human and environmental relations in favor of the survival of the human species and the different life forms, animal and vegetal (Schramm, 2011; Pessini, 2013). Potter (2016) proposed this new conception on human relations and the environment as being the interdisciplinary field of reflection on scientific knowledge and the guidance of human values (ethics). He worked to build a dialogue between academic-scientific formation and concern about the future of the human species.

> If there are "two cultures" which seem unable to dialogue — science and humanities — and if that is part of the reason the future seems doubtful, then possibly we can build a "bridge to the future", by building the subject of bioethics as a bridge between the two cultures (Potter, 2016, p. 23).

Bioethics fulfills the part of being the "bridge to the future" and lays down the dialogue between many fields of scientific knowledge and others in agreement with ethical orientation. At this first moment of reflection, bioethics is named as the "science of survival" and has the goal of improving quality of life for all people and care for the environment (Potter, 2016, p. 27). In other words, Potter centered bioethical thinking on the possibility of directing scientific knowledge for the wellbeing of humanity. He wished for the results of scientific research to become wisdom. Wisdom expresses the interaction among academic formation, life experience and knowledge in consonance with ethical values.

The look to the future of humanity and the environment was a constant concern in Potter's writings. The proposal to elaborate the "Council of the Future" and as a public space for interdisciplinary debate between sciences and humanities demonstrates the centrality of the issue of human survival in harmony with the environment (Potter, 2011). Worthy of note is the influence of John Dewey in Potter and, later, in Habermas, in the conception of scientific development as being open to the community, the interaction among the many players of research and members of civil society and non-governmental organizations[1].

> I believe you would agree with John Dewey that progress consists in a movement towards a society of free individuals, in which all, with their own work, would contribute for the freeing and enrichment of society as a hole. I believe the revitalization of our value system is as necessary as possible (Potter, 2016, p. 100).

In his analysis of Potterian bioethics, Ten Have (2018) highlights the conception of science and scientific research in Potter as the understanding that no field of expertise will appropriately respond

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1 In his book *Democracy and Education*, John Dewey (1979) highlights the importance of education for the strengthening of democratic society and the participation of citizens in building institutional foundations for the maintenance and correction of social arrangements in favor of equity and the common good. "The two elements of our criterion are guided towards democracy. The first means not only more numerous and varied points of participation of the common interest, but also bigger trust in the recognition of being, the reciprocal interests, factors of regulation and social direction. And the second not only means a freer cooperation among social groups (before isolated as much as could voluntarily be) as well as the change of social habits — its continued readaptation to adjust to new situations created by the many exchanges. And those two traits are precisely what characterize the democratically constituted society. As for the educational aspect, we first notice that the accomplishment of a form of social life in which the interests interpenetrate each other and in which progress, or readaptation, is of important consideration, makes democratic communion more interested than other communions in deliberate and systematic education" (Dewey, 1979, p. 93).

to the contemporary and complex problems and that social players have to work interdisciplinarily to assertively tackle global issues. Likewise, academic research must reestablish the connection and dialogue between scientific fields and the humanities.

> Because there is always the possibility of error, scientists ought not assume that their own area of expertise will provide the entire answer to a complex problem. In order to make recommendations for public policy, scientists should develop a realistic understanding of the relevant data, steering a course between optimistic and pessimistic evaluations so that the most feasible policy will result. They should also maintain a sense of the limitations of the data and processes at hand, looking both to interdisciplinary collaboration and empirical testing of ideas as a corrective measure (Ten Have, 2018, p. 77).

Ten Have (2018, p. 79) remembers the influence of anthropologist Margaret Mead in the bioethical concept of Potter, as she defends that universities be the "chairs of the future" and promote the dialogue between science and humanities[2]. As seen, that same idea made Potter propose that universities were the "councils of the Future". According to Ten Have:

> The council should be interdisciplinary and include experts from the natural and social sciences and the humanities, and be balanced by a democratic forum, open to "outsiders" and public debate on social problems. These mechanisms, he states, could help bridge the gaps between knowing and doing, between values and facts (Ten Have, 2018, p. 79).

In Potter's perspective, the university would be the space of excellence for the moral and political formation of citizens, just as it should be an open space for the democratic and dialogical interaction regarding social complexity. Bioethical discussions may reinvigorate popular participation in a democratic society because bioethics longs for the decision-making process to happen through reinvigorated consensus. By reflecting upon the USA's educational context, Potter emphasized the relevance of the bioethical perspective to overcome social divisions and integrate social groups for social cooperation and mutual understanding.

> The question presented by discussion and practice of bioethics in a democratic society may provide a basis for a new consensus which is today sadly absent in the United States. Those questions need to be presented and discussed in all levels of our education and of our educational system (Potter, 2018b, p. 47).

In this context of thinking about bioethics as the "bridge to the future" Potter demonstrated his concern for the future and human survival. Therefore, bioethics presents itself as the interrelation

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2 Muzur and Rincic (2019, p. 40) mention the influence of Margaret Mead on Potter's bioethical perspective by commenting on the spiritual transformation which the bioethicist underwent and the anthropologist's proposal to recover the importance of utopia in modern society. In her article "Towards More Vivid Utopias", M. Mead (1957) rebuilds the concept of utopia/s as being the paradigm/s of a time period experienced by a community and its universal potentiality to lead to responsibility before technical-scientific development, just as she proposes the establishment of the "Chairs of the Future" as being the reunion between sciences, arts and humanities. "Finally, it seems to me, in this age when the very survival of all living creatures depends upon our having a vision of the future for others which will command our deepest commitment, we need in our universities, which must change and grow with the world, not only chairs of history and comparative linguistics, of literature and art — which deal with the past and sometimes with the present — but we need also Chairs of the Future, chairs for those who will devote themselves, with all the necessary scholarship and attention, to developing science to the full extent of its possibilities for the future, and who will devote themselves as faithfully to the fine detail of what man might very well — in the light of all our knowledge — be as any classicist of medievalist devotes himself to the texts of Pindar and Horace or to the thought of St. Thomas Aquinas" (Mead, 1957, p. 961).

between scientific knowledge in agreement with the moral responsibility of researchers. The university must be constituted as a public space for the ensurance of the human species. Potter highlights the virtue of humility before technoscientific ability and the human ability of interfering in nature. In other words, it is necessary to act responsibly given the interventive and technological capacity humankind possesses. He emphasizes the need for ethical criteria to guide scientific research and the exercise of critical, reflexive and transdisciplinary skills in thinking of possible solutions to global human problems.

> Just as no individual knows the most appropriate criteria to judge the actions guided towards the future, one must be willing to overcome the limits of subjects, to exercise criticism, to develop approaches and pluralistic solutions, based on interdisciplinary groups. In practice, within this context is my proposal of bioethics as a "bridge to the future" (Potter apud Spinsanti, 2018, p. 53).

When Potter held the office of president of the Interdisciplinary Studies Committee on the Future of Man at the University of Wisconsin (Madison, USA), he and other members published the article "Purpose and Function of the University" on *Science Magazine*. This article preceded the work which opens the reflections of Potter on bioethics, *Bioethics: bridge to the future* (2016), and expresses the questions which reappeared in following works addressing the concern about the future of humankind[3], such as *Global Bioethics* (2018a). According to Potter (2018a, p. 66-67), he held the aforementioned position for three years, during which he had the goal of analyzing the responsibility of the university community in presenting possible actions for human survival and assurance of quality of life.

This paper about the university aimed at answering the four questions raised by the Board of Regents of the University of Wisconsin, with regard to the purpose and the goals of higher education. The questions referred to the purpose of higher teaching (i), the goals of the university as an entity (ii), the goals of each sector of the university (iii) and the commitment of students and student organizations in the management of the university (iv). Potter's article attempted to dialogue with the *Report of 1967* on higher education in a time when it was vital to rethink the educational structures of the United States of America. Potter evaluated the repercussion of university education on the social and political life of US citizens. The text is seminal in defending the concern with "present" issues, "future" issues and human survival. The educational context of the paper was the ebullient cultural reconstruction and the indispensability of an ethnic social integration. The American Supreme Court decisions after the "Brown of Board of Education of Topeka" case (1955)[4] stressed the urgency of social integration, the strenghtening of democracy and the implementation of civil rights in US society[5].

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3   In his memorial to professor Van Rensselaer Potter II, the collegiate of the University of Wisconsin-Madison remembered the importance of that article and its pioneering role in giving normative density to the term "bioethics" and its expression as the "bridge to the future". "The article 'Purpose and Function of the University', a co-authored product with the Interdisciplinary Studies Committee on the Future of Man at the University of Wisconsin, of which Van was the president, illustrated his commitment with the future of mankind and the environment and the enormous responsibilities which we, as academics, have in the transmission of knowledge and bioethical values" (Pitot *et al.*, 2002).

4   That important decision of the American Supreme Court aimed at restablishing ethnic-racial integration in US schools and breaking with the "Separate but equal" doctrine (1866) (Rodrigues, 1991).

5   Something similar to the idea or reeducation of US citizens and the defense of inclusive measures by the US educational system was updated later by Richard Rorty: "It seems to me that the regulating idea that we — soft liberals; we, heirs to the enlightenment; we, socratic — more often use to criticize the behavior of many conversation partners is that 'it takes education in order to leave behind fears, hatred and primitive superstitions'. This is the concept the victorious allied armies used, when going about reeducating the citizens of occupied Germany and Japan. It is also that which was used by North-American professors, who had read Dewey and were interested in putting their students to think, 'scientifically' and 'rationally', about subjects like the origin of species and sexual behavior (that is, make them read Darwin and Freud, without disgust of incredulity). It is a concept which I and most North-Americans who teach humanities or social sciences in colleges and universities invoke when we have to arrange things so that students who come in prejudiced, homophobic and fundamentalist with regard to religion leave college with stances more similar to our own" (Rorty, 2005, p. 119).

The Interdisciplinary Studies Committee on the Future of Man, founded in 1962 and presided in the 1970s by Potter, had the role of analyzing the purpose and goals of the university in accordance with the future of humanity. According to Potter, the university had the responsibility to point the ways for human survival, the role of offering appropriate information when projecting possibilities for problem solving and the decision-making power in situations of political, economic and environmental crisis. In the absence of planning by governments regarding the emerging issues of society, such as social inequality and technoscientific advancements, the role of the university could not be reduced to the resolution of current problems and the matter of public usefulness. Higher learning institutions should concern themselves with the future generations.

ON THE PURPOSE OF THE UNIVERSITY IN THE DIGITAL AGE

The action of the university, according to Potter, is characterized by the search for the truth. The promotion of research must clarify human questions in our multiple activities and discern between the immediate and future problems of humankind. The purpose of the university is to provide an environment of discovery, the performance of a critical examination and an education in knowledge and values. University activities must be marked by interdisciplinary research and provide the means to reach quality of life. "Our belief is that the matters of survival and improvement may be better served with an open and pluralistic approach, in which the judgment of priorities is under constant vigilance and reexamination" (Potter *et al.*, 1970, p. 1591).

The search for truth in the university must provide guidance for the future and for responsable action. The university provides the knowledge, abilities and social values. The government and other social entities, such as industries and private companies, would have the goal of helping solve the problems emerging from their cooperation and promote the university's activities. In Potter's words:

> We believe that a university guided towards the future would find the ways for students and teachers to engage in interdisciplinary efforts which would contribute not only for the future, but also for the present (Potter *et al.*, 1970, p. 1591).

This proposal to think of the university as a space of social interaction and analysis of social problems of the present and the future leads us to reflect on the university environment as the social space defined by freedom of investigation and the possibility of investigating through many paths. Thus, Potter enphasizes the need for integration and plurality in the forms of research.

> We argue that the members of the university faculty have the duty to identify the direction of their search for truth in explicit and meaningful terms for today's youth, for the older generation, and for each other. It is possible to be explicit about this direction concerning the future, while at the same time keeping an open mind regarding the ways or the possibility of different individual stances (Potter *et al.*, 1970, p. 1592).

He draws attention to the relevance of interdisciplinarity in the teaching work and proposes the organization of interdisciplinary study and research programs. Potter's recommendations for the development of scientific and teaching research stress the aspect of a humble attitude before the future. This is strongly emphasized by Potter's scientific and bioethical production.

> We believe the university has the duty of examining and preserving the value judgements which may elevate the condition of the society on which it depends. It may serve that purpose through a search for the truth guided towards the future and which

recognizes explicitly the need to transmit not only knowledge, but also meaningful value judgements to the following generations (Potter *et al.*, 1970, p. 1592).

The idea of university in Potter makes us reflect upon the indispensability of recognizing that the adoption of the pluralistic perspective may provide intellectual and academic freedom — the university as a public space of interaction and dialogue among individuals for the construction and strenghtening of a democratic society and the protection of equal opportunities. The purpose of the university must be guided by future problems, survival and human improvement. This perspective may engender the development of the community sense, as J. Dewey argued, and strengthen the utopias and meaning of the process of teaching and learning, as M. Mead reminded us.

The university of the digital age has been experiencing the transformations in its own self-understanding as a space of human formation and repurposing its work for the exercise of planetary citizenship. The university environment is not reduced to the formation of skilled labor, it proposes to form citizens who are concerned about the future of humankind and planet Earth (Morin, 2000; Nelson and Wei, 2012; UNESCO, 2015). Potter's reflections reinforce the defense of interdisciplinarity and a plurality of perspectives and approaches in the university environment. Likewise, the strenghtening of democratic citizenship and interaction among the types of knowledge developed in the university and in other spaces of social interaction and sharing of experiences must sustain the perspective of a global university.

The relevance of the teaching-learning process in the 21st century will be marked by the ability of teachers to interact with students as co-builders of knowledge, co-responsible and active in society. The teaching-learning process must be relevant and meaningful to students. Teachers and students must view themselves as being in a continuous process of learning and getting educated. The mark of education in the 21st century will be an emphasis on "lifelong learning" as a result of the development and training of autonomy and choice-making by the subjects of knowledge. As Rita Barros *et al*. (2014) state: "Unesco stresses the humanist point of the educational impact, with lifelong learning being an essential condition for the well-being of people and education, a collective responsibility" (Barros *et al.*, 2014, p. 549). This perspective, defended by the United Nations Educational, Scientific and Cultural Organization (Unesco), must be the reference for the teaching formation of the 21st century. The university curriculum has to consider the humanist formation as relevant to the learning process; it must point the ways for lifelong learning and be relevant to the life experiences of students.

This perspective for the university of the digital age as the "Chair of the Future" — proposed by Potter — may be better understood based on the social theory of Jürgen Habermas when highlighting the need for a dialogue between knowledge and social issues, as well as guidance towards social emancipation. In Habermas, the university has the goal of educating for citizen autonomy and enlightenment in its interaction between scientific knowledge and social relations in non-institutional environments. Similarly to Potter's paper (Potter *et al.*, 1970), the context of the German university was one of rebuilding its identity and action in society. The US and German contexts, along with their respective social theorists, were readjusting to tend to the social needs of inclusion and the wider democratization of political institutions.

THE IDEA OF UNIVERSITY, SCIENCE AND SOCIETY IN JÜRGEN HABERMAS

Thus, the functions which the university performs in favor of society must remain united, in a way, from inside, with the goals, reasons and actions of its members, who cooperate in the scope of a work division (through the entanglement of intentions). In that sense, the university must incorporate institutionally — and

anchor in the reasons — an exemplary way of life, shared intersubjectively by is members (Habermas, 2005, p. 72).

Jürgen Habermas has been prominent for his proposition of reconstruction of the social spheres based on the theory of communicative action and his action in social praxis since his time as a college student and, later, as a university professor. He is inspired by the ideal of social emancipation and the critique of the systemic forms of instrumental/strategic rationality (Oliveira, 2002; Pinzani, 2009; Brunkhorst *et al.*, 2017). The theory of communicative action aims to recover the emancipatory potential of the ability to dialogue, the search for mutual understanding, the exercise of argumentation and intersubjective thinking in the public sphere (Habermas 2012). The university is a model of public sphere due to its plurality of perspectives and theoretical-practical orientations. The process of academic university formation takes place through the interlocution among its members in their search for the understanding of social and natural phenomena.

In *The Idea of the University — Learning Processes*, Jürgen Habermas (2005) develops the reflection based on the context of educational and cultural reconstruction of Germany in the post-war period (1945) and the recovery of its classical sense as proposed by Schelling, Humboldt and Schleiermacher. According to him, there was the need for renewal of the "idea of university" or else higher learning institutions would limit themselves to the funcion of providing labor force with technical-scientific skills. This renewal of the meaning of university revived the importance of the humanistic formation of its members. The authors Humboldt (1997) and Schleiermacher (1996) made us think about the defense of the autonomy of university teaching and modern science in relation to religion and state intereference (Leopoldo and Silva, 2001; Coves, 2008). This seems to be the essential aspect for the development of activities in the university: academic freedom and autonomy. The development of scientific research in the German university environment showed its capability for functional autonomy. The university and its members have the ability of changing and inserting themselves in cultural development and in the forms of social interaction. In the perspective of such authors, knowledge development of in the university would bring about a deepening of *bildung* ("cultural formation"). *Bildung* comprehends cultural, academic and personal formation. In other words, it refers to an integral human formation, which the Greeks named by the concept of *paideia* (Jaerger, 2003; Alves, 2019).

The "idea of university" denotes the soul of the institution and its purpose in society. This purpose describes cooperation processes among the members of the scientific community. Therefore, Habermas dedicated himself to understanding the learning processes organized in the university from its process of historic-social development as an answer to the German democratic restoration post-1945. This period was marked by the widening of access to formal education and culminated with the economic crisis of the 1970s, recession in educational planning and revision of educational policy, including the tensions with the university student movements of 1967–69 (Santos, 1989; Adorno, 1995). The economic crisis caused a reduction in the number of students entering university and difficulties for them to enter the work market. Also, the crisis affected public finances and the income sources of universities. In this context of crisis and questioning of the educational system it was necessary that the German university reinvented itself and recovered the primordial sense of its role in society.

The university must fulfill its social role as a space of interaction and socialization. It must be the environment for cultural sharing and the formation of opinion and political will. Habermas emphasizes that the university space is characterized by the nexus between scientific learning processess and the forms of life of modern societies or between the university and the world of life. The world of

life is characterized as the living space of values and culture mediated by dialogue and the exercise of communicative rationality, for example, in the family and school environment. It is distinguished from systemic rationality (public administration and economy) because the social relations take effect by the process of self-understanding between individuals and the human formation (Mühl, 2016). Therefore, university education must transcend the technical-scientific aspect and aim at human and cultural formation.

> The differentiated scientific system should not be focused only on economics, on technique and administration, but remain rooted in the world of life through the traditional bundling of its functions. And that bundling of functions must be explained from the very structure of science (Habermas, 2005, p. 90).

Habermas describes the university space in its unity with the world of life because it allows the forms of socialization and social integration through the processes of teaching-learning and research. The scope of teaching is the way of presenting results and interaction between teachers and students. The research takes place through the collective construction of knowledge and competencies. Teaching and research enable the cultural development and accomplishment of the ideal of a society open to contemporary subjects and to the process of *aufklärung* ("enlightenment").

The *aufklärung* and its discussion have an important role in phylosophical analysis about the development of social emancipation and the critique of the oppressing forms of technical-scientific knowledge. The critical philosophy of Immanuel Kant, in his infamous booklet on the enlightenment, emphasizes the critical process as being the evaluation and judgement carried out in the public space. The process of enlightenment and the development of rational skills, within the individual or society, present the conditions required to set oneself free from any submission or limitation to the ability to think. According to Kant, the enlightenment process is marked by the freedom that individuals have to criticize the *status quo* of political institutions. This critical behavior is denoted by freedom of public exposure of thought and opinion. This process of public enlightenment would promote social and scientific development as an expression of critical freedom.

> A higher degree of civil liberty seems to be advantageous for the freedom of spirit of the people, yet it sets for them insurmountable limits; a lower degree of that gives to this space the wish to expand as much as possible (Kant, 1985, p. 114).

Michel Foucault, in the text dedicated to enlightenment in Kant, describes that social process as referring to current matters. Philosophy would develop in the problematization of the present and would aim at understanding its process of social rationalization: "[...] philosophy as the problematization of a current issue and as questioning by the philosopher of that issue of which he is part and in relation to which he has to position himself, could characterize philosophy as the discourse of modernity and about modernity" (Foucault, 1984, p. 3). According to Foucault, the *aufklärung* is the cultural self-reflecting process situated between past and present which acts in the social structures of the present.

> The *Aufklärung* is a time, a time which forms its own motto, its precept and which tells what has to be done, as much in relation to the general history of thought, as in relation to its present and the forms of knowledge, of knowing, of ignorance and of illusion in which it can recognize its historical situation (Foucault, 1984, p. 3).

Habermas describes the relationship between science and the enlightenment of society as the process of social emancipation and assurance of the autonomous development of individuals. That relation between science and social enlightenment is at the reflexive philosophical base and guides itself by intellectual clarity and freedom of spirit. In this sense, Habermas understands that the development of teaching-learning processes in the university environment would ensure a unity between teaching and research, and, among the different forms of expression of scientific research, science and general formation and science and enlightenment.

In the German context, university and science are structured by the research and teaching developed within their scopes of action. On the one hand, science is added to the goal of a general formation and grants a relationship of complementarity between the teaching and learning process. On the other hand, science in unity with the process of enlightenment of society may culminate in the peak of moral culture. That is the primordial sense of the German university: scientific education must culminate in the enlightened and moral formation of its members. The members of the university must have a moral commitment to the good of society and the assurance of critical freedom, as asserted by Kantian philosophy. Habermas, under the inspiration of Karl Jaspers, advocates the philosophical reflection inscribed in science as being the process of inclusion of ethical assumptions and care for the scientific development of society. The university must not reduce its activity to the functional aspect of the formation of skilled labor; it must fulfill its essence: an integral human formation and its action in society (Terra, 2014).

> [Jaspers] says, also, that sciences need philosophical guidance, because only this may ensure not only the habit of thinking scientifically by reflecting about pressupositions, but also awareness of the ideas guiding research, as well as the reason for the unconditional search for knowledge. Therefore, the role of protector of the idea of university is up to philosophy — and, with that, the role of pacemaker of reforms (Habermas, 2005, p. 91).

That ideal of the interaction between philosophy and science may be observed in the United States' model of university if we study the sociology of Talcott Parsons (Parsons, Platt and Gerald, 1973; Parsons, 1974) regarding the social roles of the university. Parsons' social analysis views the university environment as fostering research and the promotion of young researchers with the goals of academic preparation for the profession and a general formation, the humanistic one. In this case, there is a bundling between the process of cultural self-understanding and intellectual enlightenment. In the US context, Parsons notes the process of enlargement of the educational system in the 20th century as having the goal of ensuring equality of opportunity and citizenship to all people in face of social and economic transformations. Social modernization led to a broadening of the democratization of institutions and of their collegiate way of making decisions.

> Many organizations stereotyped as bureaucracy under many aspects have become "collegiates". In the case of modern government that is not predominantly bureaucratic, not only because it was "democratized" by the elected office and responsibility before the public, but also because its internal structure, specially its "executive branch", is, in great part, a "collegiate" (Parsons, 1974, p. 129).

Habermas understands the learning processes in the university environment as the communicative forms of development of scientific argumentation. The university could be analyzed metaphorically as being the "public community of communication of researchers". By mentioning Schleiermacher and the matter of knowledge as a language and communication process, the

university environment is shown as provider of social interaction. This philosophical perspective understands human relations as inserted in the communication process and in the social interactions of the cognitive development process.

> The first law of the whole trend towards knowledge is the following: communication; and, in it being impossible to produce anything for oneself without use of language, nature itself expressed that law clearly (Schleiermacher apud Habermas, 2005, p. 99).

In the university environment would be the remnants of the world of life, for example, cooperation in the teaching-learning process and the construction of knowledge developed in it. Communicative rationality is marked by being the reflexive and comprehensive exercise of social relations among individuals. The intersubjective relation among communication actors occurs through the use of language (dialogue) with the goal of understanding each other under social norms. This acting guided towards understanding is by excellence reflexive and concerned with the Other. It is directed at overcoming individual and subjective conceptions. The exercise of communicative rationality may provide the motivation for ethical action and break with the strategic-instrumental rationality of contemporary society (Habermas, 2012). Strategic-instrumental rationality is marked by the search for success and efficiency of decisions. It has been widely spread and amplified by the technological and algorithmic capacity of contemporary society. Thus, recovery of the communicative ability of individuals and strengthening of the university as a public sphere may be the proper tools for the formation of individuals who are morally and politically committed to society.

THE UNIVERSITY AS A SPACE FOR DIALOGUE IN DIGITAL SOCIETY

The exercise of communicative rationality in the university environment enables the interaction among members with the "telos" ("ultimate purpose") of integral and humanistic formation. In a society undergoing a technological and digital transformation, Harari (2018) warns of the need for an education directed at reflexive thinking in face of the advancement of artificial intelligence and algorithmization of society. Education in contemporary society must be grounded in its subjects' capability of interaction and the valorization of the search for meaning in human existence.

> So, what should we be teaching? Many specialists in pedagogy claim schools should start to teach "the four Cs" — critical thinking, communication, collaboration and criativity. In a broader sense, schools should minimize technical skills and emphasize skills for generic purposes of life. Most important of all should be the ability to deal with changes, learn new things and preserve mental balance in situations which are not familiar (Harari, 2018, p. 279).

In the business environment it is common to make a distinction between the "hard skills" (technical competencies) and "soft skills" (relational competencies). The first represent the technical and productive abilities and the latter refer to behavioral and relational abilities. The robotization and automation process, in many social spheres, has led to the replacement of human labor for intelligent machines and robots. The advancement of artificial intelligence, and its ability to simulate human thinking, has questioned the distinction between "hard skills" and "soft skills" and made us think about the proposal for training in "human skills". These would represent the ability to understand and be sensitive to the Other (Iorio, 2021a; 2021b). In other words, communicative competencies, acting with ethics and empathy, and human sensitivity are essential elements for a society that is moving towards automation in production, services and labor activities. The university can play

the role of mediating and providing education in humanistic knowledge for the digital society in a communicative space of interaction and sharing of knowledges and life experiences.

Social media outlets amplified the possibilities of interaction and connection among individuals. However, they have shown to be averse to dialogue that aims at mutual understanding and the essential and emerging questions of contemporary society (UNESCO, 2019). The university may be kept as a space for a dialogue which is not mediatized or under the control of the economic-financial system and the market interests. As a public space, it is the environment of resistance to coercive forms of the strategic-instrumental rationality. The action of the university promotes the enlightenment of people and ensures a more democratic and free society.

The idea of university in Habermas leads to reflection on the relevance of university autonomy and freedom in face of the influence of government interest and the power of algorithms. The communicative action present in the university environment may break with the logic of social systems and propose interactive ways for the social engagement of the members of society.

FINAL CONSIDERATIONS

University in the digital age, as an idea and project for a social institution, is connected and reflects on its identity in contemporary society. Van Rensselaer Potter and Jürgen Habermas advocate for the university space to be open and plural in order to serve as a base and foundation for democratic political institutions. The university must express the democracit spirit and its way of action among its members. In Potter's perspective, it has the mission of constituting a "Chair of the Future" to contribute to the resolution of urgent and emerging global problems, namely issues related to socioeconomic inequalities, the protection of the environment and the assurance of global health. Human survival and its future must be the core issues to be investigated in the university environment. In Habermas, the idea of university preserves the relations that are non-systemic and mediated by communicative abilities of understanding among social actors. The reflexive and formative exercise in the interaction among members of the university may engender an integral human formation and moral commitment with social and political issues.

The reflections of Potter and Habermas, in different contexts and times, complement each other and strengthen the wish to rebuild the idea of university under the point of view of the digital revolution. The latter makes social actors, in their many spheres of action, reflect upon the essence of human action and the meaning of their existence and choices. The cognitive technologies have the capacity of overcoming productive and technical human abilities. They possess higher precision and efficiency in the accomplishment of analytical and predictive thinking.

The theoretical reference of V. R. Potter and J. Habermas regarding the idea of university helps us reflect about this space of discursive interaction and human formation as the locus for the construction of the foundations of democratic society. The university and its agents have the responsibility of enlightening citizens on the value of scientific knowledge and its truth. The university space is dedicated to a human and citizen formation with the goal of highlighting its ability to guide the human species towards its survival and the assurance of better conditions for the most vulnerable people, as argued by Potter. The university is the locus for open and free communicative interaction, the promotion and representation of ideas, thoughts and experiences of a plural society.

It is necessary to go beyond the reflections of Potter and Habermas to rebuild society and its political institutions for the education of people, with the goal of protecting the dignity of the human person in vulnerable situations. The social emancipation project must make the produced, shared and lived knowledges of the university cross over its borders and reach vulnerable people.

The idea of university in the digital society must be connected to the social responsibility of its agents and the practice of activities beyond university spaces. Those interaction activities

are possible within the digital context and/or presentially. The digital turning point favors the meeting of the plurality of knowledge and practices. It invites a continued discursive interaction and social engagement. In face of the technological possibilities, the university reinvents itself by rethinking its structures and finding in an integral human education (*paideia*, *humanitas*, *bildung*, *universitas* etc.) its essence as a public space of interaction among individuals capable of self-understanding with regard to social norms and planning a more democratic, free and fair society for all people.

REFERENCES

ADORNO, Theodor Ludwig Wiesengrund. **Educação e emancipação**. São Paulo: Paz e Terra, 1995.

ALVES, Alexandre. A tradição alemã do cultivo de si (Bildung) e sua significação histórica. **Educação & Realidade**, Porto Alegre, v. 44, n. 2, e83003, 2019. https://doi.org/10.1590/2175-623683003

BARROS, Rita Manuela Almeida; MONTEIRO, Angélica Maria Reis; MOREIRA, José António Marques. Aprender no ensino superior: relações com a predisposição dos estudantes para o envolvimento na aprendizagem ao longo da vida. **Revista Brasileira de Estudos Pedagógicos**, Brasília, v. 95, n. 241, p. 544-566, set-dez. 2014, https://doi.org/10.1590/S2176-6681/305811495

BRUNKHORST, Hauke; KREIDE, Regina; LAFONT, Cristina. **The Habermas handbook**. New York: Columbia University Press, 2017.

COVES, Faustino Oncina. La filosofía clásica alemana y su idea de la universidad: ¿un anacronismo viviente? In: COVES, Faustino Oncina. **Filosofía para la universidad, filosofía contra la universidad (de Kant a Nietzsche)**. Madrid: Editorial Dykinson, 2008. p. 13-47.

DAMAS, Luiz Antonio. Novo paradigma e novos desafios educacionais. **Revista de Educação PUC-Campinas**, Campinas, n. 10, p. 23-39, 2001.

DEWEY, John. **Democracia e educação**. São Paulo: Companhia Editora Nacional, 1979.

FOUCAULT, Michel. "Qu'est-ce que les Lumières?". **Magazine Littéraire**, n. 207, p. 35-39, 1984.

HABERMAS, Jürgen. A ideia de universidade – processos de aprendizagem. In: HABERMAS, Jürgen. **Diagnósticos do Tempo**. Rio de Janeiro: Tempo Brasileiro, 2005, p. 71-104.

HABERMAS, Jürgen. **A teoria do agir comunicativo**. São Paulo: Martins Fontes, 2012.

HARARI, Yuval Noah. **21 Lições para o Século 21**. São Paulo: Companhia das Letras, 2018.

HUMBOLDT, Wilhelm von. **Sobre a organização interna e externa das instituições científicas superiores em Berlim**. Rio de Janeiro: Ed. UERJ, 1997.

IORIO, Andrea. Nem hard, nem soft: precisamos falar sobre as human skills. **MIT Technology Review**. 2021a. Available at: https://mittechreview.com.br/nem-hard-nem-soft-precisamos-falar-sobre-as-human-skills/. Accessed on: 10 feb. 2022.

IORIO, Andrea. Como a empatia nos torna mais inovadores. **MIT Technology Review**. 2021b. Available at: https://mittechreview.com.br/como-a-empatia-nos-torna-mais-inovadores/. Accessed on: 01 feb. 2022.

JAEGER, Werner. **Paideia: a formação do homem grego**. São Paulo: Martins Fontes, 2003.

KANT, Immanuel. Resposta à pergunta: Que é "Esclarecimento" (*Aufklärung*)? In: KANT, Immanuel. **Immanuel Kant: Textos seletos**. Rio de Janeiro: Vozes, 1985. p. 100-116.

LEOPOLDO E SILVA, Franklin. Reflexões sobre o conceito e a função da Universidade pública. **Estudos Avançados**, v. 15, n. 42, p. 295-304, 2001. https://doi.org/10.1590/S0103-40142001000200015

LEOPOLDO E SILVA, Franklin. Universidade: a ideia e a história. **Estudos Avançados**, v. 20, n. 56, p. 191-202, 2006. https://doi.org/10.1590/S0103-40142006000100013

MEAD, Margaret. Towards More Vivid Utopias. **Science**, v. 126, n. 3280, p. 957-961, 1957.

MORIN, Edgar. **Os sete saberes necessários à educação do futuro**. São Paulo: Cortez, 2000.

MÜHL, Eldon Henrique. Mundo da vida e educação: racionalidade e normatividade. **Filosofia e Educação**, Campinas, v. 8, n. 2, p. 97-120, 2016. https://doi.org/10.20396/rfe.v8i2.8646391

MUZUR, Amir; RINCIC, Iva. **Van Rensselaer Potter and his place in the history of bioethics**. Münster: LIT Verlag, 2019.

NELSON Adam R.; WEI, Ian P. **The global university. historical studies in education**. New York: Palgrave Macmillan, 2012.

OLIVEIRA, Nythamar Hilário Fernandes de. Processos de aprendizagem, mundo da vida e sistema: a ideia de Universidade em Habermas. In: ROHDEN, Valerio (org.). **Ideias de Universidade**. Canoas: EDULBRA, 2002, p. 104-115.

PARSONS, Talcott. **O sistema das sociedades modernas**. São Paulo: Pioneira, 1974.

PARSONS, Talcott; PLATT, Gerald M.; SMELSER, Neil Joseph. **The American University**. Cambridge: Harvard University Press, 1973.

PERRENOUD, Philippe. A formação dos professores no século XXI. In: PERRENOUD, Philippe; THURLER, Monica Gather; MACEDO, Lino de; MACHADO Nilson José; ALLESSANDRINI, Cristina Dias. **As competências para ensinar no século XXI: a formação dos professores e o desafio da avaliação.** Porto Alegre: Artmed Editora, 2002. p. 11-27.

PESSINI, Leo. As origens da bioética: do credo bioético de Potter ao imperativo bioético de Fritz Jahr. **Revista Bioética**, v. 21, n. 1, p. 9-19, 2013.

PINZANI, Alessandro. **Habermas**. Porto Alegre: ArtMed, 2009.

PITOT, Henry Clement; DRINKWATER, Norman R.; KASPER, Charles Boyer. **Memorial Resolution of the Faculty of the University of Wisconsin-Madison on the Death of Professor Emeritus Van Rensselaer Potter II**. Madison: Univerity of Wisconsin, 2002. Available at: https://kb.wisconsin.edu/images/group222/shared/2002-04-01FacultySenate/1628(mem_res).pdf. Accessed on: 01 feb. 2022.

POTTER, Van Rensselaer; BAERREIS, D. A.; BRYSON, R. A; CURVIN, J. W; JOHANSEN, G; McLEOD, J; RANKIN, J.; SYMON, K. R. Purpose and Function of the University, **Science**, v. 167, n. 3925, p. 1590-1593, 1970.

POTTER, Van Rensselaer. **Bioética: ponte para o futuro**. São Paulo: Edições Loyola, 2016.

POTTER, Van Rensselaer. Credo bioético. **Revista Bioethikos (Centro Universitário São Camilo)**, v. 5, n .3, p. 345, 2011.

POTTER, Van Rensselaer. **Bioética global: construindo a partir do legado de Leopold**. São Paulo: Edições Loyola, 2018a.

POTTER, Van Rensselaer. Bioética. In: PESSINI, Leo; SGANZERLA, Anor; ZANELLA, Diego Carlos. **Van Rensselaer Potter: um bioeticista original**. São Paulo: Loyola, 2018b. p. 45-48.

RODRIGUES, Leda Boechat. **A corte de Warren (1953-1969): revolução constitucional**. Rio de Janeiro: Civilização Brasileira, 1991.

RORTY, Richard. Verdade, universalidade e política democrática (justificação, contexto, racionalidade e pragmatismo). In: SOUZA, José Crisóstomo (org.). **Filosofia, racionalidade, democracia: os debates Rorty & Habermas**. São Paulo: EDUNESP, 2005. p. 79-126.

SANTOS, Boaventura de Souza. Da ideia de Universidade à Universidade das ideias. **Revista Crítica de Ciências sociais**, n. 27/28, p. 11-62, jun. 1989.

SCHLEIERMACHER, Friedrich Daniel Ernst. **Gelegentliche Gedanken Über Universitäten in Deutschen Sinn in Schriften**. Frankfurt: Deutscher Klassiker Verlag, 1996.

SCHRAMM, Fermin Roland. Uma breve genealogia da bioética em companhia de Van Rensselaer Potter. **Revista Bioethikos (Centro Universitário São Camilo)**, v. 5, n. 3, p. 302-308, 2011.

SÔNEGO, Aline. Os desafios da universidade no século XXI e algumas reflexões sobre a posição docente frente a este processo. **REBES - Revista Brasileira de Ensino Superior**, v. 1, n. 1, p. 30-35, jul-set. 2015.

SPINSANTI, Sandro. Um encontro com Van Rensselaer Potter. In: PESSINI, Leo; SGANZERLA, Anor; ZANELLA, Diego Carlos. **Van Rensselaer Potter: um bioeticista original**. São Paulo: Loyola, 2018, p. 49-60.

TEN HAVE, Henk Antonius Maria Johannes. O conceito de bioética de Potter. In: PESSINI, Leo; SGANZERLA, Anor; ZANELLA, Diego Carlos, (orgs). **Van Rensselaer Potter: um bioeticista original**. São Paulo: Loyola, 2018. p. 75-98.

TERRA, Ricardo. A universidade entre a excelência administrada e o social-desenvolvimentismo. **Novos Estudos CEBRAP**, n. 100, p. 81-95, nov. 2014. https://doi.org/10.1590/S0101-33002014000300005

UNESCO. **Declaração mundial sobre a educação superior:** declaração mundial sobre educação superior no século XXI; visão e ação, marco referencial de ação prioritária para a mudança e o desenvolvimento da educação superior. Brasília: UNESCO; 1998. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000140457. Accessed on: 20 feb. 2022.

UNESCO. **Perspectives on emerging issues**. Lausanne: UNESCO; 2015. Available at: https://en.unesco.org/sites/default/files/usr15_perspectives_on_emerging_issues.pdf. Accessed on: 01 feb. 2022.

UNESCO. **Preliminary study on a possible standard-setting instrument on the ethics of artificial intelligence**. In: 40th GENERAL CONFERENCE; 2019. Paris: UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000369455. Accessed on: 30 jan. 2022.

WHITEHOUSE, Peter J. Em direção a uma bioética mais profunda. In: PESSINI, Leo; SGANZERLA, Anor; ZANELLA, Diego Carlos, (orgs.). **Van Rensselaer Potter: um bioeticista original**. São Paulo: Loyola, 2018. p. 189-200.

ZABALA, Antoni; ARNAU, Laia. O termo competência surge como resposta às limitações do ensino tradicional. In: ZABALA, Antoni; ARNAU, Laia. **Como aprender e ensinar competências**. Porto Alegre: Artmed, 2010. p. 17-26.

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