

MEĐUNARODNI INTERDISCIPLINARNI 3. KONGRES  
CENTRA ZA INTERDISCIPLINARNA ISTRAŽIVANJA  
FILOZOFSKOG FAKULTETA OSIJEK:

# » DRUŠTVO, ZNANOST I UMJETNOST U (POST)DIGITALNOM DOBU«

INTERNATIONAL INTERDISCIPLINARY 3<sup>RD</sup> CONGRESS  
OF THE CENTRE FOR INTERDISCIPLINARY RESEARCH  
OF THE FACULTY OF HUMANITIES  
AND SOCIAL SCIENCES IN OSIJEK:

# “SOCIETY, SCIENCES, AND ARTS IN THE (POST)DIGITAL ERA”

KNJIŽICA SAŽETAKA / BOOK OF ABSTRACTS



**FILOZOFSKI FAKULTET**  
SVEUČILIŠTE JOSIPA JURJA STROSSMAYERA U OSIJEKU





Centar za interdisciplinarna istraživanja  
Filozofskog fakulteta Osijek

Centre for Interdisciplinary Research  
of the Faculty of Humanities and Social Sciences in Osijek

**MEĐUNARODNI INTERDISCIPLINARNI  
3. KONGRES CENTRA ZA  
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FILOZFSKOG FAKULTETA OSIJEK:**

**>>Društvo, znanost i umjetnost u (post)digitalnom dobu<<**

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CENTAR ZA INTERDISCIPLINARNA ISTRAŽIVANJA  
CENTRE FOR INTERDISCIPLINARY RESEARCH



**FILOZFSKI FAKULTET**  
SVEUČILISTE JOSIPA JURJA STROSSMAYERA U OSIJEKU



Osijek, Hrvatska, 8. – 10. studenog 2023. godine  
Osijek, Croatia, 8–10 November 2023

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Filozofski fakultet Sveučilišta Josipa  
Jurja Strossmayera u Osijeku

## **ZA IZDAVAČA**

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# **POKROVITELJI KONGRESA**

Ministarstvo znanosti i obrazovanja Republike Hrvatske

Centar za znanstveni rad u Vinkovcima,  
Hrvatska akademija znanosti i umjetnosti

Filozofski fakultet Osijek

Osječko-baranjska županija

Grad Osijek

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# **PATRONS OF THE CONGRESS**

Ministry of Science and Education of the Republic of Croatia

Center for Scientific Work in Vinkovci,  
Croatian Academy of Sciences and Arts

Faculty of Humanities and Social Sciences in Osijek

Osijek-Baranja County

City of Osijek



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*INTER\_CON 2023:*

*»Društvo, znanost i umjetnost u (post)digitalnom dobu«*

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**ORGANIZACIJSKI I  
PROGRAMSKI ODBOR**

*INTER\_CON 2023:*

*“Society, Sciences, and Arts in the (Post)Digital Era”*

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**ORGANIZATION AND  
PROGRAMME COMMITTEE**

## **Organizacijski odbor**

*Međunarodnog interdisciplinarnog 3. Kongresa Centra za interdisciplinarna istraživanja Filozofskog fakulteta Osijek: »Društvo, znanost i umjetnost u (post)digitalnom dobu«*

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## **Organization Committee**

*of the International Interdisciplinary 3<sup>rd</sup> Congress of the Centre for Interdisciplinary Research of the Faculty of Humanities and Social Sciences in Osijek: "Society, Sciences, and Arts in the (Post)Digital Era"*

Igor Josipović (Hrvatska / Croatia) *predsjednik / President*; Davor Balić (Hrvatska / Croatia) *potpredsjednik / Vice President*; Hrvoje Potlimbrzović (Hrvatska / Croatia) *tajnik / Secretary*; Anica Bilić (Hrvatska / Croatia); Michał Dobrzański (Poljska / Poland); Giovanni Favero (Italija / Italy); Emiliano Gallaga Murrieta (Meksiko / Mexico); Michael H. G. Hoffmann (Sjedinjene Američke Države / United States of America); Demian Papo (Hrvatska / Croatia); Una Popović (Srbija / Serbia); Jan Cornelius Schmidt (Njemačka / Germany); Mujo Slatina (Bosna i Hercegovina / Bosnia and Herzegovina); Yarong Chen (Kina / China); Rick Szostak (Kanada / Canada); Julie Thompson Klein (Sjedinjene Američke Države / United States of America)

## **Programski odbor**

*Međunarodnog interdisciplinarnog 3. Kongresa Centra za interdisciplinarna istraživanja Filozofskog fakulteta Osijek: »Društvo, znanost i umjetnost u (post)digitalnom dobu«*

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## **Programme Committee**

*of the International Interdisciplinary 3<sup>rd</sup> Congress of the Centre for Interdisciplinary Research of the Faculty of Humanities and Social Sciences in Osijek: "Society, Sciences, and Arts in the (Post)Digital Era"*

Hrvoje Potlimbrzović (Hrvatska / Croatia) *predsjednik / President*; Demian Papo (Hrvatska / Croatia) *potpredsjednik / Vice President*; Anica Bilić (Hrvatska / Croatia); Michał Dobrzański (Poljska / Poland); Giovanni Favero (Italija / Italy); Sergej Filipović (Hrvatska / Croatia); Michael H. G. Hoffmann (Sjedinjene Američke Države / United States of America); Juraj Jurlina (Hrvatska / Croatia); Damir Marinić (Hrvatska / Croatia); Una Popović (Srbija / Serbia); Mujo Slatina (Bosna i Hercegovina / Bosnia and Herzegovina); Nemanja Spasenovski (Hrvatska / Croatia); Yarong Chen (Kina / China); Rick Szostak (Kanada / Canada); Julie Thompson Klein (Sjedinjene Američke Države / United States of America)



*INTER\_CON 2023:*

*»Društvo, znanost i umjetnost u (post)digitalnom dobu«*

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## **UVOD**

*INTER\_CON 2023:*

*“Society, Sciences, and Arts in the (Post)Digital Era”*

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## **INTRODUCTION**



## UZ TEMU: DRUŠTVO, ZNANOST I UMJETNOST U (POST)DIGITALNOM DOBU

Filozofski fakultet Osijek i njegova istraživačka mreža Centar za interdisciplinarna istraživanja dosad su organizirali i održali dva kongresa: »Interdisciplinarnost u teoriji i praksi« (2021.) i »Izazovi obrazovanja« (2022.). Prvi je okupio četrdeset i četiri sudionika iz četiriju zemalja, a drugi pedeset osam sudionika iz šest zemalja. Kao i u prethodnim dvama slučajevima, i ovaj smo kongres odlučili posvetiti temi koja zaokuplja pažnju znanstvenikā ne samo iz brojnih zasebnih disciplina nego i onih znanstvenika koji se bave istraživanjima koja imaju inter- i transdisciplinarna, pa čak i antidisciplinarna obilježja. Naime, u središte ovogodišnjeg kongresa postavili smo (post)digitalnost, jednu od temeljnih značajki današnjice, koja kao činjenicu uzima prožetost analogne i digitalne stvarnosti te uklanjanje opreke između tih dvaju oblika stvarnosti. Upravo je zato kongres posvećen posljedicama koje (post)digitalnost ostavlja na društvo u cjelini, kao i na dva značajna područja čovjekova djelovanja: znanost i umjetnost.

Organizacijski odbor *Međunarodnog interdisciplinarnog 3. Kongresa Centra za interdisciplinarna istraživanja Filozofskog fakulteta Osijek: »Društvo, znanost i umjetnost u (post)digitalnom dobu« (INTER\_CON 2023)* čini petnaest znanstvenika iz deset zemalja (Bosna i Hercegovina, Hrvatska, Italija, Kanada, Kina, Meksiko, Njemačka, Poljska, Sjedinjene Američke Države i Srbija). Tom su se odboru ove godine priključili i Michael H. G. Hoffmann (Sjedinjene Američke Države) i Jan Cornelius Schmidt (Njemačka). Ovogodišnji kongres broji šezdeset osam sudionika, među kojima su znanstvenici, stručnjaci, praktičari i studenti iz devet zemalja (Austrija, Bosna i Hercegovina, Hrvatska, Indija, Kina, Slovačka, Slovenija, Rusija, Sjedinjene Američke Države). Dakle, ponovno se možemo pohvaliti rastom broja sudionika i zemalja iz kojih dolaze.

*INTER\_CON 2023* u programu ima četiri plenarna izlaganja koja će održati: filozof interdisciplinarnosti Ravindra Kumar Singh Choudhary (Indija), filozof Michael H. G. Hoffmann (Sjedinjene Američke Države), teoretičar postdigitalnosti Petar Jandrić (Hrvatska) i teoretičarka interdisciplinarnosti Nancy J. Nersessian (Sjedinjene Američke Države). Osim toga, program kongresa obuhvaća i sljedeće aktivnosti: panel raspravu o mogućnostima suradnje organizacija civilnog društva, znanosti i umjetnosti; radionicu za studente o društveno angažiranim predstavama; izložbu plakata i predstavljanje zbornika *Izazovi obrazovanja*. Sudionicima kongresa i ove smo godine omogućili objavljivanje znanstvenih i stručnih radova nastalih na temelju njihova sudjelovanja na kongresu, i to na jednom od dvaju službenih jezika kongresa: hrvatskom i engleskom. Ti će radovi biti objavljeni u zborniku radova do sljedećeg kongresa (*INTER\_CON 2024*).

Ovom prilikom izražavamo svoje zadovoljstvo činjenicom da se organizaciji kongresa u funkciji suorganizatora priključio i Centar za znanstveni rad u Vinkovcima Hrvatske akademije znanosti i umjetnosti. Pokrovitelji su kongresa Osječko-baranjska županija i Grad Osijek.

Broj sudionika, okupljeni plenarni izlagači i raznovrsnost aktivnosti koje se odvijaju u sklopu *INTER\_CON*-a 2023 pružaju potvrdu vrijednosti zalaganja i angažmana koje po pitanju istraživanja interdisciplinarnosti i interdisciplinarnog pristupa u znanosti zauzima Centar za interdisciplinarna istraživanja Filozofskog fakulteta Osijek. Tendencija rasta koju bilježimo značajno je ohrabrenje i podstrek za ustrajanje u daljnjem radu Centra u godinama koje predstoje.

IGOR JOSIPOVIĆ

DEMIAN PAPO

HRVOJE POTLIMBRZOVIĆ

## ON THE TOPIC: SOCIETY, SCIENCES, AND ARTS IN THE (POST)DIGITAL ERA

Faculty of Humanities and Social Sciences in Osijek and its research network Centre for Interdisciplinary Research have thus far organized and held two congresses: “Interdisciplinarity in Theory and Practice” (2021) and “Challenges of Education” (2022). The first gathered forty-four participants from four countries, and the second fifty-eight participants from six countries. As in the previous two cases, we decided to dedicate this congress to a topic that attracts the attention of scholars not only from numerous separate disciplines, but also those who are engaged in research that has inter- and transdisciplinary, and even antidisciplinary characteristics. Namely, we placed (post)digitality at the center of this year’s congress, which is one of the fundamental features of today and takes the permeation of analog and digital reality, as well as the removal of the opposition between these two forms of reality, as a fact.

The organization committee of the *International Interdisciplinary 3<sup>rd</sup> Congress of the Centre for Interdisciplinary Research of the Faculty of Humanities and Social Sciences in Osijek: “Society, Sciences and Arts in the (Post)Digital Era” (INTER\_CON 2023)* consists of fifteen scientists from ten countries (Bosnia and Herzegovina, Croatia, Italy, Canada, China, Mexico, Germany, Poland, United States of America and Serbia). Michael H. G. Hoffmann (United States of America) and Jan Cornelius Schmidt (Germany) joined this committee this year. This year’s congress has sixty-eight participants, including scientists, experts, practitioners and students from nine countries (Austria, Bosnia and Herzegovina, Croatia, India, China, Slovakia, Slovenia, Russia, United States of America). So, we can once again be proud of an increase in the number of participants and the countries they come from.

INTER\_CON 2023 has four keynote lectures presentations in the programme, which will be given by: philosopher of interdisciplinarity Ravindra K. S. Choudhary (India), philosopher Michael H. G. Hoffmann (United States of America), postdigital theoretician Petar Jandrić (Croatia) and theoretician of interdisciplinarity Nancy J. Nersessian (United States of America). In addition, the congress programme includes the following activities: a panel discussion on the possibilities of cooperation between civil society organizations, sciences and arts; a student workshop on socially engaged plays; poster exhibition and presentation of the book of proceedings *Challenges of Education*. Once again, we made it possible for participants of the congress to publish scientific and professional papers coming out of their participation in the congress, in one of the two official languages of the congress: Croatian and English. These papers will be published in the book of proceedings before our next congress (INTER\_CON 2024).

On this occasion, we express our satisfaction with the fact that the Center for Scientific Work in Vinkovci of the Croatian Academy of Sciences and Arts joined the organization of the congress as a co-organizer. The patrons of the congress are Osijek-Baranja County and the City of Osijek.

The number of participants, the gathered keynote lecturers and the variety of activities that take place as part of *INTER\_CON 2023* confirm the value of commitment and engagement that the Centre for Interdisciplinary Research of the Faculty of Humanities and Social Sciences in Osijek takes in research of interdisciplinarity and in interdisciplinary approach in science. Such a growth tendency is a significant encouragement and incentive for persistence in the further work of our Centre in the years ahead.

IGOR JOSIPOVIĆ

DEMIAN PAPO

HRVOJE POTLIMBRZOVIĆ



*INTER\_CON 2023:  
»Društvo, znanost i umjetnost u (post)digitalnom dobu«*

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## **PROGRAM**

*INTER\_CON 2023:  
“Society, Sciences, and Arts in the (Post)Digital Era”*

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## **PROGRAMME**



# PROGRAM / PROGRAMME

**SRIJEDA, 8. studenog 2023. / WEDNESDAY, 8 November 2023**

**Dvorana 39 Filozofskog fakulteta, Lorenza Jägera 9, Osijek /**  
Hall 39, Faculty of Humanities and Social Sciences, Lorenz Jäger Street 9, Osijek  
**Online platforma Zoom / Online platform Zoom**

**9.00 – 9.30**

**Otvaranje kongresa i pozdravne riječi / Opening ceremony and welcoming speeches**

- dr. sc. ANICA BILIĆ, upraviteljica Centra za znanstveni rad u Vinkovcima Hrvatske Akademije znanosti i umjetnosti
- IVAN ANUŠIĆ, župan Osječko-baranjske županije
- IVAN RADIĆ, gradonačelnik Grada Osijeka
- doc. dr. sc. IGOR JOSIPOVIĆ, predsjednik Povjerenstva Centra za interdisciplinarna istraživanja Filozofskog fakulteta Osijek te predsjednik Organizacijskog odbora kongresa
- prof. dr. sc. IVAN TROJAN, dekan Filozofskog fakulteta Sveučilišta Josipa Jurja Strossmayera u Osijeku

**9.30 – 9.45 IGOR JOSIPOVIĆ (Hrvatska / Croatia): Istraživanje istine u digitalnoj eri: post-istina, dezinformacije i relevantnost koncepta *neorganiziranog znanja* Friedricha Hayeka / Exploring Truth in the Digital Era: Post-Truth, Disinformation, and the Relevance of Friedrich Hayek's Concept of *Unorganized Knowledge***

**9.45 – 10.00 DEMIAN PAPO (Croatia / Hrvatska), DORA IVANIŠEVIĆ (Austria / Austrija): Postdigitality of Research on Croatian Philosophical Heritage: John of Ragusa (ca. 1390 – 1443) / Postdigitalnost istraživanja hrvatske filozofske baštine: Ivan Stojković (oko 1390. – 1443.)**

**10.00 – 10.15 MARIN SELEŠ, TANJA HERCOG, ANDREA SUDAREVIĆ (Hrvatska / Croatia): Uporaba tiskanih izvora u pisanju radova u (post)digitalnom dobu / The Use of Printed Sources in Writing Papers in the (Post)Digital Era**

**10.15 – 10.30** DINKA LIŠČIĆ CIPRIĆ (Hrvatska / Croatia): **Digitalizacijom enkulturacije k očuvanju tradicijskih sadržaja / Digitalization of Enculturation as a Means of Heritage Preservation**

**10.30 – 10.45** *Rasprava / Discussion*

**10.45 – 11.00** *Pauza / Break*

**11.00 – 11.15** JOSIP BERDICA, NIKOL ŽIHA (Hrvatska / Croatia): **Moralna hrabrost u digitalnom društvu / Moral Courage in Digital Society**

**11.15 – 11.30** TONI PRANIĆ (Hrvatska / Croatia): **Digitalni sustavi i otuđenje: pogled iz klasične sociologije / Digital Systems and Alienation: A View from Classical Sociology**

**11.30 – 11.45** AJNA JODANOVIĆ (Bosna i Hercegovina / Bosnia and Herzegovina): **Politika cyber sigurnosti Europske unije u digitalnom dobu / European Union Cybersecurity Policy in the Digital Era**

**11.45 – 12.00** NEMANJA SPASENOVSKI (Hrvatska / Croatia): **Interdisciplinarni pristup istraživanju konzumerizma / Interdisciplinary Approach in Consumerism Research**

**12.00 – 12.15** *Rasprava / Discussion*

**12.15 – 13.30** *Pauza za ručak / Lunch break*

**13.30 – 13.45** MONIKA GUDLIN, IVA ŠLOGAR (Hrvatska / Croatia): **Korištenje alatā digitalne tehnologije kod učenja stranoga jezika u osnovnim školama i ustanovama ranoga i predškolskog odgoja i obrazovanja / Use of Digital Technology Tools in Learning a Foreign Language in Elementary Schools and Institutions of Early and Preschool Education**

**13.45 – 14.00** MIRELA MÜLLER (Hrvatska / Croatia): **Audiovizualni input i refleksija za promicanje vještina razgovora na njemačkom kao stranog jezika / Audiovisual Input and Reflection for Conversational Skills Promotion in German as a Foreign Language**

**14.00 – 14.15** IVANA ŠUSTEK (Hrvatska / Croatia): **Primjena digitalne tehnologije u nastavi / Application of Digital Technology in Teaching**

**14.15 – 14.30** MIA FILIPOV (Hrvatska / Croatia): **Razvoj profesionalne vizije kao sastavnice prilagodljive učiteljske stručnosti u stručnom usavršavanju uz primjenu videozapisa nastave / Developing Professional Vision as a Component of Adaptive Teacher Expertise in Video-Based Professional Development**

**14.30 – 14.45** *Rasprava / Discussion*

**14.45 – 15.00** *Pauza / Break*

**15.00 – 15.15** SARINA BAKIĆ, SELMA ALISPAHIĆ (Bosna i Hercegovina / *Bosnia and Herzegovina*): **Autentičnost umjetnosti u digitalnom dobu: pitanje istine, subjektiviteta i umjetne inteligencije** / *Authenticity of Art in the Digital Era: The Question of Truth, Subjectivity, and Artificial Intelligence*

**15.15 – 15.30** MARITA BRČIĆ KULJIŠ (Hrvatska / *Croatia*): **Umjetna inteligencija i sloboda govora** / *Artificial Intelligence and Freedom of Speech*

**15.30 – 15.45** DAMIR MARINIĆ (Hrvatska / *Croatia*): **Umreženo društvo kao metasistemski prijelaz u evoluciji društva** / *Networked Society As a Metasystem Transition in Evolution of Society*

**15.45 – 16.00** *Rasprava / Discussion*

**16.00 – 16.15** *Pauza / Break*

**16.15 – 16.45** *Plenarno predavanje / Keynote lecture*

NANCY J. NERSESIAN (United States of America / *Sjedinjene Američke Države*): **Interdisciplinary Integration in Action** / *Interdisciplinarna integracija u akciji*

**16.45 – 17.15** *Rasprava / Discussion*

**17.15 – 17.30** *Pauza / Break*

**17.30 – 18.30** *Izložba plakata / Poster exhibition*

**18.30** *Završetak prvog dana Kongresa / End of the first day of Congress*

ČETVRTAK, 9. studenog 2023. / THURSDAY, 9 November 2023

Dvorana 39 Filozofskog fakulteta, Lorenza Jägera 9, Osijek /

Hall 39, Faculty of Humanities and Social Sciences, Lorenz Jäger Street 9, Osijek

*Online platforma Zoom / Online platform Zoom*

**10.00 – 10.15 ANITA KOSTANJČAR (Hrvatska / Croatia): Izazovi obrazovanja odraslih u digitalnom dobu / Challenges of Adult Education in the Digital Era**

**10.15 – 10.30 LUCIJA TOMAC, JADRANKA HERCEG, ANITA ZOVKO (Hrvatska / Croatia): Andragog – osnova kvalitetnog sustava obrazovanja odraslih / Andragogist – The Basis of a Quality System of Adult Education**

**10.30 – 10.45 TONČA JUKIĆ (Hrvatska / Croatia): Važnost i mogućnosti odgoja u (post)digitalnom dobu / The Importance and Possibilities of Upbringing in the (Post)Digital Era**

**10.45 – 11.00 Rasprava / Discussion**

**11.00 – 11.15 Pauza / break**

**11.15 – 11.30 JASMINKA ZLOKOVIĆ, ANITA ZOVKO, IVA JUREŠA (Hrvatska / Croatia): Spolni odgoj u odgojno-obrazovnim ustanovama – stari i novi izazovi 21. stoljeća / Sex Education in Educational Institutions – Old and New Challenges in the 21<sup>st</sup> Century**

**11.30 – 11.45 JURAJ JURLINA, ŽELJKO PAVIĆ (Hrvatska / Croatia): Mediji i erozija socijalnog kapitala: opada li povjerenje s učestalošću upotrebe televizije i interneta? / Media and the Erosion of Social Capital: Does Trust Decrease With the Frequency of Television and Internet Usage?**

**11.45 – 12.00 VLATKA FAPALI, FRANJO NEMET (Hrvatska / Croatia): Ekologija u digitalnom dobu / Ecology in the Digital Era**

**12.00 – 12.15 Rasprava / Discussion**

**12.15 – 12.30 Pauza / break**

**12.30 – 12.45 ZRINKA ŠIMUNOVIĆ, VIŠNJA VEKIĆ-KLJAIĆ (Hrvatska / Croatia): Obrazovanje 4.0: nadogradnja i ulaganje u obrazovni sustav / Education 4.0: Upgrading and Investing in Educational System**



**12.45 – 13.00** ANITA DREMEL (Hrvatska / Croatia): **Izazovi korištenja online izvora kao istraživačkih podataka: feministički pogled na neke neodređenosti** / Challenges in Using Online Sources as Research Data: A Feminist View of Some Ambiguities

**13.00 – 13.15** MUEDIB ŠAHINOVIĆ (Bosna i Hercegovina / Bosnia and Herzegovina): **Etički izazovi znanosti u (post)digitalnom društvu: konsekvantna detronizacija fundamentalnih paradigmi** / Ethical Challenges of Science in (Post)-Digital Society: Consequent Detronization of Fundamental Paradigms

**13.15 – 13.30** *Rasprava / Discussion*

**13.30 – 15.00** *Pauza za ručak / Lunch break*

**15.00 – 15.30** *Plenarno predavanje / Keynote lecture*

MICHAEL H. G. HOFFMANN (United States of America / Sjedinjene Američke Države): **Wicked Problems, Social Responsibility, Inter- and Transdisciplinarity** / Opaki problemi, društvena odgovornost, inter- i transdisciplinarnost

**15.30 – 16.00** *Rasprava / Discussion*

**16.00 – 16.15** *Pauza / Break*

**16.15 – 16.30** ZRINKA LIŠČIĆ (Hrvatska / Croatia): **Razvoj digitalne kompetencije u glazbenom obrazovanju** / Development of Digital Competence in Music Education

**16.30 – 16.45** ANDREA DEBELJUH, DARKO LONČARIĆ (Hrvatska / Croatia): **NTC učenje za razvoj divergentnog mišljenja** / NTC Learning for Divergent Thinking Development

**16.45 – 17.00** SANDA MILOŠEVIĆ (Bosna i Hercegovina / Bosnia and Herzegovina): **STEM područje obrazovanja u osnovnoj školi** / STEM Field of Education in Elementary School

**17.00 – 17.15** *Rasprava / Discussion*

**17.15 – 17.30** *Pauza / Break*

**17.30 – 18.15**

**Predstavljanje zbornika radova** / Presentation of the book of proceedings: Igor Josipović, Demian Papo, Hrvoje Potlimbrzović (ur.), *Izazovi obrazovanja / Challenges of Education* (Osijek: Filozofski fakultet u Osijeku, 2023).

**Predstavljajući / Presenters:** dr. sc. Dejan Pernjak, doc. dr. sc. Igor Josipović, dr. sc. Demian Papo, dr. sc. Hrvoje Potlimbrzović

| **18.15 – 18.30** *Pauza / Break*

**18.30 – 20.00** **Interdisciplinarna radionica za studente /**  
*Interdisciplinary student workshop*

**20.00** *Završetak drugog dana Kongresa / End of the second day of Congress*

**PETAK, 10. studenog 2023. / FRIDAY, 10 November 2023**

**Dvorana 39 Filozofskog fakulteta, Lorenza Jägera 9, Osijek /**  
Hall 39, Faculty of Humanities and Social Sciences, Lorenz Jäger Street 9, Osijek  
**Online platforma Zoom / Online platform Zoom**

**9.00 – 9.30** *Plenarno predavanje / Keynote lecture*

**RAVINDRA KUMAR SINGH CHOUDHARY (India / Indija): Thinking Interdisciplinarily: Exploring Indian Experiences and Experiments / Interdisciplinarno mišljenje: istraživanje indijskih iskustava i eksperimenata**

| **9.30 – 10.00** *Rasprava / Discussion*

| **10.00 – 10.15** *Pauza / Break*

**10.15 – 11.45**

**Intedisciplinarna panel rasprava / Interdisciplinary panel discussion:**

**INTER\_AKCIJA: mogućnosti suradnje organizacija civilnog društva, znanosti i umjetnosti / INTER\_ACTION: Opportunities for Cooperation Between Civil Society Organizations, Sciences, and Arts**

**Sudionici / Participants:**

**izv. prof. dr. sc. Sarina Bakić, Fakultet političkih nauka, Univerzitet u Sarajevu / Faculty of Political Sciences, University of Sarajevo**

**doc. dr. sc. Dinka Čaha, Pravni fakultet, Sveučilište Josipa Jurja Strossmayera u Osijeku / Faculty of Law, University Josip Juraj Strossmayer in Osijek**

**Martina Globočnik, mag. act. soc., Fade In**

Lejla Šehić Relić, **struč. spec. javne uprave**, DKolektiv – organizacija za društveni razvoj / DKolektiv – organisation for social development

**dr. sc. Hrvoje Potlimbrzović**, Filozofski fakultet, Sveučilište Josipa Jurja Strossmayera u Osijeku / Faculty of Humanities and Social Sciences, University of Josip Juraj Strossmayer in Osijek

**11.45 – 12.00** *Pauza / Break*

**12.00 – 12.15** NIKICA TORBICA, MIRNA ŠOSTARKO, BORIS RAUŠ (Hrvatska / Croatia): **Društveni angažman Osječana/ki zaposlenih u sektoru informacijskih tehnologija** / Social Engagement of the People of Osijek Employed in the IT Sector

**12.15 – 12.30** RENATA JUKIĆ, TIHANA ŠKOJO, MIRELA BEDENIKOVIĆ LEŽ (Hrvatska / Croatia): **Akademski stres i slobodno vrijeme učenika** / Academic Stress and Students' Free Time

**12.30 – 12.45** ROMAN ŠIMUNOVIĆ (Hrvatska / Croatia): **Parasocijalni odnosi u digitalnom dobu: filozofski pristup** / Parasocial Relationships in the Digital Era: Philosophical Approach

**12.45 – 13.00** ANA MARIJA DUNAJ (Slovenija / Slovenia), IVANA RADIĆ (Hrvatska / Croatia): **Doprinos kvalitete medija komunikacije zadovoljstvu korporativnom informiranošću** / The Contribution of the Quality of Communication Media to Satisfaction With Corporate Information

**13.00 – 13.15** *Rasprava / Discussion*

**13.15 – 14.30** *Pauza za ručak / Lunch Break*

**14.30 – 14.45** DINO GERO GEMERI (Croatia / Hrvatska): **The Phenomenon of Arrogance: Definition, Form, and Scalability** / Arogancija kao fenomen: definicija, forma i skaliranje

**14.45 – 15.00** GABRIJELA BULJAN (Croatia / Hrvatska): **On a Social Dimension of Word-Formation Productivity** / O društvenoj dimenziji tvorbene produktivnosti

**15.00 – 15.15** OLGA ZVEREVA (Russia / Rusija): **A Child in the World of Information and Communication Technologies** / Dijete u svijetu informacijske i komunikacijske tehnologije

**15.15 – 15.30** ROMAN PIKULIK (Slovakia / Slovačka): **Ecstasy of (Human) Disappearance: A Virilian Vision** / Zanos (čovjekova) nestajanja: Viriliova vizija

**15.30 – 15.45** *Rasprava / Discussion*

**15.45 – 16.00** *Pauza / Break*

**16.00 – 16.30** *Plenarno predavanje / Keynote lecture*

**PETAR JANDRIĆ** (Hrvatska / Croatia): **Postdigitalno istraživanje – po čemu se razlikuje?** / Postdigital Research – How is it Different?

**16.30 – 17.00** *Rasprava / Discussion*

**17.00 – 17.15** *Pauza / Break*

**17.15 – 17.30** **DENIS NJARI** (Hrvatska / Croatia): **Srednjovjekovlje u pikselima i kadrovima. Iskustvo rada na kolegiju *Srednjovjekovna povijest i kreativne industrije*** / The Middle Ages in Pixels and Frames. Work Experience on the *Medieval History and Creative Industries* Course

**17.30 – 17.45** **SERGEJ FILIPOVIĆ, IVAN FREMEC** (Hrvatska / Croatia): **Stavovi i zadovoljstvo studenata povijesti *online* učenjem** / Attitudes and Satisfaction of History Students With Online Learning

**17.45 – 18.00** **DEJAN PERNJAK** (Hrvatska / Croatia): **Digitalna povijest – perspektive u Hrvatskoj** / Digital History – Perspectives in Croatia

**18.00 – 18.15** **GORAN ĐURĐEVIĆ** (Kina / China): **Globalna antika: izazovi poučavanja** / Global Antiquities: Teaching Challenges

**18.15 – 18.30** *Rasprava / Discussion*

**18.30 – 19.00** *Završna rasprava i zatvaranje Kongresa /*

*Final discussion and closing of the Congress*

**20.00** *Svečana večera za sudionike Kongresa / Dinner for Congress participants*

INTER\_CON 2023:

»Društvo, znanost i umjetnost u (post)digitalnom dobu«

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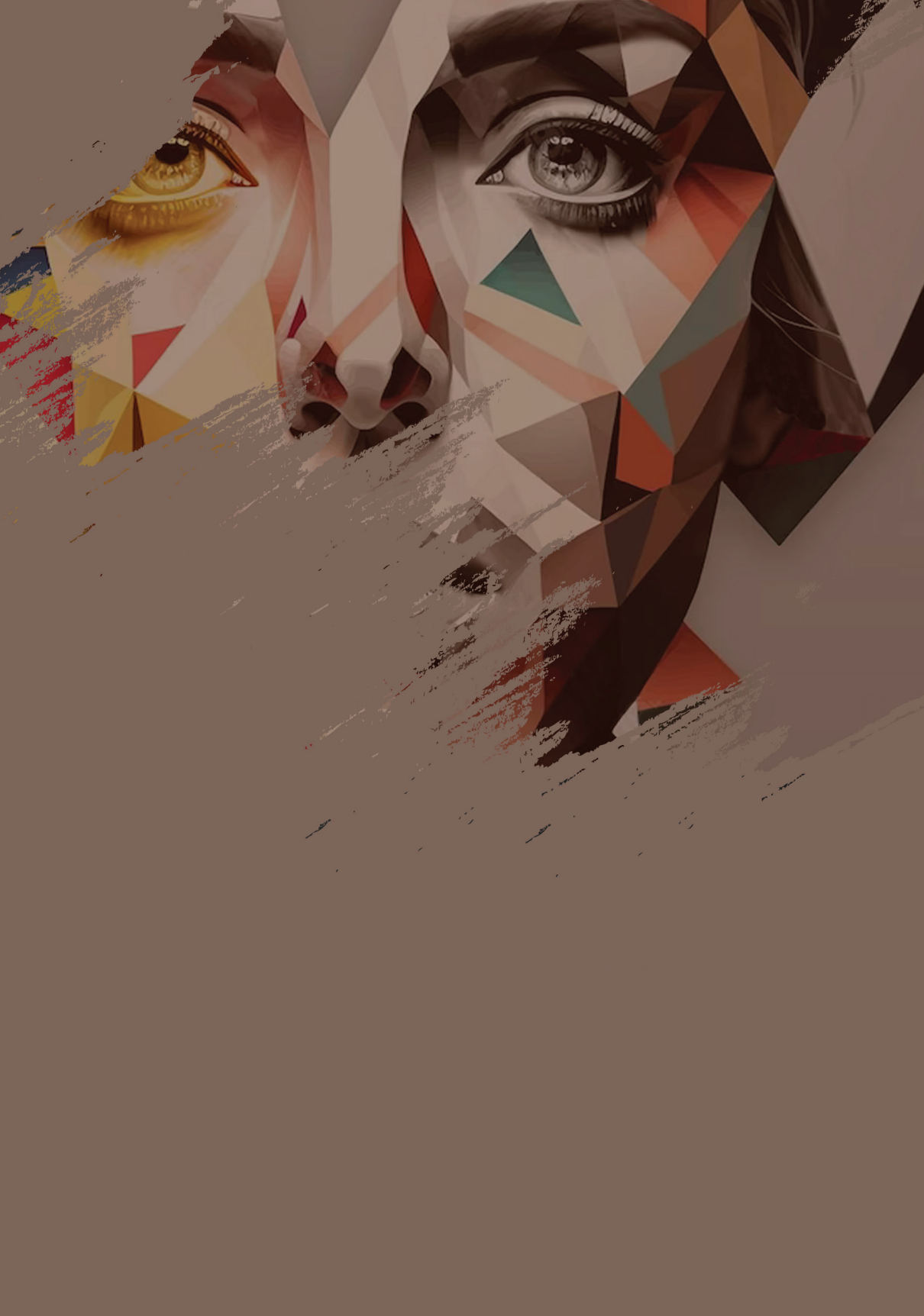
## **SAŽECI IZLAGANJA**

INTER\_CON 2023:

“Society, Sciences, and Arts in the (Post)Digital Era”

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## **PAPER ABSTRACTS**





## **SARINA BAKIĆ, SELMA ALISPAHIĆ**

Fakultet političkih nauka, Univerzitet u Sarajevu, Bosna i Hercegovina / Faculty of Political Sciences, University of Sarajevo, Bosnia and Herzegovina

### **AUTENTIČNOST UMJETNOSTI U DIGITALNOM DOBU: PITANJE ISTINE, SUBJEKTIVITETA I UMJETNE INTELIGENCIJE**

Jedno od najviše raspravljanih pitanja u vezi umjetnosti i stvaranja umjetnosti u digitalnom dobu njezina je autentičnost, a ta je tema bila zastupljena u područjima kritičke teorije društva i estetike. Zahtjev za autentičnošću često je postavljen kao krajnji uvjet umjetničkih formi i kriterij za njihovo prepoznavanje.

Autentično umjetničko djelo definirano je kao ono koje posjeduje svoje jedinstveno *sada i ovdje*, prema riječima Waltera Benjamina. Prema Heideggerovom mišljenju, ono ima vlastitu istinu - to je mjesto gdje istina postaje neskrivena. Stoga je moguće govoriti o istini kao estetičkoj kategoriji. Odnos između istine i umjetnosti jedna je od glavnih tema u povijesti filozofskog razmišljanja o umjetnosti. Platon je, na primjer, kritizirao takozvanu mimetičku umjetnost jer replicira postojeće i stoga predstavlja tek kopiju onoga što je autentičnije. U tom smislu i znanost i umjetnost imaju epistemološku vrijednost i bave se istinom, iako na različite načine. Slijedeći španjolskog slikara Francisca Goyu, istinu se može izreći na različite načine, ali ona je jedna i drevna. Sličnu točku iznio je Ivan Focht koji tvrdi da se znanost i umjetnost bave istim objektima na različite načine - znanost im pristupa »izvana«, dok umjetnost »povezuje ljudski smisao s njima«, pri čemu se znanstvena istina razumijeva, dok se umjetnička doživljava i stvara se s postavljanjem umjetničkog djela. Dok znanost i racionalno razmišljanje ovise o korištenju jasnih i ograničenih pojmova u mediju misli i eksperimenta, umjetnička aktivnost koristi opise i subjektivno iskustvo te prikazuje i evocira istinu u obliku osjetnih predstava. Neizbježno, pitanje istine u postmodernom dobu dodatno komplicira tu tvrdnju, i može se reći da su i znanost, odnosno praksa istraživanja, i umjetnost duboko pogođeni, promijenjeni i dovedeni u pitanje upotrebom i primjenom digitalne tehnologije u suvremenom dobu.

Zahtjev za istinom i autentičnošću često je služio kao mjesto za kritiku formi kulturne produkcije, koje pretendiraju da se razumiju kao umjetnost, ali ovise o upotrebi tehnologije reprodukcije u industrijskom dobu i stoga dovode do stvaranja kulture za masovnu i popularnu potrošnju. Osim toga, dolazak digitalnog doba iznio je nova i s ovom problematikom povezana pitanja na vidjelo. Problem se premjestio s čina reprodukcije na sâm čin produkcije.

U filozofiji i sociologiji umjetnosti subjektivni element, dakle umjetnik, shvaćen je kao važan dio svojstva umjetničkog u umjetničkom djelu. Kant je govorio o geniju, koji nije svjestan uvjeta svojeg stvaranja i nije sposoban pružiti racionalno i znanstveno objašnjenje kako se ono događa, a koji pruža materijal koji dobiva oblik zahvaljujući tehnički obrazovanoj i pravilima upravljanoj 'prisilnoj' vještini. Slično je Hegel govorio o duhu, a Heidegger je raspravljao o hermeneutičkom krugu čiji su međusobno povezani elementi umjetnik, umjetnost i umjetničko djelo.

Stoga se prepoznalo da postojanje umjetnosti ovisi o postojanju kreativnog subjekta, ljudskog bića, čija krajnja subjektivnost, koja nadilazi čisto tehničko znanje i neizbježnu ukorijenjenost umjetnosti u *tehne*, predstavlja neizostavan sastojak i uvjet *sine qua non* u procesu stvaranja umjetnosti. Ovo razumijevanje, odnosno pitanje brisanja kreativnog subjekta, djelomično je poslužilo i kao temelj za kritiku produkcije 'umjetnosti' u kulturnoj industriji.

Kako se društvo mijenja, naročito zahvaljujući upotrebi digitalne tehnologije (i umjetnost zajedno s njim), naše današnje razumijevanje umjetnosti postalo je nejasno. Čini se da se nevjerojatno dogodilo, unatoč predviđanjima autora koji su pisali o razlikama između ljudskog i računalnog 'uma', poput Huberta Dreyfusa koji je tvrdio da potonji nikada ne može simulirati nepredvidljivost i spontanost koja karakterizira prvog. Jedna od najvećih briga je pojava UI tehnologije koja je sposobna stvarati 'umjetnost' koja je gotovo nerazlučiva od umjetnosti stvorene od strane ljudi. Međutim, sličnost je samo 'vanjska' i odnosi se na načine na koje x, koji želi biti prepoznat kao umjetnost, biva prikazan. Unutarnji je proces potpuno drugačiji. U digitalnom stvaranju umjetnosti, a posebice u UI-stvorenoj 'umjetnosti', nema mjesta za koncepte koji su se koristili za opisivanje procesa umjetničkog stvaranja stoljećima, kao što su inspiracija, talent, maštovitost i genijalnost. Proces je potpuno matematički i logičan te ovisi o složenim algoritmima. Tu se radi samo o razumu nasuprot tradicionalnom odsustvu razuma u božanskom, misterioznom i potpuno neracionalnom procesu stvaranja od strane genija. Stvaranje umjetnosti postaje logička zagonetka, svakodnevni i rješiv problem, simulacija ljudske maštovitosti, umjesto neobjašnjivog djelovanja nepoznatih sila ljudske prirode u umjetnosti koja nije posredovana digitalno.

Drugo pitanje je 'manje digitalizirana' verzija stvaranja umjetnosti u digitalnom dobu, gdje subjekt i dalje postoji i ostaje 'um' iza procesa, ali je njegovo stvaranje omogućeno upotrebom digitalne tehnologije u obliku softvera i digitalnih medija, gdje digitalna tehnologija predstavlja alat. Stvar je s tom vrstom produkcije da je tehnički dio umjetničkog stvaranja digitaliziran i ponekad olakšan, ili zahtijeva manje tehničkog 'umijeća' u usporedbi s tradicionalnom umjetnošću. Međutim,

ovu vrstu produkcije i dalje se može obuhvatiti i objasniti klasičnim teorijama umjetnosti, jer trijada umjetnik–umjetničko djelo–umjetnost ostaje, a razlika između stanja nadahnuća subjekta i njegovog tehničkog znanja i dalje je primjenjiva u smislu objašnjavanja procesa kreativnosti.

Što razlikuje ljudsku i umjetnu kreativnu inteligenciju? Je li bit umjetnosti ista kao nekad? Govoreći o umjetnosti danas, govorimo li o istoj stvari o kojoj smo govorili prije nekoliko stoljeća ili čak desetljeća? Možemo li koristiti stare kriterije za prosuđivanje umjetnosti danas? Je li umjetnost postala nešto drugo i gdje se nalazi njezina autentičnost, odnosno ima li je uopće? Trebamo li biti kritični prema novim oblicima i načinima produkcije umjetnosti ili trebamo ponovno definirati koncept umjetnosti, rekonfigurirati svoje razumijevanje umjetnosti i ponovno razmotriti svoje teorije na način da ih učinimo sposobnim da obuhvate nove dimenzije umjetnosti otvorene upotrebom digitalne tehnologije?

U ovom radu naš je cilj odgovoriti na ta i druga međusobno povezana pitanja. Napraviti ćemo pregled teorija umjetnosti u preddigitalnom i digitalnom dobu, a zatim pokušati objasniti promjene koje je stvaranje umjetnosti u digitalnom društvu unijelo. Cilj nam je ispitati digitalne sadržaje u suvremenoj umjetnosti koje društvo prepoznaje kao umjetnost, analizirati ih i na taj način empirijski poduprijeti svoje istraživanje. Cilj je rada doprinijeti razumijevanju produkcije umjetnosti u digitalnom dobu u svjetlu koncepta autentičnosti.

**Ključne riječi:** umjetnost, digitalno doba, umjetna inteligencija, autentičnost, subjektivnost

## **AUTHENTICITY OF ART IN THE DIGITAL AGE: THE QUESTION OF TRUTH, SUBJECTIVITY, AND ARTIFICIAL INTELLIGENCE**

One of the most debated issues regarding art and art creation in the digital age is its authenticity, and the authenticity of art has been a recurrent topic in the fields of critical theory of society and aesthetics. The request for authenticity has often been made on art forms as its ultimate demand and the criteria for its recognizability as an art form.

The authentic artwork has been defined as one that possesses its unique *here and now*, in Walter Benjamin's words. In Heidegger's view, it has its own truth—it is the place where the truth happens and becomes unconcealed. Therefore, it is possible to speak about truth as an aesthetic category. The relationship between truth and art is one of the main topics in the history of philosophical thinking

about art. Plato, for example, criticized the so-called mimetic art because it replicates the existing and therefore represents a mere copy of what is more authentic. In this sense, both science and art have epistemic value and are preoccupied with truth, albeit in different ways. Following the Spanish painter Francisco Goya, the truth can be said in multiple ways, but it is one and ancient. A similar point was made by Ivan Focht who claimed that art and science deal with same objects in different ways—science approaches them “externally”, while art “ties a human meaning to them”, and the scientific truth is understood, while artistic truth is experienced and comes to being with the becoming of an artwork. While science and rational thought depend on the use of clear and delimited concepts, in the media of thought and experiment, artistic activity utilizes descriptions and subjective experience, it shows and evokes the truth in the form of perceptible representations. Inevitably, the question of truth in the postmodern age further complicates this claim, and it can be said that both sciences, i.e. the practice of research, and arts are deeply affected, changed, and challenged by the use and application of digital technology in the contemporary age.

This demand for truth and authenticity has often served as a place for a critique of the forms of cultural production that intends to be understood as art but depends on the use of technology of reproduction in the industrial age and therefore leads to the creation of the culture for mass and popular consumption. In addition, the becoming of the digital age has brought new and related issues to the light of day. The problematic spot moved from the mere act of reproduction to the very act of production.

In philosophy and sociology of art, the subjective element, the artist, has been understood as an important part of the quality of art in the artwork. Kant spoke about the genius who is unconscious of the conditions of his creation and is unable to provide a rational and scientific explanation of how it happens, which provides the material that receives its form by virtue of the technically educated and rule-governed “coercive” skill. Likewise, Hegel spoke about the spirit, and Heidegger discussed the hermeneutical circle whose interrelating elements are the artist, the art, and the artwork.

Therefore, it has been recognized that the existence of art depends on the existence of a creative subject, a human being, whose uttermost subjectivity which goes beyond mere technical knowledge and inevitable rootedness of art in *techné* represents an indispensable ingredient and a *conditio sine qua non* in the process of art creation. This insight, i.e. the issue of erasing the creative subject, has also partially served as a basis for the critique of the production of “art” in the culture industry.

As society is changing, significantly owing to the use of digital technology (and art along with it), our understanding of art has become obscure. It seems that the unimaginable has happened, despite the predictions of the authors who wrote about the differences between the human and computer “minds”, such as Hubert Dreyfus who stated that the latter can never simulate the unpredictability and spontaneity that characterizes the former. One of the most prominent worries is the emergence of AI technology that is capable of creating “art” that is virtually indistinguishable from the art created by humans. However, its resemblance is only “external” and regards the ways the x that wants to be recognized as art is presented. The internal process is completely different. In the digital creation of art, and most specifically in the AI-produced “art”, there is no place for concepts that have been used for describing the process of artistic creation for centuries, such as inspiration, talent, imagination, and genius. The process is completely mathematical and logical, and it depends on complex algorithms. It is “all reason” versus the traditional absence of reason in the divine, mysterious and utterly a-rational process of creation by the genius. The art creation becomes a riddle, a mundane and solvable issue, a simulation of human imagination, rather than the inexplicable working of unknown forces of human nature at play in non-digitally mediated art.

Another issue is the “less digitalized” version of art creation in the digital age, where the subject is still present and remains “the mind” behind the process, but its creation is enabled by the use of digital technology in the form of software and digital media, where digital technology represents a tool. The issue with this form of production is that the *techne* part of art creation is digitalized and at times made easier, or requires less technical “artistry” in comparison to traditional art. However, this form of production can still be subsumed under and explained by the classic theories of art, as the triad artist-artwork-art remains, and the distinction between the state of inspiredness of the subject and its technical knowledge is still applicable in terms of explaining the process of creativity.

What distinguishes human and artificial creative intelligence? Is the essence of art the same as it used to be? Speaking about art today, are we speaking about the same thing we spoke about a couple of centuries or even decades ago? Can we use the old criteria for judging art today? Has art become something else and where are we to find its authenticity, i.e. does it have it at all? Should we be critical towards new forms and ways of art production, or should we redefine the very concept of art, reconfigure our understanding of art, and revisit our theories in such a way as to make them capable of encompassing the new dimensions of art opened by the use of digital technology?

In this paper, our goal is to answer these and other interrelated questions. We will make an overview of the theories of art in the pre-digital and digital ages, followed by an attempt to explain the changes that the creation of art in the digital society has introduced. We aim to examine the digital pieces in contemporary art that society recognizes as art, analyze them and in such a way empirically support our research. The goal of the paper is to contribute to the understanding of art production in the digital age in the light of the concept of authenticity.

| **Key words:** art, digital age, artificial intelligence, authenticity, subjectivity

## **JOSIP BERDICA, NIKOL ŽIHA**

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### **MORALNA HRABROST U DIGITALNOM DRUŠTVU**

Moralna hrabrost, prema mišljenju autorā, podrazumijeva sposobnost pojedinca da se zauzme za svoje temeljne vrijednosti usprkos potencijalnim negativnim društvenim posljedicama. Posebice u digitalnom okruženju, ona podrazumijeva spremnost osobe da se izloži određenoj patnji i osudi od strane okoline, a koja ne zahvaća nužno tijelo, već ‘um i srce’. Drugim riječima, moralna hrabrost pretpostavlja čvrsta uvjerenja iza kojih stojimo i za koja smo spremni trpjeti bilo koji oblik društvene (ali i osobne) osude i kritike.

Kada govorimo o suvremenom digitalnom društvu, autorima izlaganja postavlja se temeljno pitanje: ima li mjesta za moralnu hrabrost u digitalnom društvu u kojem se rastaču osobnosti i identiteti kao čvrsta polazišta za čovjekovo djelovanje te koje mjesto uopće moralna hrabrost ima u virtualnom okruženju koje se temelji na anonimnosti i redukciji ‘onog bitnog’, a zapravo u okruženju koje ne podržava čvrsta uvjerenja? Osobito je to važno za suvremeni politički diskurs unutar kojega se gubljenje stava i identitetskih osobina postavlja gotovo kao uvjet bez kojeg se ne može. Riječ je o diskursu koji zamagljuje, a zapravo odbacuje bilo kakva čvrsta uvjerenja. Može li se onda i koncept građanskog neposluha nepravednim zakonima smatrati nekom vrstom ostatka moralne hrabrosti u političkoj zajednici liberalne ustavne demokracije? Što je s moralnom hrabrošću u akademskom svijetu?

**Ključne riječi:** moralna hrabrost, digitalno društvo, identitet, politika, obrazovanje

### **MORAL COURAGE IN DIGITAL SOCIETY**

According to the authors, moral courage implies the capacity of an individual to stand up for his core values despite potential negative social consequences. Especially in the digital environment, it includes a person’s willingness to expose himself to certain suffering and condemnation from the environment, which does not necessarily affect the body, but the “mind and heart”. In other words, moral courage presupposes firm beliefs behind which we stand and for which we are ready to suffer any form of social (as well as personal) condemnation and criticism.

When we talk about the contemporary digital society, the authors pose a fundamental question: is there a place for moral courage in a digital society in which personalities and identities that act as solid starting points for human action are disintegrated and what place does moral courage have in a virtual environment that is based on anonymity, deprived of “what is essential”, and does not support firm beliefs. This is particularly important for contemporary political discourse, within which the loss of attitude and identity traits is set almost as a condition that cannot be lived without. It is a discourse that obscures, and in fact rejects, any firm beliefs. Can the concept of civil disobedience to unjust laws be considered a kind of remnant of moral courage in the political community of a liberal constitutional democracy? What about moral courage in academia?

| **Key words:** moral courage, digital society, identity, politics, education



## MARITA BRČIĆ KULJIŠ

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### UMJETNA INTELIGENCIJA I SLOBODA GOVORA

Iako je prisutna u svakodnevnom životu već nekoliko desetljeća, umjetna inteligencija u zadnje vrijeme zaokuplja pažnju javnosti, a posebice nakon pojavljivanja jezičnih modela kao što su ChatGPT, koji ima sposobnost razumijevanja i generiranja prirodnog jezičnog teksta.

S obzirom na to da se naša komunikacije najvećim dijelom preselila u virtualni svijet, potrebno je istražiti na koji se način umjetna inteligencija reflektira na slobodu govora. Već sada svjedočimo tome da različiti algoritmi umjetne inteligencije ograničavaju slobodu govora na internetu uklanjanjem objavljenog sadržaja ili čak blokiranjem korisničkog računa.

Da bismo uopće mogli razumjeti odnos slobode govora i umjetne inteligencije, potrebno je analizirati u kakvom su odnosu umjetna inteligencija i temeljni argumenti za slobodu govora kao što su: argument iz vrijednosti istine, argument iz autonomije te argument iz demokracije. Ovaj posljednji sadržava dva modela argumentacije: argument iz prava na informaciju i argument iz suverenosti.

**Ključne riječi:** sloboda govora, umjetna inteligencija (UI), demokracija, informacije, virtualni svijet

### ARTIFICIAL INTELLIGENCE AND FREEDOM OF SPEECH

Artificial intelligence, although it has been present in everyday life for several decades, has recently captured public attention, especially after the appearance of language models such as ChatGPT, which has the ability to understand and generate natural language text.

Given that most of our communication has moved to the virtual world, it is necessary to explore how artificial intelligence reflects on the freedom of speech. We are already witnessing how various artificial intelligence algorithms limit freedom of speech on the Internet by removing published content or even blocking a user's account.

In order to be able to understand the relationship between freedom of speech and artificial intelligence, it is necessary to analyze the relationship between artificial intelligence and arguments for freedom of speech, such as: the argument

from the value of truth, the argument from autonomy, and the argument from democracy, which contains two models of argumentation: the argument from rights to information and the argument from sovereignty.

**Key words:** freedom of speech, artificial intelligence (AI), democracy, information, virtual world

## **GABRIJELA BULJAN**

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### **ON A SOCIAL DIMENSION OF WORD-FORMATION PRODUCTIVITY**

According to some opinions “an ideal theory of word-formation must be able to account for the (possible) existence or non-existence of morphologically complex words by positing mechanisms that can correctly predict the combinatorial properties of morphological elements” (Plag, 1999, p. 1). It is fine to want one’s theory to be able to predict possible words. But theory-building often comes with a neglect of real complex words, especially those inconsistent with the theory’s principles.

Even descriptive studies may be guilty of selective attention. In Croatian WF, dictionaries, academic texts and quality journalism have traditionally been the main sources of data; the language of the Everyman tends to be ignored. Thus, we know little about how ordinary people put their “word-formation ability” to use, and how this is affected by their social background and identity/-ies, intentions and the social context of communication.

In my talk I will show how social context may affect what we do with the morphological building blocks of our language. By remaining emphatically non-prescriptive and non-judgmental about what kinds of coinages theory should account for, I will show that our knowledge about the productivity of one Croatian suffix depends on whose linguistic productions make the cut. Although not interdisciplinary itself, this study is a linguist’s plea for more socially sensitive research into word-formation productivity.

**| Key words:** word-formation, productivity, theory, data

### **O DRUŠTVENOJ DIMENZIJI TVORBENE PRODUKTIVNOSTI**

Prema nekim mišljenjima, »idealna teorija tvorbe riječi mora biti u stanju objasniti (moguće) postojanje ili nepostojanje morfološki kompleksnih riječi postavljanjem mehanizama kojima se točno mogu predvidjeti kombinacijske mogućnosti morfoloških elemenata« (Plag, 1999, str. 1). Nema ničeg spornoga u nastojanju da se izgradi teorija koja može predvidjeti moguće riječi jezika. No, pritom se nerijetko zanemaruju postojeće morfološki kompleksne riječi, posebice ako nisu u skladu s teorijskim načelima i postavkama.

Čak su i neke deskriptivne studije sklone selektivnom pristupu podacima. U hrvatskoj tvorbi tradicionalni su izvori empirijskog materijala rječnici, književnost, akademska proza i novinski tekstovi, dok je svakodnevni jezik običnog pojedinca u pravilu zanemaren. Stoga i ne znamo puno o tome kako običan govornik primjenjuje svoju rječotvornu sposobnost u praksi, kao ni o načinu na koji to utječe na njegov društveni status, društveni identitet(i), komunikacijske namjere i komunikacijski kontekst.

Tema je ovog izlaganja utjecaj komunikacijskog konteksta na načine na koje koristimo morfološke alate svojega jezika. Svojim izrazito nepreskriptivnim i otvorenim pristupom prema podacima (u smislu njihove ‘prikladnosti’ za analizu/izgradnju teorije), pokazat ću da naše spoznaje o produktivnosti jednog hrvatskog sufiksa itekako ovise o tome čiji se i kakvi primjeri jezične uporabe probiru u empirijsku građu. Iako provedena studija nije zamišljena kao interdisciplinarna, treba je ipak shvatiti kao poziv da se u budućim proučavanjima tvorbene produktivnosti snažnije povede računa o različitim sociološkim aspektima tvorbe riječi.

**| Ključne riječi:** tvorba riječi, produktivnost, teorija, podaci

## **RAVINDRA KUMAR SINGH CHOUDHARY**

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### **THINKING INTERDISCIPLINARILY: EXPLORING INDIAN EXPERIENCES AND EXPERIMENTS**

The main aim of this paper is two-pronged: characterizing interdisciplinary thinking in general and trying to enrich it in particular by incorporating some leading Indian perspectives.

Firstly, the question is: What is interdisciplinary thinking? It does not simply mean to cross disciplinary boundaries for general interaction. Instead, it is meant for creating something new out of diverse disciplinary inputs. Paradoxically, interdisciplinarity presupposes disciplinarity which tends to function in silos; yet this state of affairs also makes interdisciplinary thinking indispensable. For, problems nowadays are becoming increasingly complex and knowledge situation ever more dynamic. In hindsight, modernity fostered the idea of discipline as a domain-specific intellectual activity which reinforced regimentation through departmentality in our university systems. So, the matter will be looked into here critically as well.

Secondly, what can India contribute to interdisciplinarity? To enrich interdisciplinarity, we need to keep exploring newer terrains. Indian intellectual landscape, with its diversity in culture and richness of philosophy, has been quite conducive to thinking in interdisciplinary spirit. India today goes on experimenting to integrate this legacy into its education system. India's National Education Policy 2020 is a paradigm example. Indian view of interdisciplinarity has distinctive features and it can add new dimensions to interdisciplinary thinking.

**Key words:** interdisciplinarity, interdisciplinary thinking, departmentality, Indian view of interdisciplinarity, National Education Policy 2020

### **INTERDISCIPLINARNO MIŠLJENJE: ISTRAŽIVANJE INDIJSKIH ISKUSTAVA I EKSPERIMENATA**

Glavni je cilj ovog rada dvosmjernan: općenito okarakterizirati interdisciplinarno mišljenje i pokušati ga posebno obogatiti uključivanjem nekih vodećih indijskih perspektiva.

Prvo, postavlja se pitanje: što je interdisciplinarno mišljenje? To ne znači samo prijeći disciplinarne granice u svrhu opće interakcije. Umjesto toga, ono je na-

mijenjeno stvaranju nečeg novog iz različitih disciplinarnih inputa. Paradoksalno, interdisciplinarnost pretpostavlja disciplinarnost koja teži funkcioniranju u silosima; ipak takvo stanje stvari također čini interdisciplinarno mišljenje neophodnim, jer problemi danas postaju sve složeniji, a situacija sa znanjem sve dinamičnija. Gledajući unatrag, suvremenost je potaknula ideju discipline kao intelektualne aktivnosti specifične za domenu, što je dodatno osnaženo departmentalizacijom u našim sveučilišnim sustavima. Dakle, stvar će se i ovdje kritički promotriti.

Drugo, što Indija može doprinijeti interdisciplinarnosti? Da bismo obogatili interdisciplinarnost, moramo nastaviti istraživati novija područja. Indijski intelektualni krajolik, sa svojom raznolikošću kulture i bogatstvom filozofije, bio je prilično pogodan za mišljenje u interdisciplinarnom duhu. Indija danas nastavlja eksperimentirati ne bi li integrirala to nasljeđe u svoj obrazovni sustav. Indijska Nacionalna obrazovna politika iz 2020. godine primjer je paradigmatске naravi. Indijski pogled na interdisciplinarnost ima posebne značajke i može dodati nove dimenzije interdisciplinarnom mišljenju.

**Ključne riječi:** interdisciplinarnost, interdisciplinarno mišljenje, departmentalizacija, indijski pogled na interdisciplinarnost, Nacionalna obrazovna politika iz 2020. godine

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### **NTC UČENJE ZA RAZVOJ DIVERGENTNOG MIŠLJENJA**

U radu je prikazana važnost koju NTC sustav učenja daje ranoj stimulaciji i motoričkim sposobnostima da bi se mozak što bolje razvio, a s njime i više kognitivne funkcije poput divergentne produkcije. NTC potiče ranu stimulaciju, jer ona sama nije dovoljna. Mozak treba dalje poticati da bi održao maksimalan razvoj. S obzirom na to da su istraživanja pokazala učinkovitost NTC sustava učenja za poboljšanje uspješnosti učenika u raznim područjima, ispitalo se vrijedi li to i za divergentno razmišljanje.

Da bi se to provjerilo, proveden je pilot eksperiment. Polazeći od teorijske točke da se divergentno razmišljanje može poboljšati vježbanjem, razvijena je definirana metodologija istraživanja. Pomoću vježbe postignut je razvoj divergentnog mišljenja kod učenika trećeg razreda osnovne škole Jurja Dobrile u Rovinju (Hrvatska). Jedina aktivnost u eksperimentalnoj grupi bila je razvijanje tečnosti u divergentnom razmišljanju kroz jednominutnu vježbu dva puta tjedno. Istovremeno je, a nakon inicijalnog testiranja, kontrolna grupa rješavala lakše matematičke zadatke. Jednominutnim vježbama na početku sata, u pet tjedana provođenja istraživanja, učenici su udvostručili broj asocijacija na zadani pojam, što pokazuje koliko je zapravo jednostavnim metodama i tehnikama moguće razvijati jedan od važnijih procesa, odnosno sposobnosti – divergentnu produkciju. Rezultati su potvrdili hipotezu da će učenici vježbom postići bolje rezultate u divergentnoj proizvodnji.

**Ključne riječi:** NTC, divergentno mišljenje, razvoj mozga, rana stimulacija, asocijacije

### **NTC LEARNING FOR DIVERGENT THINKING DEVELOPMENT**

The paper shows the importance that the NTC learning system gives to early stimulation and motor skills in order to develop the brain, and thus more cognitive functions such as divergent production. NTC promotes early stimulation, although it alone is not enough. The brain needs to continue to be stimulated in order to maintain maximum development. Given that research has shown the

effectiveness of the NTC learning system for improving student performance in various areas, it was examined whether this is also true for divergent thinking.

In order to verify this, a pilot experiment was conducted. Starting from the theoretical point that divergent thinking can be improved through practice, a defined research methodology was developed. Through the exercise, the development of divergent thinking among the third-grade students of the Juraj Dobrila elementary school in Rovinj (Croatia), was achieved. The only activity in the experimental group was developing fluency in divergent thinking through a one-minute exercise twice a week. While, after the initial testing, at the same time, the control group solved easier mathematical tasks. With one-minute exercises at the very beginning of the class, in the five weeks of research, the students doubled the number of associations to the given term, which shows how simple methods and techniques are actually able to develop one of the most important processes, i.e. abilities—divergent production. The results confirmed the hypothesis that students will achieve better results in divergent production through practice.

**Key words:** NTC, divergent thinking, brain development, early stimulation, associations



## ANITA DREMEL

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# IZAZOVI KORIŠTENJA ONLINE IZVORA KAO ISTRAŽIVAČKIH PODATAKA: FEMINISTIČKI POGLED NA NEKE NEODREĐENOSTI

*Online* okruženja unijela su brojne promjene u naše svakodnevne živote. Omogućila su nam jednostavno i praktično promatranje pojedinaca i skupina, no, nažalost, dovela su i do pojave mnogih oblika nasilja i viktimizacije. Cilj je ovog izlaganja pregledati različite argumente i strategije za rješavanje nekih važnih etičkih i metodoloških pitanja koja se pojavljuju kada se podaci iz *online* izvora, posebice s društvenih mreža, koriste u društveno-znanstvenim istraživanjima. Pogled na novonastale dvosmislenosti u vezi velikih podataka, informiranog pristanka i digitalnog pozitivizma, ovdje se razvija iz perspektive feminističke teorije/stajališta i epistemičke nepravde. Ključna etička pitanja u istraživanju društvenih medija odnose se na prikupljanje podataka iz izvora različitih razina privatnosti, anonimnost subjekata, povjerljivost i informirani pristanak. Iako su istraživanja društvenih mreža u društvenim znanostima u velikom porastu, nedostaju jasne etičke smjernice za takva istraživanja. Studije koje koriste društvene mreže kao izvor istraživačkih podataka zahtijevaju različite pristupe etičkim razmatranjima, ovisno o prirodi istraživačkih pitanja, ciljevima i osjetljivosti ciljane populacije. Istraživači i odbori za etiku trebali bi raditi zajedno na razvoju stručnosti pri ocjenjivanju takvih studija. Metodološki izazovi uključuju brigu o specifičnom portretiranju i predstavljanju na društvenim medijima, kao i o tome kako se informacije proizvode, dijele i koriste. Vrlo je važno razumjeti da podaci izvučeni s platformi društvenih medija imaju značajna ograničenja. Postoje pitanja reprezentativnosti, što znači da istraživači trebaju biti oprezni s generalizacijama.

**Ključne riječi:** *online* izvori istraživačkih podataka, društveno-znanstveno istraživanje, epistemička nepravda, etički i metodološki izazovi

## CHALLENGES IN USING ONLINE SOURCES AS RESEARCH DATA: A FEMINIST VIEW OF SOME AMBIGUITIES

Online environments have introduced many changes into our daily lives. They have made it easy and practical to observe individuals and groups and have unfortunately also led to the appearance of many forms of violence and victimization.

The aim of this presentation is to review different arguments and strategies for solving some important ethical and methodological questions that appear when data from online sources, particularly social media, are used in social science research. A view of newly arising ambiguities around big data, informed consent and digital positivism is provided from the perspective of a feminist standpoint epistemology and epistemic injustice. Key ethical issues in social media research refer to recruitment, collecting data from sources of varying levels of privacy, anonymity of subjects, confidentiality and informed consent. Even though social media research in social sciences is rapidly increasing, clear ethical guidelines for such research are missing. Studies using social media as a research data source require distinct approaches to ethical considerations, depending on the nature of research questions, objectives and sensitivity of the targeted population. Researchers and ethics review boards should work together to develop expertise in evaluating the design of such studies. Methodological challenges include concerns about specific portrayal and representation on social media, as well as about how information is produced, shared and engaged with. It is quite important to understand that data extracted from social media platforms have notable limitations. There are issues of representativeness, which means that researchers should be careful with generalizations.

**Key words:** online data sources, social science research, epistemic injustice, ethical and methodological challenges

## **ANA MARIJA DUNAJ<sup>1</sup>, IVANA RADIĆ<sup>2</sup>**

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### **DOPRINOS KVALITETE MEDIJA KOMUNIKACIJE ZADOVOLJSTVU KORPORATIVNOM INFORMIRANOŠĆU**

Cilj je ovoga rada ispitati koliko zadovoljstvo kvalitetom medija komunikacije policijskih službenika u Hrvatskoj doprinosi zadovoljstvu korporativnom informiranošću. Istraživanje je provedeno na prigodnom uzorku od 1190 policijskih službenika iz svih 20 policijskih uprava u Hrvatskoj. Podaci su prikupljeni dobrovoljnim i anonimnim anketiranjem metodom pismo-olovka u prosincu 2020. godine. Kao instrument korišten je *Upitnik za procjenu zadovoljstva internom komunikacijom* (Tkalac Verčić i sur., 2009) koji mjeri osam dimenzija zadovoljstva internom komunikacijom. Za potrebe ovoga rada korištene su dvije dimenzije: zadovoljstvo korporativnom informiranošću i zadovoljstvo kvalitetom medija komunikacije. Rezultati regresijske analize pokazali su da zadovoljstvo kvalitetom medija komunikacije u značajnoj mjeri doprinosi zadovoljstvu korporativnom informiranošću policijskih službenika, dok socio-demografske varijable i karijera policijskih službenika nisu značajni prediktori zadovoljstva korporativnom informiranošću policijskih službenika u Hrvatskoj. Ovakva saznanja imaju važne praktične implikacije za policijski *management* prilikom planiranja unapređenja interne komunikacije policije. Perspektiva je budućih istraživanja detaljnije istražiti koje kanale digitalne komunikacije preferiraju policijskih službenici.

**Ključne riječi:** zadovoljstvo korporativnom informiranošću, zadovoljstvo kvalitetom medija komunikacije, interna komunikacija policije

### **THE CONTRIBUTION OF THE QUALITY OF COMMUNICATION MEDIA TO SATISFACTION WITH CORPORATE INFORMATION**

This paper aims to determine how much satisfaction with the quality of communication media of police officers in Croatia contributes to satisfaction with corporate information. The survey was conducted on a convenience sample of 1190 police officers in all 20 police administrations in Croatia. The data were collected through a voluntary, anonymous survey using the pen-and-paper method in December 2020. The instrument used was *The internal communication satisfac-*

*tion questionnaire* (Tkalac Verčić et al., 2009) that measures eight dimensions of satisfaction with internal communication. In this paper, we use two dimensions: satisfaction with corporate information and satisfaction with the quality of communication media. The regression analysis results reveal that satisfaction with the quality of communication media significantly contributes to satisfaction with the corporate information of police officers until socio-demographic variables and the career of police officers are not significant predictors of satisfaction with the corporate information of police officers in Croatia. These findings have important practical implications for police management when improving internal police communication. Future research seeks to examine in more detail which channels of digital communication are preferred by police officers.

**Key words:** satisfaction with corporate information, satisfaction with the quality of communication media, internal police communication

## GORAN ĐURĐEVIĆ

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### GLOBALNA ANTIKA: IZAZOVI POUČAVANJA

Globalna antika jedna je od novijih istraživačkih poddisciplina u kojoj se istražuje i podučava antički svijet u komparativnoj, prožimajućoj i povezujućoj perspektivi. Jedan od izazova globalne antike leži u načinu njezine prezentacije, odnosno u sveučilišnoj nastavi o globalnoj antici. Dok u istraživanju globalne antike postoje različite tendencije ovisne o disciplinama, teorijskim okvirima i metodologiji, u nastavnome je planu globalna antika bitno manje zastupljena. U radu se navode četiri moguća pristupa: regionalni, tematski, kronološki i disciplinarni, dok je sve zaokruženo autorovim empirijskim zapažanjima u sklopu kolegija *Globalni antički svjetovi*.

**Ključne riječi:** globalna antika, nastava na visokim učilištima, didaktika i metodika nastave, komparativni pristup

### GLOBAL ANTIQUITIES: TEACHING CHALLENGES

Global Antiquity is one of the newer academic subdisciplines in which the ancient world is studied and taught in a comparative, pervasive and connective perspective. One of the challenges of global antiquity lies in the way of presentation, that is, in university teaching about global antiquity. While in the research of global antiquity there are different tendencies depending on disciplines, theoretical frameworks and methodology, global antiquity is significantly less represented in the curriculum. The paper lists four possible approaches: regional, thematic, chronological or disciplinary, while everything is rounded off by author's empirical observations on the *Global Ancient Worlds* course.

**Key words:** global antiquities, university teaching, didactics and teaching methodology, comparative perspectives

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## **EKOLOGIJA U DIGITALNOM DOBU**

Koncepti digitalnog ili postdigitalnog doba i ekološke osviještenosti igraju ključne uloge u oblikovanju suvremenog društva. U ovom kontekstu, napredak tehnologije, posebice u području elektroničkih uređaja, ima izrazitu važnost u oblikovanju naše svakodnevne stvarnosti. Korištenje takvih uređaja ima značajan ekološki utjecaj zbog procesa proizvodnje, potrošnje energije i odlaganja elektroničkog otpada. S ciljem suočavanja s globalnim izazovima poput klimatskih promjena i ograničenosti resursa, digitalno/postdigitalno doba potiče nas na razmišljanje o održivosti i etičkoj primjeni tehnologije. Napredna elektronika, uključujući pametne telefone, tablete i računala, postala je neizostavan dio naših života, ali istovremeno generira e-otpade koji negativno utječu na okoliš. U skladu s ekološkom osviještenošću digitalnog/postdigitalnog doba, trebamo razvijati inovativne pristupe da bismo smanjili taj otpad putem recikliranja, produženja životnog vijeka uređaja i povećanja energetske učinkovitosti.

Cilj je istraživanja bio prikazati utjecaj učestalosti korištenja elektroničkih uređaja na ekološku svijest i sklonost ekološki odgovornom ponašanju, poput recikliranja i popravka uređaja. Istraživanje je provedeno putem internetske ankete, a uzorak je činilo 88 ispitanika. Statističkom obradom podataka dokazano je da osobe koje češće recikliraju elektroničke uređaje i baterije imaju veću ekološku svijest o utjecaju elektroničkih uređaja na okoliš, a ispitanici koji češće koriste elektroničke uređaje nisu svjesni da postoji mogućnost njihove zamjene umjesto kupovine novih uređaja.

**| Ključne riječi:** digitalno doba, ekologija, okoliš, recikliranje

## **ECOLOGY IN THE DIGITAL ERA**

The concepts of the digital or post-digital era and environmental awareness play key roles in shaping contemporary society. In this context, the advancement of technology, especially in the field of electronic devices, has a distinct importance in shaping our everyday reality. The use of these devices has a significant environmental impact due to the manufacturing process, energy consumption,

and electronic waste disposal. In order to face global challenges such as climate change and limited resources, the digital/post-digital era encourages us to think about sustainability and ethical application of technology. Advanced electronics, including smartphones, tablets and computers, have become an indispensable part of our lives, but at the same time they generate e-waste that negatively affects the environment. In line with the environmental awareness of the digital/post-digital era, we need to develop innovative approaches to reduce this waste through recycling, extending the life of devices and increasing energy efficiency. The aim of the research was to show the impact of the frequency of use of electronic devices on environmental awareness and the tendency towards environmentally responsible behavior, such as recycling and repairing devices. The research was conducted through an online survey, and the sample consisted of 88 respondents. Statistical data processing has proven that people who recycle electronic devices and batteries more often have a greater ecological awareness of the impact of electronic devices on the environment, and respondents who use electronic devices more often are not aware that there is a possibility of replacing them instead of buying new ones.

**Key words:** digital era, ecology, environment, recycling

## **MIA FILIPOV**

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# **RAZVOJ PROFESIONALNE VIZIJE KAO SASTAVNICE PRILAGODLJIVE UČITELJSKE STRUČNOSTI U STRUČNOM USAVRŠAVANJU UZ PRIMJENU VIDEOZAPISA NASTAVE**

Profesionalni razvoj, stručno usavršavanje i prilagodljiva učiteljska stručnost ključni su pojmovi koji se u posljednjih 30 godina vežu uz ostvarivanje pozitivnih odgojno-obrazovnih promjena. Profesionalni razvoj određuje se kao zbir cjeloživotnih procesa i aktivnosti čiji je cilj unaprijediti nastavničke kompetencije i opću profesionalnu dobrobit učitelja, a posljedično i učenje učenika. Stručno usavršavanje definira se kao konkretna i vremenski omeđena serija aktivnosti s jasno određenim ishodima učenja učitelja. Svrha je profesionalnog razvoja učitelja te stručnog usavršavanja, kao njegove sastavnice, doprinijeti razvoju prilagodljive učiteljske stručnosti. Učitelj kao prilagodljivi stručnjak pronalazi kreativna rješenja svakodnevnih problema u nastavi, pri čemu primjenjuje istraživačko-refleksivni pristup nastavi i tako izgrađuje fleksibilnu bazu profesionalnih umijeća. Profesionalna vizija jedna je od najvažnijih sastavnica prilagodljive učiteljske stručnosti, koja se određuje kao sposobnost uočavanja odabranih elemenata nastavne prakse, njihove interpretacije i odlučivanja o tome kako postupiti na temelju opaženog. Da bi došlo do optimalnog razvoja tih kompetencija, nužno je stvoriti poticajno okruženje u kojemu će učitelji pripremati, izvoditi i snimati nastavu, ostvarivati refleksiju o njoj i dobivati povratne informacije o nastavi unutar zajednice učenja. Budući da uobičajeno stručno usavršavanje učitelja u Hrvatskoj ne odgovara navedenim smjernicama, ovim se radom želi opisati nove mogućnosti razvoja prilagodljive učiteljske stručnosti u stručnom usavršavanju uz primjenu videozapisa nastave.

**Ključne riječi:** prilagodljiva učiteljska stručnost, profesionalni razvoj, refleksija, stručno usavršavanje učitelja, videozapisi nastave

## **DEVELOPING PROFESSIONAL VISION AS A COMPONENT OF ADAPTIVE TEACHER EXPERTISE IN VIDEO-BASED PROFESSIONAL DEVELOPMENT**

In the last 30 years, career-long professional learning and development, in-service teachers' professional training and adaptive teacher expertise have been key



concepts associated with positive educational changes. Career-long professional learning and development is defined as a collection of lifelong processes and activities aimed at improving teaching competencies and the general professional well-being of teachers, and consequently the learning of students. In-service teachers' professional training is defined as a concrete and time-limited series of activities with clearly defined teachers' learning outcomes. The purpose of career-long professional development and learning and in-service teachers' professional training as its component is to contribute to the development of adaptive teacher expertise. As an adaptable expert, the teacher is skillful in finding creative solutions to everyday problems in the classroom, while applying a research-reflexive approach to teaching and thus building a flexible base of professional knowledge and skills. Professional vision is one of the most important components of adaptive teacher expertise, which is defined as the ability to observe and interpret selected elements of teaching practice, as well as make decisions on how to act based on what is observed. In order to achieve the optimal development of these competencies, it is necessary to create a stimulating environment in which teachers will prepare, perform and record classes, reflect on them and receive feedback on their teaching within a learning community. Since the usual in-service teachers' professional training in Croatia does not correspond to the abovementioned guidelines, this paper aims to describe new possibilities of developing adaptive teacher expertise in professional development programs with the use of videos of teaching.

**Key words:** adaptive teacher expertise, in-service teachers' professional training, career-long professional development and learning, reflection, videos of teaching

## **SERGEJ FILIPOVIĆ, IVAN FREMEC**

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### **STAVOVI I ZADOVOLJSTVO STUDENATA POVIJESTI ONLINE UČENJEM**

Zdravstvena i društvena kriza prouzrokovana pandemijom COVID-19 postavila je velike izazove pred obrazovni sustav. Jedan od tih izazova bio je i prelazak s učioničke na *online* nastavu na visokoškolskim ustanovama. Cilj je ovoga rada odgovoriti na pitanja kakvi su stavovi studenata povijesti Filozofskog fakulteta u Osijeku prema *online* učenju i kakvo je zadovoljstvo tih studenata provedenom *online* nastavom. Također se nastoji doći do odgovora kakvi su stavovi studenata povijesti prema eventualnim budućim korištenjima *online* učenja na studiju povijesti, neovisno o zdravstvenim krizama. Uz pomoć upitnika kojim su podaci prikupljeni, analiziraju se osobni stavovi studenata o *online* učenju, zadovoljstvo *online* alatima, vlastita procjena osposobljenosti za *online* učenje, zadovoljstvo nastavnicima i sobom, stavovi prema budućem korištenju *online* učenja i prilagođenost *online* učenja specifično za studij povijesti. Donose se zaključci i preporuke za budućnost.

| **Ključne riječi:** *online* učenje, *online* nastava, studij povijesti, studenti

### **ATTITUDES AND SATISFACTION OF HISTORY STUDENTS WITH ONLINE LEARNING**

The health and social crisis caused by the COVID-19 pandemic has posed significant challenges to the education system. One of these challenges was the transition from in-person learning to online learning at higher education institutions. The aim of this paper is to answer questions about the attitudes of history students at the Faculty of Humanities and Social Sciences in Osijek towards online learning and their satisfaction with online education. It also seeks to explore the attitudes of history students towards potential future uses of online learning in history studies, regardless of health crises. Using a questionnaire for data collection, the study analyzes students' personal attitudes towards online learning, satisfaction with online tools, self-assessment of online learning readiness, satisfaction with instructors and themselves, attitudes towards future use of online learning, and suitability of online learning specifically for history studies. Conclusions and recommendations for the future are provided.

| **Key words:** online learning, online classes, history studies, students

## **DINO GERO GEMERI**

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### **THE PHENOMENON OF ARROGANCE: DEFINITION, FORM, AND SCALABILITY**

Arrogance is as old as humanity itself. It is a concept deeply embedded into human character and is undeniable as much as it is everlasting. Throughout history, this concept influenced, both directly and indirectly, the shaping of the world as it is today. The unavoidability of this phenomenon stirs arrogance from fragmental mundane situations up to monumental historic events. However, it is ironic that such a notion received limited systematic research and academic inquisition. This paper is centered solely on the concept of arrogance as it separates it from the rest of the human traits, such as, but not limited to, humility, aggression, ambition, and confidence. Therefore, the author studies the mechanisms of the concept of arrogance by providing its theoretical framework and historical analysis, as well as theorizing upon different interpretations of the concept's definition, structural forms and elements, and possible scalability. It is argued that it is possible that, when adequately defined, the concept of arrogance can be detected and quantified by identifying and analyzing its structural elements.

**| Key words:** arrogance, hubris, overconfidence, person perception

### **AROGANCIJA KAO FENOMEN: DEFINICIJA, FORMA I SKALIRANJE**

Arogancija je stara koliko i čovječanstvo. To je koncept koji je duboko usađen u ljudski karakter te je jednako neosporiv koliko i permanentan. Promatrano kroz prizmu globalne povijesti, pojam arogancije imao je (ne)izravnog utjecaja na oblikovanje svijeta kakav je danas. Neminovnost tog fenomena indicira da je aroganciju moguće pronaći i unutar okvira svakodnevnih, manje značajnih događaja, pa sve i do unutrašnjosti parametara monumentalnih, povijesnih zbivanja. Međutim, ironično je da takav pojam ipak ne iziskuje više interesa unutar akademske sfere, uslijed čega arogancija kao koncept ostaje poprilično neistražen fenomen. Fokus ovog rada nalazi se striktno na konceptu arogancije koja je izolirana od ostalih ljudskih osobina poput, ali ne i isključivo, poniznosti, agresivnosti, ambicioznosti i samouvjerenosti. Shodno tome, autor proučava mehanizme fenomena arogancije dajući njezin teorijski okvir i povijesni pregled te teorizirajući o različitim interpretacijskim definicijama, strukturalnim formama i

oblicima, kao i o mogućoj mjerljivosti tog koncepta. Rad promiče stav da je moguće, u slučaju da se koncept adekvatno definira, pouzdano otkriti i kvantificirati razinu arogantnog ponašanja individue pomoću analize njezinih strukturalnih formi i oblika.

■ **Ključne riječi:** arogancija, oholost, pretjerana samouvjerenost, percepcija individue

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# **KORIŠTENJE ALATĀ DIGITALNE TEHNOLOGIJE KOD UČENJA STRANOGA JEZIKA U OSNOVNIM ŠKOLAMA I USTANOVAMA RANOGA I PREDŠKOLSKOG ODGOJA I OBRAZOVANJA**

Aktualnostima u današnjem vremenu nadaleko i gotovo primarno doprinosi digitalna tehnologija kao neminovna sastavnica današnjeg života. Digitalna tehnologija usađuje se u živote ljudi, implementira u vrijednosti po kojima se živi i zasigurno okružuje svaku sferu ljudske svakodnevice. Stoga ne čudi činjenica da se digitalna tehnologija sve više implementira i u odgojno-obrazovni rad. Primjer za to je i učenje stranog jezika, kako u ranom i predškolskom tako i u osnovnoškolskom odgoju i obrazovanju. Ovaj će rad zato donijeti deskriptivni opis implementacije alatā digitalne tehnologije u učenju i poučavanju stranoga jezika kroz usporedbu najčešće korištenih alata od strane odgajatelja u ustanovama ranog i predškolskog odgoja i obrazovanja, kao i učiteljā razredne nastave u osnovnoškolskim ustanovama. Za potrebe ovog manjeg istraživanja korištena je metoda intervjuja s odgajateljima i učiteljima te su podaci deskriptivno analizirani i uspoređeni s postojećim istraživanjima.

**Ključne riječi:** digitalna tehnologija, osnovne škole, rani i predškolski odgoj i obrazovanje, strani jezik

# **THE USE OF DIGITAL TECHNOLOGY TOOLS IN LEARNING A FOREIGN LANGUAGE IN ELEMENTARY SCHOOLS AND INSTITUTIONS OF EARLY AND PRESCHOOL EDUCATION**

Digital technology, as an inevitable component of today’s life, largely and almost primarily contributes to current events. As such, digital technology is embedded in people’s lives, implemented in the values by which we live, and certainly surrounds every sphere of human everyday life, so it is not surprising that digital technology is increasingly being implemented in educational work as well. An example of this is learning a foreign language, both in early childhood and preschool, as well as in primary education. This paper will therefore provide a descriptive description of the implementation of digital technology tools in

learning and teaching a foreign language through a comparison of the most commonly used tools by educators in early and preschool education institutions, as well as classroom teachers in elementary schools. For the purposes of this small research, the interview method with educators and teachers was used, and the data were descriptively analyzed and compared with existing research.

**Key words:** digital technology, primary schools, early and preschool education, foreign language

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### WICKED PROBLEMS, SOCIAL RESPONSIBILITY, INTER- AND TRANSDISCIPLINARITY

The notion of *wicked problems* has been introduced by Rittel and Webber in 1973 to describe problems that are difficult to deal with because it is not clear how to frame the problem: "There is no definitive formulation of a wicked problem." Wicked problems are framed in a number of different ways, depending on who is looking at the problem. The perception of the problem is determined—in academia—by different conceptual frameworks or disciplinary background and—in the political arena—by conflicting interests and values. This talk introduces the notion of *wicked-square problems*, problems that are wicked times wicked. Based on the ethical principle that everybody who has a stake in the outcome of a decision—because they are affected by this outcome—should be involved in the process of decision making, wicked-square problems must not be dealt with exclusively by experts or political representatives. Every stakeholder must be involved. As I will show, this leads to the problem of how to effectively organize and perform deliberation across the boundaries of scientific disciplines, interests, and ideological commitments.

**Key words:** wicked problems, framing, stakeholder engagement

### OPAKI PROBLEMI, DRUŠTVENA ODGOVORNOST, INTER- I TRANSDISCIPLINARNOST

Pojam *opaki problemi* uveli su Rittel i Webber 1973. godine ne bi li opisali probleme s kojima se teško nositi zbog toga što nije jasno kako ih postaviti: »Ne postoji konačna formulacija opakog problema.« Opaki problemi mogu biti postavljeni na više različitih načina, ovisno o tome tko promatra problem. Percepcija problema određena je – u akademskoj zajednici – različitim konceptualnim okvirima ili disciplinarnom pozadinom i – u političkoj areni – sukobljenim interesima i vrijednostima. Ovo izlaganje uvodi pojam *opakih problema na kvadrat*, problema koji su opaki i množe se s opakim. Na temelju etičkog načela da svatko tko ima udjela u ishodu odluke – jer na njih taj ishod utječe – treba biti uključen u proces donošenja odluka, opakim problemima na kvadrat ne smiju se baviti isključivo stručnjaci ili politički predstavnici. Sve zainteresirane strane moraju biti uključene. Kao što ću pokazati, to dovodi do problema kako učinkovito organizirati

i izvesti deliberaciju preko granica znanstvenih disciplina, interesa i ideoloških opredjeljenja.

**Ključne riječi:** opaki problemi, postavljanje problema, uključenost svih zainteresiranih



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## POSTDIGITALNO ISTRAŽIVANJE – PO ČEMU SE RAZLIKUJE?

Od pokretanja *Postdigital Science and Education* časopisa, biblioteke i enciklopedije, postdigitalna istraživanja u naglom su porastu. Međutim, implikacije postdigitalnog istraživanja (i istraživačkih metoda) pomalo su nejasne. Što znači provoditi postdigitalna istraživanja? Koji su glavni izazovi i mogućnosti povezani s postdigitalnim istraživanjem? I, možda i najvažnije, koje su perspektive za budućnost postdigitalnog istraživanja?

Temeljena na dvije nedavno objavljene knjige, *Postdigital Research: Genealogies, Challenges, and Future Perspectives* i *Constructing Postdigital Research: Method and Emancipation* (Jandrić, MacKenzie & Knox, 2023), prezentacija se bavi trima glavnim pitanjima: Što je postdigitalno znanje? Što znači provoditi postdigitalna istraživanja? Kako se postdigitalno istraživanje razlikuje od istraživanja u drugim perspektivama? Govoreći o različitim metodama konstrukcije postdigitalnih istraživanja, prezentacija će istražiti postdigitalnu dinamiku inkluzije i ekskluzije, kao i međusobnu povezanost metode i emancipacije.

**Ključne riječi:** teorija postdigitalnog istraživanja, genealogije postdigitalnosti, postdigitalno znanje, postdigitalni senzibiliteti, postdigitalno istraživanje i obrazovanje

## POSTDIGITAL RESEARCH – HOW IS IT DIFFERENT?

Since the inception of the *Postdigital Science and Education* journal, book series, and encyclopaedia, postdigital scholarship has experienced rapid growth. However, the implications of postdigital research (methods) have remained unclear. What does it mean to conduct postdigital research? What are the main challenges and opportunities of postdigital research? And, probably most importantly, what are its future prospects?

Based on two recently published books, *Postdigital Research: Genealogies, Challenges, and Future Perspectives* and *Constructing Postdigital Research: Method and Emancipation* (Jandrić, MacKenzie & Knox, 2023), this presentation will address three key questions: What is postdigital knowledge? What does it mean to do postdigital research? What, if anything, is distinct from research conducted in other per-

spectives? Delving into the various methods of constructing postdigital research, the presentation will explore the postdigital dynamic of inclusion and exclusion, as well as the interplay between method and emancipation.

**Key words:** theory of postdigital research, genealogies of the postdigital, postdigital knowledge, postdigital sensibilities, postdigital research and education

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# POLITIKA CYBER SIGURNOSTI EUROPSKE UNIJE U DIGITALNOM DOBU

Svjesni smo da je virtualni svijet zbog konstantne evolucije tehnologije postao sve veći izvor različitih prijetnji, zbog čega postoji rastuća potreba za zaštitom pojedinaca, tvrtki, javnih organizacija i društva. Jedno od nastojanja Europske unije jest da postane najsigurnije *online* okruženje. Prema političkim smjernicama za Europsku komisiju za period 2019. – 2024. godine, cyber sigurnost ostaje prioritetno područje za daljnje djelovanje u godinama koje dolaze. Ovaj rad za cilj ima pružiti pregled složenog pejzaža politike cyber sigurnosti Europske unije i identificirati glavne izazove za njezino efikasno provođenje. Glavni je cilj ovog istraživanja ispitati strategije politike cyber sigurnosti i regulativu Europske unije te analizirati što još treba učiniti kako bi se uspostavila cyber otpornost u budućnosti s obzirom na složenost europske cyber sigurnosti. Rezultati istraživanja pokazat će kako Europska unija radi na promociji i osiguravanju cyber otpornosti, kao i na koji način štiti našu komunikaciju i podatke da bi održala sigurnost *online* društva i ekonomije.

**Ključne riječi:** Europska unija, politika cyber sigurnosti, cyber otpornost, digitalno doba

## EUROPEAN UNION CYBERSECURITY POLICY IN THE DIGITAL ERA

We are aware that the virtual world, due to the constant evolution of technology, has become a growing source of various threats, which is why there is an increasing need to protect individuals, businesses, public organizations, and society. One of the efforts of the European Union is to become the safest online environment. Cyber security remains a priority area for further action in the years to come, according to the political guidelines for the European Commission 2019–2024. This paper aims to provide an overview of a complex European Union cybersecurity policy landscape, and to identify the main challenges to effective policy delivery. The main goal of this research is to interrogate cybersecurity strategy policy and regulation of the European Union, and to analyze what remains to be done to ensure a secure and resilient cyberspace in the future regarding the complexity of the European cybersecurity. The results of the research will show

how the European Union works to promote and ensure cyber resilience, as well as how it protects our communication and data in order to keep online society and economy secure.

! **Key words:** European Union, cybersecurity policy, cyber resilience, digital era

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### **ISTRAŽIVANJE ISTINE U DIGITALNOJ ERI: POST-ISTINA, DEZINFORMACIJE I RELEVANTNOST KONCEPTA NEORGANIZIRANOG ZNANJA FRIEDRICHA HAYEKA**

Digitalno doba uvelo nas je u novu eru obilježenu neviđenim pristupom informacijama, komunikaciji i interakciji, iz temelja mijenjajući način na koji pojedinci i društva percipiraju koncept istine. U tom razdoblju, izazovi politike post-istine i neobuzdano širenje dezinformacija došli su do izražaja, potičući kritičko ispitivanje načina na koji se istina konstruira i razumije. Cilj je ovog istraživanja analizirati utjecaj digitalnog doba na pitanje istine, politike post-istine i dezinformacija, s posebnim fokusom na koncept *neorganiziranog znanja* Friedricha Hayeka. Naglašava se relevantnost tog Hayekova koncepta u razumijevanju evoluirajuće naravi istine i nudi se temelj za buduća istraživanja i diskurs u navigaciji kroz složenost istine u sve digitalnijem i povezanijem svijetu.

Politika post-istine, koju karakterizira manipulacija javnim mnijenjem pozivanjem na emocije i uvjerenja umjesto činjenica, postala je značajka koja definira digitalno doba. Bujica informacija iz različitih izvora, često proturječnih i neprovjerenih, pokrenula je duboka pitanja o integritetu znanja i sposobnosti da se razabere što je istina. Hayekov koncept *neorganiziranog znanja* postaje jedan od mogućih teorijskih koncepata kroz koji se mogu razumjeti suvremeni izazovi koji okružuju istinu. Njegovi uvidi u decentraliziranu prirodu znanja i njegovu ulogu u spontanom poretku društva duboko odjekuju decentraliziranim informacijskim krajolikom digitalnog doba. Ispitujući kako pojedinci pristupaju, tumače i pridonose ogromnoj količini informacija na internetu, ovo izlaganje nastoji povući paralele između Hayekovih ideja i raspršene, nekoordinirane prirode proizvodnje i širenja znanja u digitalnom području.

**Ključne riječi:** digitalno doba, post-istina, dezinformacije, neorganizirano znanje, Friedrich Hayek

### **EXPLORING TRUTH IN THE DIGITAL ERA: POST-TRUTH, DISINFORMATION, AND THE RELEVANCE OF FRIEDRICH HAYEK'S CONCEPT OF UNORGANIZED KNOWLEDGE**

The digital era has ushered in a new era marked by unprecedented access to information, communication, and interaction, fundamentally transforming the

way individuals and societies perceive the concept of truth. In this era, the challenges of post-truth politics and the rampant dissemination of disinformation have come to the forefront, prompting a critical examination of how truth is constructed and understood. The aim of this research is to analyze digital age's impact on the question of truth, post-truth politics and disinformation, with a particular focus on Friedrich Hayek's concept of *unorganized knowledge*. It highlights the relevance of Hayek's concept in understanding the evolving nature of truth and offers a foundation for future research and discourse in navigating the complexities of truth in an increasingly digital and interconnected world.

Post-truth politics, characterized by the manipulation of public opinion through appeals to emotion and belief over facts, has become a defining feature of the digital era. The deluge of information from various sources, often conflicting and unchecked, has raised profound questions about the integrity of knowledge and the ability to discern what is true. Hayek's concept of *unorganized knowledge* becomes a possible theoretical concept through which contemporary challenges surrounding truth can be understood. Hayek's insights into the decentralized nature of knowledge and its role in the spontaneous order of society resonate profoundly with the decentralized information landscape of the digital era. By examining how individuals access, interpret, and contribute to the vast pool of information on the internet, this paper seeks to draw parallels between Hayek's ideas and the dispersed, uncoordinated nature of knowledge production and dissemination in the digital era.

**Key words:** digital era, post-truth, disinformation, unorganized knowledge, Friedrich Hayek

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## **AKADEMSKI STRES I SLOBODNO VRIJEME UČENIKA**

Vrijeme u kojem živimo karakteriziraju brojne stresne situacije kako za odrasle ljude tako i za djecu i adolescente. Škola djeci predstavlja najčešći stresni kontekst. Psiholozi i pedagozi kontinuirano upozoravaju na akademski stres, koji učenici osjećaju zbog pretrpanosti obvezama i 'utrke za peticama' (narušeno fizičko i mentalno zdravlje, loša slika o sebi, nisko samopouzdanje itd.).

Manjak slobodnog vremena, prekobrojne obaveze i konflikti između različitih socijalnih uloga kod djece, mogu biti znatan izvor stresa. Način na koji se učenici nose sa stresom nazivamo »suočavanje« (Mazzola i sur., 2011). *Adaptivne strategije* suočavanja sa stresom, poput fizičke aktivnosti, druženja, socijalne potpore i slično, doprinose boljem psihičkom zdravlju osobe. Proaktivno sučeljavanje najučinkovitiji je način za suočavanje sa stresom (Veresova & Mala, 2012). Korištenje psihoaktivnih supstanci, izbjegavanje okoline te ostali neprikladni načini suočavanja sa stresom rezultirat će *maladaptivnim* odgovorima organizma (Zarei i sur., 2016). Slobodno vrijeme predstavlja prostor oporavka i suočavanja sa stresom iz barem dvaju razloga: aktivnost i izazov te pasivno oporavljanje (Trenberth & Dewe, 2002).

Kakva je uloga škole u oblikovanju slobodnog vremena učenika, trebamo li razmišljati o tome kako slobodnovremenske aktivnosti mogu utjecati na razvoj metoda upravljanja i suočavanja sa stresom kod djece i mladih? Može li (i treba li) škola osigurati aktivnosti koje bi predstavljale izazov, ali i prostor pasivnog oporavljanja za djecu i mlade?

Cilj je rada dati pregled literature koja proučava pitanje akademskog stresa kod djece i mladih te otvoriti nova pitanja i eventualna istraživanja o navedenom fenomenu.

**| Ključne riječi:** učenici, škola, akademski stres, slobodno vrijeme

## ACADEMIC STRESS AND STUDENTS' FREE TIME

The time we live in is characterized by a large number of stressful situations for adults, as well as for children and adolescents. School is the most common stressful environment for children. Psychologists and pedagogues continuously warn about academic stress felt by pupils due to overburdening with duties and the “race for A’s” (impaired physical and mental health, poor self-image, low self-esteem, etc.).

Lack of free time, excessive duties and conflicts between different social roles of children can be a significant source of stress. The way pupils deal with stress is referred to as coping (Mazzola et al., 2011). Adaptive coping strategies when dealing with stress, such as physical activity, socializing and social support, to name a few, contribute to a person’s improved mental health. Proactive confrontation is the most effective way of coping with stress (Veresova & Mala, 2012). The use of psychoactive substances, avoiding the stressors surrounding them and other inappropriate ways of coping with stress will result in maladaptive responses of the organism (Zarei et al., 2016). Free time provides room for recovery and coping with stress for at least two reasons: activity and challenge, as well as passive recovery (Trenberth & Dewe, 2002).

What is the role of the school in shaping pupils’ leisure time, do we need to think about it, how can free-time activities affect the development of methods for managing and coping with stress in children and youth? Can (and should) the school provide activities that would pose a challenge, but also provide room for passive recovery for children and youth?

The aim of this paper is to provide an overview of the literature that studies the issue of academic stress in children and youth and to raise new questions and encourage possible research on this phenomenon.

**I Key words:** students, school, academic stress, free time



## **TONČA JUKIĆ**

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### **VAŽNOST I MOGUĆNOSTI ODGOJA U (POST)DIGITALNOM DOBU**

Odgoj kao jedan od temeljnih pedagoških procesa iznimno je važan za cjeloviti razvoj pojedinca. Nažalost, posljednjih desetljeća svjedočimo tome da je odgoj, u odnosu na obrazovanje, često zanemarivan te mu nije pridavana važnost koju zaslužuje u pedagogijskoj teoriji i u pedagoškoj praksi. Tome je, između ostaloga, pridonijelo i različito razumijevanje odgoja u različitim pedagogijskim koncepcijama, kao i neprecizna i nekritička uporaba pedagogijskih pojmova u znanstvenoj i svakodnevnoj komunikaciji. Ni suvremena digitalna tehnologija, unatoč utvrđenim pozitivnim učincima koje može imati na razvoj djece i kvalitetu nastavnog procesa, nije uvijek imala povoljan učinak na odgoj i osjetljive procese socio-emocionalnog razvoja pojedinca. U ovom se radu, stoga, daje pregled različitih pedagogijskih određenja i razumijevanja odgoja u kontekstu (post)digitalnog doba opisanog s motrišta suvremenih teorijskih pristupa. Radom se želi uputiti na važnost i mogućnosti odgoja u (post)digitalnom dobu s naglaskom na pitanja svrhovitosti odgoja s obzirom na (post)digitalni odnos pojedinca i tehnologije.

**I Ključne riječi:** digitalna tehnologija, pojedinac, socio-emocionalni razvoj

### **THE IMPORTANCE AND POSSIBILITIES OF UPBRINGING IN THE (POST)DIGITAL ERA**

Upbringing, as one of the fundamental pedagogical processes, is extremely important for the holistic development of an individual. Unfortunately, in recent decades, we have witnessed that upbringing, in relation to education, is often neglected, and pedagogical theory and pedagogical practice do not give it the importance it deserves. Among other things, the different understandings of upbringing in different pedagogical conceptions contributed to this, as well as the imprecise and uncritical use of pedagogical terms in scientific and everyday communication. Even contemporary digital technology, despite the established positive effects it can have on children's development and the quality of the teaching process, has not always had a favorable effect on upbringing and the sensitive processes of a person's social-emotional development. This paper, therefore, provides an overview of various pedagogical definitions and under-

standings of upbringing in the context of the (post)digital age described from the viewpoint of contemporary theoretical approaches. The paper aims to address the importance and possibilities of upbringing in the (post)digital age with an emphasis on questions of the purpose of upbringing with regard to the (post)-digital relationship between an individual and technology.

| **Key words:** digital technology, individual, social-emotional development

## **JURAJ JURLINA, ŽELJKO PAVIĆ**

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### **MEDIJI I EROZIJA SOCIJALNOG KAPITALA: OPADA LI POVJERENJE S UČESTALOŠĆU UPOTREBE TELEVIZIJE I INTERNETA?**

Socijalni kapital, norme reciprociteta i povjerenje važni su čimbenici društvene integracije i kohezije. Opadanje generaliziranog i institucionalnog povjerenja može imati snažne posljedice za funkcioniranje društva u cjelini, ali i za generalno stanje zdravlja, sreće, kulture i ekonomije. U hrvatskoj se znanstvenoj i široj javnosti problem povjerenja ističe već duže vrijeme, a prema dosadašnjim istraživanjima ono je konstantno na niskim razinama. U radu se na probabilističkom uzorku stanovnika Republike Hrvatske analizira i zatim raspravlja utjecaj konzumiranja medijskih sadržaja putem tradicionalnog (televizija) i suvremenog medija (interneta) na povjerenje. Naime, iako je internet omogućio brzo i jednostavno umrežavanje te otvorio mogućnosti stvaranja novih javnih sfera i demokratskih dijaloga, rezultati pokazuju da njegova ekstenzivna upotreba negativno utječe na generalizirano i institucionalno povjerenje. S druge strane, učestalost gledanja televizije, kao tradicionalnog medija, pokazala se pozitivno povezanom s objema inačicama povjerenja. Ta je diskrepancija karakteristična za proces individualizacije koji pretpostavlja odmak od homogenosti i standardizacije (karakteristične za tradicionalne medije) i pomak prema heterogenizaciji i osobnom izboru (karakterističnom za suvremene medije), što potkopava tradicionalne socijalno-strukturne preduvjete za društvenu koheziju i povjerenje.

**Ključne riječi:** generalizirano povjerenje, institucionalno povjerenje, televizija, internet, medijizacija, individualizacija

### **MEDIA AND THE EROSION OF SOCIAL CAPITAL: DOES TRUST DECREASE WITH THE FREQUENCY OF TELEVISION AND INTERNET USAGE?**

Social capital, reciprocity norms, and trust are important factors in social integration and cohesion. The decline of generalized and institutional trust can have strong consequences for the functioning of society as a whole, as well as for the overall state of health, happiness, culture, and the economy. In the scientific and broader public discourse in Croatia, the issue of trust has been highlighted for quite some time, and according to previous research, it has consistently re-

mained at low levels. This study analyzes and discusses the impact of consuming media content through traditional media (television) and contemporary media (the internet) on trust, using a probabilistic sample of the population of the Republic of Croatia. Although the internet enables quick and easy networking and opens possibilities for the creation of new public spheres and democratic dialogues, the results show that its extensive use negatively affects generalized and institutional trust. On the other hand, the frequency of watching television, as a traditional medium, has been positively associated with both forms of trust. This discrepancy is characteristic of the process of individualization, which implies a shift away from homogeneity and standardization (characteristic of traditional media) towards heterogenization and personal choice (characteristic of contemporary media), undermining traditional socio-structural prerequisites for social cohesion and trust.

**Key words:** generalized trust, institutional trust, television, internet, mediation, individualization

## **ANITA KOSTANJČAR**

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## **IZAZOVI OBRAZOVANJA ODRASLIH U DIGITALNOM DOBU**

Pedagozi i didaktičari još od davnina proklamiraju ideju cjeloživotnog obrazovanja bez obzira na to nastavlja li odrasli svoje školovanje, prekvalificiraju se ili stručno usavršavaju. Obrazovanje odraslih važno je zato što dovodi do osobnog razvitka pojedinca te uravnoteženog sudjelovanja u socijalnom, gospodarskom i kulturnom razvitku. Koncept cjeloživotnog obrazovanja ideja je koju promoviraju sve značajne europske i međunarodne organizacije. Iako je sastavni dio regulativa i neizostavan je dio svakoga tko je radno aktivan, cjeloživotno se obrazovati u suvremenom dobu podrazumijeva stil života svakog pojedinca, pa čak i osoba starije životne dobi koji nisu radno aktivni.

Mogućnosti uključivanja u obrazovanje u suvremenom su dobu mnogobrojne, od kontaktnih do *online* obrazovnih programa, osposobljavanja, usavršavanja, prekvalifikacija do učenja zabavnih sadržaja koji će zadovoljiti osobne interese pojedinca. *Online* obrazovni programi doprinijeli su prevazilaženju ograničenja uslijed udaljenosti boravišta polaznika od mjesta izvođenja nastave, kao i vremenskog ograničenja. Iako postoje brojne prednosti *online* pohađanja obrazovanja, ono je ujedno i značajan izazov za osobe srednje i starije životne dobi koji nisu odrastali uz suvremenu tehnologiju koja prati takav način obrazovanja. U ovom ćemo radu istražiti koji su to izazovi, ali i mogućnosti njegova prevazilaženja pomoću metode studija budućnosti, uzročno-slojevite analize.

**Ključne riječi:** andragogija, cjeloživotno obrazovanje, uzročno-slojevita analiza

## **CHALLENGES OF ADULT EDUCATION IN THE DIGITAL ERA**

Pedagogues and didacticists have been proclaiming the idea of lifelong education since ancient times, regardless of whether adults continue their education, retrain or improve professionally. Adult education is important because it leads to personal development of the individual and balanced participation in social, economic and cultural development. The concept of lifelong education is an idea promoted by all significant European and international organizations. Although it is an integral part of regulations and is an indispensable part of everyone who

is actively working, lifelong education in the modern era implies the lifestyle of every individual and even elderly people who are not actively working.

The possibilities of inclusion in education are numerous in the modern era, from contact to online educational programs, training, improvement, retraining to learning entertainment content that will satisfy the personal interests of the individual. Online educational programs have contributed to overcoming the limitations due to the distance of the participants' residence from the place of teaching, as well as the time limit. Although there are numerous advantages of attending education online, it is also a significant challenge for middle-aged and elderly people who did not grow up with modern technology that accompanies this type of education. In this paper, we will investigate what these challenges are, but also the possibilities of overcoming them using the future study method, causal-layered analysis.

**Key words:** andragogy, lifelong education, causal-layered analysis

## **DINKA LIŠČIĆ CIPRIĆ**

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### **DIGITALIZACIJOM ENKULTURACIJE K OČUVANJU TRADICIJSKIH SADRŽAJA**

Spoznaja, usvajanje i primjenjivanje društvenih normi, vrijednosti i običaja predstavlja enkulturaciju, proces bez kojeg očuvanje i opstanak, ne samo kulture već i ukupne društvene zajednice, ne bi u potpunosti bilo moguće. Društvene zajednice propisuju što je prikladno, a što ne, te enkulturiraju mlade generacije unutar tih postavljenih okvira. Proces enkulturacije započinje u djetinjstvu te obuhvaća prijenos spoznaja s generacije na generaciju. Dolaskom mlađih članova u društvenu zajednicu njezini stariji pripadnici suočavaju se s digitalnim uređajima, platformama i drugačijim načinom života. Pripadnici digitalne generacije preispituju načine djelovanja unutar zajednice, provođenje enkulturacije i spoznavanje vlastitog identiteta. No, posjedovanje i upotreba digitalnih uređaja, društvenih mreža i platformi ne bi trebali imati nužno negativan predznak. Njihovim pravilnim, odgovornim i smislenim rukovanjem digitalizirati se može svaki potreban ili željeni sadržaj, pa tako i sadržaj kulturne baštine. Digitalizacijom tradicijskih sadržaja današnjoj se mladeži i djeci može pristupiti na njima razumljiv način. Tako društvena zajednica modernizira pristup razumijevanju, prihvaćanju i prenošenju kulturnih vrijednosti, normi i običaja. Ovaj rad donosi komparativni prikaz nekoliko primjera dobre prakse digitalizacije enkulturacije u odabranim zemljama svijeta, kojom su istraživači potaknuli na razmišljanje o modernom očuvanju kulturne baštine i time se suprotstavili procesima globalizacije i akulturacije.

**| Ključne riječi:** enkulturacija, digitalizacija, tradicijska baština, očuvanje

### **DIGITALIZATION OF ENCULTURATION AS A MEANS OF HERITAGE PRESERVATION**

Enculturation is defined as a process of realizing, adopting and applying social norms, values, and customs. Without it, preservation and survival of culture and society in general could not be possible. Social communities determine what is appropriate and what is not, and young generations are enculturated within these established frameworks. The process of enculturation begins in childhood and thus includes the transfer of knowledge from generation to generation. Younger members joining a social community leads to its older members being

exposed to digital devices and platforms as well as a different way of life. Members of the digital generation are re-examining the ways of acting within the community, carrying out enculturation and learning about their own identity. However, use of digital devices, social networks and platforms should not necessarily have a negative connotation of their own. If handled properly, responsibly and in a meaningful way, any content can be digitalized, including cultural heritage. Nowadays, traditional content can be digitalized, making it more youth-friendly than ever. That way, social communities can modernize their approach to understanding, accepting and passing down cultural values, norms and customs. This paper provides a comparative review of several examples of good practice related to the digitalization of enculturation in selected countries of the world, which encouraged researchers to think about modern preservation of cultural heritage and to oppose processes of globalization and acculturation.

| **Key words:** enculturation, digitalization, tradition, preservation



## ZRINKA LIŠČIĆ

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### RAZVOJ DIGITALNE KOMPETENCIJE U GLAZBENOM OBRAZOVANJU

Digitalna pismenost predstavlja jednu od ključnih kompetencija u kontekstu cjeloživotnog učenja i unaprjeđenja nastave, te kao takva iziskuje inovativne promjene na području trenutnih odgojno-obrazovnih metoda i postupaka. Ukoliko se osvrnemo na glazbene škole, njihova je dužnost ponuditi unaprjeđeno glazbeno obrazovanje koje ide ukorak s vremenom globalnog korištenja digitalne tehnologije. Jedan je od vodećih izazova glazbenih pedagoga motivacija učenika za nastavu i usvajanje nastavnog sadržaja uz implementiranje digitalne tehnologije, kako bi na taj način učenici mogli izraziti svoju kreativnost i glazbene sposobnosti. Bitno je dosljedno koristiti digitalne alate da ne bi posljedično predstavljali distrakciju učenicima tijekom učenja, odnosno odmagali u koncentraciji učenika. Važan aspekt implementiranja digitalne tehnologije u nastavu podrazumijevaju digitalne vještine i kompetencije učitelja za taj proces. Obrazovna tehnologija ponekad se neprikladno primjenjuje s ciljevima i svrhom koji ne odgovaraju didaktičko-metodičkim potrebama nastavnog procesa. Izazov je našeg vremena uvidjeti prednosti i nedostatke obrazovne tehnologije te sagledati sve mogućnosti njezine primjerene uporabe, a inovacije u nastavni proces uvoditi samo onda kada je to doista potrebno. Glazbenim školama neophodno je osuvremenjivanje nastavnog procesa i glazbenog poučavanja, što uvjetuje određenu razinu digitalne pismenosti i kompetentnosti učitelja.

**Ključne riječi:** digitalna tehnologija, glazbena škola, glazbeni pedagozi, digitalne kompetencije

### DEVELOPMENT OF DIGITAL COMPETENCE IN MUSIC EDUCATION

Digital literacy is one of the crucial competencies in the context of lifelong learning and improvement of teaching. As such, it requires innovative changes in current educational methods and practices. In the context of music schools, they must provide advanced music education adapted to the era of global use of digital technology. Some of the most significant challenges for music pedagogues are to motivate students for classes and modify the teaching content by using digital technology so that students can express their creativity and musical skills.

Consistent use of digital tools is essential, but it is crucial to prevent them from distracting students' learning, i.e., hindering students' concentration. An essential aspect of using digital technology in the classroom is the digital skills and competencies of the teacher. Educational technology is sometimes used inadequately, with goals and purposes not corresponding to the didactic-methodological requirements of the teaching process. The challenge nowadays is to recognize the advantages and disadvantages of educational technology and consider all the possibilities of its adequate use, introducing innovations into the teaching process when necessary. Music schools need to modernize the teaching process and music teaching, which requires a certain level of teachers' digital literacy and competencies.

**Key words:** digital technology, music school, music pedagogues, digital competencies

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### UMREŽENO DRUŠTVO KAO METASISTEMSKI PRIJELAZ U EVOLUCIJI DRUŠTVA

Promatrana s aspekta Velike povijesti, evolucija se može opisati kao proces kontinuirane integracije evolucijskog supstrata, u kojem svaki prethodni oblik materije biva integriran tako da tvori novi, evolucijski napredniji i kompleksniji oblik. Tako su se od subatomske čestice oblikovali atomi, od kojih su se oblikovale molekule, sve do pojave živih bića koja su u stanju simbolički misliti. Pritom je važno napomenuti da svaki novi evolucijski oblik predstavlja novu 'jedinku' sačinjenu od skupa međusobno integriranih 'jedinki' prethodne evolucijske razine. Taj se proces često naziva 'evolucija individualnosti', pri čemu nije riječ o nizu nekakvih 'kvantnih skokova' od jedne razine na drugu, već je riječ o postupnom procesu metasistemskih prijelaza – međukoraka prema novoj evolucijskoj razini. S tim u vezi, brojni teoretičari razmatraju evoluciju društva kao proces kreiranja evolucijski nove razine, u kojoj je društvo kao cjelina međusobno integrirano tako da tvori novu, evolucijski napredniju 'jedinku', dok je umreženo društvo tek metasistemski prijelaz na tom putu. U ovom radu osvrnut ćemo se na pojedine društvene fenomene koji su proizašli iz razvoja umreženog društva te ih razmotriti u kontekstu evolucije društva prema novoj evolucijskoj razini.

**Ključne riječi:** umreženo društvo, metasistemski prijelaz, Velika povijest, evolucija društva

### NETWORKED SOCIETY AS A METASYSTEM TRANSITION IN EVOLUTION OF SOCIETY

Observed from the perspective of Big History, evolution can be described as a process of continuous integration of the evolutionary substrate, where each previous form of matter is integrated to form a new, more evolutionarily advanced and complex form. Thus atoms were formed from subatomic particles, from which molecules were formed, until the appearance of living beings that are able to think symbolically. It is important to note that each new evolutionary form represents a new 'individual', made up of a set of mutually integrated 'individuals' of the previous evolutionary level. This process is often called the 'evolution of individuality', and it is not a series of 'quantum jumps' from one level to another, but a gradual process of metasystem transitions—intermediate steps towards a

new evolutionary level. In this regard, numerous theorists consider the evolution of society as a process of creating an evolutionarily new level, in which society as a whole is mutually integrated to form a new, more evolutionarily advanced 'individual', while the networked society is only a metasystem transition on that path. In this paper, we will look at certain social phenomena that have arisen from the development of a networked society and consider them in the context of the evolution of society towards a new evolutionary level.

**Key words:** networked society, metasystem transition, Big History, evolution of society

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### **STEM PODRUČJE OBRAZOVANJA U OSNOVNOJ ŠKOLI**

Potreba za poboljšanjem STEM područja obrazovanja dovodi do osjećaja neodređenosti u vezi prirode i konceptualizacije STEM obrazovanja, ne samo među edukatorima nego i među drugim sudionicima, uključujući učenike i kreatore odgojno-obrazovnih politika. Tema ovog istraživanja jest mogućnost postupnog uvođenja STEM obrazovanja u Republici Hrvatskoj i Bosni i Hercegovini prema usporedbi sa zemljama koje su davno počele s njegovim realiziranjem. Kada se govori o pedagoškim inovacijama, s pravom se postavlja pitanje njihovog suštinskog značenja, o mogućnostima njihova uvođenja i o učincima koje će time postići. Neki kreatori prosvjetne politike misle da uvođenje inovacija u nastavi prati ogromno materijalno ulaganje, potpunu reorganizaciju odgojno obrazovnog sustava te potpuno drugačije pripremanje nastavnog kadra. U ovom su radu izdvojene i obrađene neke inovacije u nastavi koje su uglavnom eksperimentalno provjerenе i već su pokazale pozitivne učinke u obrazovnim sustavima europskih zemalja i koje se mogu, bez iznimnih teškoća, postupno uvoditi i u obrazovne sustave Republike Hrvatske te Bosne i Hercegovine. Istraživanje je uključivalo upotrebu sljedećih znanstvenih metoda: analize i sinteze teme STEM obrazovanja i obrazovanja koje potiče rad s darovitim i talentiranim učenicima na primjerima dobre prakse uvođenja STEM područja u zemljama Europske unije, anketiranje učenika i nastavnika u osnovnim školama u Republici Hrvatskoj te Bosni i Hercegovini, i eksperimentalni dio (postupno uvođenje STEM područja u osnovno obrazovanje na primjeru »STEM kluba« i »Tima za talentirane i nadarene učenike« u Osnovnoj školi »Mladen Stojanović« u Laktašima). Da bi se ostvarilo što potpunije uključivanje učenika i nastavnika u STEM područje obrazovanja, u ovom se radu prikazuju teorije te praktične metode i oblici rada koji kroz organiziranje izvannastavnih aktivnosti osiguravaju osnovne pretpostavke za njegovu provedbu i odabir modela koji se mogu postupno uvoditi i u obrazovne sustave Republike Hrvatske i Bosne i Hercegovine. Istraživanje je provedeno u jedanaest škola iz Republike Hrvatske i jedanaest škola iz Bosne i Hercegovine. Uzorak nastavnika koji su sudjelovali u anketiranju je 119 iz Republike Hrvatske i 113 iz Bosne i Hercegovine. Uzorak učenika činio je 250 iz Republike Hrvatske i 274 iz Bosne i Hercegovine. Uzorak roditelja u BiH bio je 248. Roditelji iz Republike Hrvatske nisu sudjelovali u istraživanju iako im je bilo ponuđeno.

**Ključne riječi:** STEM edukacija, promicanje talentiranih i nadarenih učenika, obrazovanje za znanstvenu i tehničku kompetenciju, učenje bazirano na istraživanju, razvijanje identiteta STEM nastavnika

## **STEM FIELD OF EDUCATION IN ELEMENTARY SCHOOL**

The need to improve the STEM field of education causes a feeling of uncertainty in relation to the nature and conceptualization of STEM education not only among educators, but also among other participants, including students and policymakers. The topic of this research is the possibility of gradual introduction of STEM education in primary schools in comparison with the countries which started implementing it long ago. When talking about pedagogical innovations, one can rightly question their essential meaning, i.e. whether it is possible to introduce them and what effects they will produce. Some education policymakers think that the introduction of innovations in teaching requires huge financial investments, reorganization of the entire education system, and completely different preparation of teaching staff. This study briefly addresses some teaching innovations which have mainly been experimentally verified, which have already produced positive effects, and which can be gradually introduced in our conditions as well, without any major difficulties. The research used the following scientific methods: the method of analysis and synthesis of the topic of STEM education and the education which encourages working with gifted and talented students, a survey conducted among the students and teachers in primary schools in the Republic of Croatia and Bosnia and Herzegovina, and the experimental part (gradual introduction of the STEM field in primary education following the example of the STEM club and the Team for Talented and Gifted Students in the Elementary School "Mladen Stojanović" Laktaši). In order to achieve the most complete inclusion of students and teachers in the STEM field of education, this paper presents theories and practical methods and forms of work that, through the organization of extracurricular activities, provide the basic prerequisites for its implementation and selection of models that can gradually be introduced into the educational systems of the Republic of Croatia and Bosnia and Herzegovina. The research was conducted on eleven schools from the Republic of Croatia and eleven schools from Bosnia and Herzegovina. The sample of teachers who participated in the survey is 119 from the Republic of Croatia and 113 from Bosnia and Herzegovina, the sample of students is 250 from the Republic of Croatia and 274 from Bosnia and Herzegovina. The sample of parents from Bosnia and Herzegovina is 248. Parents from the Republic of Croatia did not participate in the research even though it was offered to them.

**Key words:** STEM education, promotion of talented and gifted students, education for scientific and technical competence, research-based learning, STEM teachers' identity development

## MIRELA MÜLLER

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# AUDIOVIZUALNI INPUT I REFLEKSIJA ZA PROMICANJE VJEŠTINA RAZGOVORA NA NJEMAČKOM KAO STRANOM JEZIKU

Promicanje komunikacijske kompetencije na stranom L2 jeziku uvijek je inovativna tematika u (post)digitalnom društvu. U audiovizualnoj metodi govorni jezik ima prednost pred pisanim. Ovdje se ističe slušanje s razumijevanjem jer su priprema za govor i živahan izgovor od velike važnosti za usvajanje stranog jezika. Vizualne reprezentacije, kao primjerice slike, koriste se u svim fazama obrade nastavnog materijala, a ne samo za prenošenje značenja. Stoga, simboličke slike mogu poslužiti kao vježbe i transferi u nastavi. Uz slike se prikazuju i audio zapisi razgovora. Nadalje, potrebno je uzeti u obzir i perspektive kulturoloških studija u kojima nastavnici stranog jezika imaju ulogu jezično-kulturnog posrednika. U radu se daje prijedlog kako se perspektive analize razgovora mogu koristiti na kulturološki osjetljiv način u nastavi njemačkog kao stranog jezika da bi se poboljšala recepcija te promišljanje autentičnog konverzacijskog metodičkog sadržaja na stranom jeziku. U istraživanju su uključeni sastavni dijelovi minimalnih videozapisa u paru i rada u PRAAT programu za analizu govora. Za snimanje govora koristio se Audacity Zoom H4n snimač. Istraživanje je provedeno u ljetnom i zimskom semestru akademske 2022./2023. godine u sklopu kolegija *Modeli govorne produkcije*, i to među studentima koji studiraju njemački kao strani jezik na Filozofskom fakultetu u Splitu. Analizirano je ukupno 12 audiovizualnih zapisa koje su snimili studenti, a na kojima se nalaze igrokazi nastali na temelju stvarnih životnih situacija. Takvi parametri bili su, primjerice, sljedeći: formalna situacija naspram neformalne situacije, upoznatost partnera/ice naspram neupoznatosti partnera/ice, ± hijerarhija, ± veličina brige, itd. Ovisno o govornom činu i komunikacijskom zadatku, bili su dostupni različiti parametri za varijacije. Da bi se omogućio detaljan pregled, duljina pojedinačnih igranja uloga bila je ograničena na 1–1,5 minuta. Cilj korištenja takvih minimalnih igara uloga u paru je uvježbavanje vještina promatranja, kako iz lingvističke tako i iz interkulturalne/kulturološke perspektive. Globalno razumijevanje komunikacijskog zadatka i situacije postiglo se vrlo brzo preliminarnim rasterećenjem i promišljanjem o relevantnim parametrima koji mogu imati pozitivne učinke za razvoj vještina razgovora na L2 stranom jeziku. Istraživanje zaključuje da je korištenje audiovizualnog inputa i njegova refleksija jako bitna za promicanje vještina razgovora na njemačkom kao stranom jeziku.

**Ključne riječi:** audiovizualna metoda, komunikacijske vještine, studenti, nastava, kulturološke studije



## AUDIOVISUAL INPUT AND REFLECTION FOR CONVERSATIONAL SKILLS PROMOTION IN GERMAN AS A FOREIGN LANGUAGE

Promoting communicative competence in a foreign L2 language is always an innovative topic in the (post)digital society. In the audiovisual method, spoken language takes precedence over written language. Listening comprehension is emphasized here because preparation for speaking and lively pronunciation is of great importance for acquiring a foreign language. Visual representations such as pictures are used in all stages of processing teaching material, and not only for conveying meaning. With that, symbolic images can serve as exercises and transfers in class. Along with the images, the audio recordings of the conversations are also displayed. Furthermore, it is necessary to take into account the perspectives of cultural studies, in which foreign language teachers play the role of linguistic and cultural mediators. The paper proposes how conversation analysis perspectives can be used in a culturally sensitive way in the teaching of German as a foreign language to improve the reception and reflection of authentic conversational methodical content in a foreign language. The research included components of minimal pair videos and work in the PRAAT speech analysis program. An Audacity Zoom H4n recorder was used to record speech. The research was conducted in the summer and winter of 2022/2023 academic year in the course *Models of Speech Production* among students studying German as a foreign language at the Faculty of Humanities and Social Sciences in Split. A total of 12 student audiovisual recordings were analyzed that recorded plays based on real-life situations. Such parameters were for example: formal situation versus informal situation, familiarity of the partner versus unfamiliarity of the partner, ± hierarchy, ± amount of concern, etc. Depending on the speech act and the communication task, different parameters were available for variation. To allow for a detailed review, the length of individual role plays was limited to 1–1.5 minutes. The goal of using such minimal pair role-playing games is to practice observational skills, both from a linguistic and an intercultural/cultural perspective. A global understanding of the communication task and situation was achieved very quickly by preliminary relief and reflection on the relevant parameters that can have positive students for the development of L2 foreign language conversational skills. The research has found that the use of audiovisual input and its reflection is very important for promoting conversational skills in German as a foreign language.

**Key words:** audiovisual method, communication skills, students, teaching, cultural studies

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## **INTERDISCIPLINARY INTEGRATION IN ACTION**

Interdisciplinarity is understood to require integration from multiple fields. But what is “integration”? How is it achieved? What facilitates or impedes it in the research process? I discuss specific findings about “integration” from our ethnographic investigations of pioneering research labs in the bioengineering sciences and the characteristics we identify as important to cultivate to facilitate ID research.

| **Key words:** integration, adaptive problem space, ID facilitation

## **INTERDISCIPLINARNA INTEGRACIJA U AKCIJI**

Interdisciplinarnost se razumijeva kao ono što zahtijeva integraciju iz više polja. Ali što je ‘integracija?’ Kako ju se može postići? Što ona olakšava ili otežava u istraživačkom procesu? Govorit ću o posebnim nalazima o ‘integraciji’ koji su proizašli iz naših etnografskih istraživanja provedenih u pionirskim istraživačkim laboratorijima u bioinženjerskim znanostima, a onda i o obilježjima za koja smatramo da je važno njegovati da bi se potaknulo interdisciplinarna istraživanja.

| **Ključne riječi:** integracija, prilagodljiv problemski prostor, poticanje interdisciplinarnosti

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### **SREDNJOVJEKOVLJE U PIKSELIMA I KADROVIMA. ISKUSTVO RADA NA KOLEGIJU SREDNJOVJEKOVNA POVIJEST I KREATIVNE INDUSTRIJE**

Rad se temelji na iskustvu proizašlom iz četverogodišnje prakse izbornog kolegija *Srednjovjekovna povijest i kreativne industrije* koji se izvodi na drugoj godini diplomskoga studija Povijesti na Filozofskom fakultetu u Osijeku. U okviru tog kolegija studenti trebaju, među ostalim, detaljno predstaviti i analizirati jedan filmski, računalni ili bilo koji drugi predložak (po vlastitom izboru) s područja suvremenih kreativnih industrija koji tematizira razdoblje srednjega vijeka. Iako taj kolegij nije pionirski ni u europskim, a ni u hrvatskim okvirima, ipak su analogni kolegiji i dalje vrlo rijetko u ponudi studijskih programa povijesti. Iskustvo na kolegiju sugerira da je apsolutna većina studenata bila motivirana za upis na studij povijesti upravo nekom od interpretacija povijesti u vizualnim medijima, najčešće filmovima, serijama ili računalnim igrama. S druge strane, posebice razdoblje srednjovjekovne povijesti studenti percipiraju kao suhoparno i 'dosadno'. Cilj je ovoga rada analizirati edukativne, tehnološke i kreativne ishode konvergencije tradicionalnih povijesnih narativa s njihovom interpretacijom u suvremenim kreativnim industrijama. Budući da se kolegij nalazi na završnoj godini studija, također je i dobar pokazatelj vještina koje su studenti stekli tijekom studija u razvitku vlastitog kritičkoga pristupa u analizi i razlikovanju 'stvarne' povijesti od one interpretirane kroz različite medije. Generalno, studenti koji su slušali navedeni kolegij ističu svoje visoko zadovoljstvo iskustvom i postignutim ishodima. Zaključno, digitalne bi sadržaje kreativnih industrija svakako bilo uputno značajnije integrirati na svim obrazovnim razinama na kojima se povijest podučava, uz neizostavno poticanje kritičkog pristupa svakom predlošku.

**| Ključne riječi:** Srednji vijek, kreativne industrije, podučavanje povijesti

### **THE MIDDLE AGES IN PIXELS AND FRAMES. WORK EXPERIENCE ON THE *MEDIEVAL HISTORY AND CREATIVE INDUSTRIES* COURSE**

The paper is based on the experience derived from the four-year practice of the elective course *Medieval History and Creative Industries* which is taught during the second year of graduate studies of History at the Faculty of Humanities and So-

cial Sciences in Osijek. In this course, students must, among other things, present and analyze in detail one film, computer game or any other template (of their own choice) from the field of contemporary creative industries that thematizes the period of the Middle Ages. Although this course is not first of its kind in neither European nor Croatian context, similar courses are still rarely offered in history study programs. The experience in the course suggests that the absolute majority of students were motivated to enroll in history studies precisely by one of the interpretations of history in visual media, most often films, series or computer games. On the other hand, especially the period of medieval history is perceived by students as dry and “boring”. The aim of this paper is to analyze the educational, technological and creative outcomes of the convergence of traditional historical narratives with their interpretation in contemporary creative industries. As the course is in the final year of history studies, it is also a good indicator of the skills students have acquired during their studies in developing their own critical approach in analyzing and distinguishing ‘real’ history from that interpreted through different media. In general, students who attended the course emphasize their high satisfaction with the experience and the results achieved. In conclusion, it would certainly be advisable to integrate the digital contents of creative industries more significantly at all educational levels where history is taught, with the inevitable encouragement of a critical approach to each template.

**Key words:** Middle Ages, creative industries, teaching history

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## **POSTDIGITALITY OF RESEARCH ON CROATIAN PHILOSOPHICAL HERITAGE: JOHN OF RAGUSA (CA. 1390 – 1443)**

Postdigitality has not bypassed research on Croatian philosophical heritage. On this occasion, we shall exemplify this claim by research conducted on the oration *Erit tibi gloria* (1424) by the Dubrovnik early Renaissance thinker Ivan Stojković (project FFOS-003).

*Erit tibi gloria* is an oration whose Latin autograph, as well as many of his other autographs, Stojković bequeathed to the Basel Dominicans. This oration is preserved in Basel's university library under the signature A VI 35.

For the purposes of our research, we obtained the oration *Erit tibi gloria* in digital form. The work on its transcription, translation into Croatian and content analysis was greatly supported by digital sources, tools and research methods. In our presentation, we shall offer an answer to the following question: is it possible to do research on Croatian philosophical heritage of Stojković's time without reaching for digital materials?

**Key words:** John of Ragusa, *Erit tibi gloria*, Croatian philosophical heritage, postdigitality

## **POSTDIGITALNOST ISTRAŽIVANJA HRVATSKE FILOZOFESKE BAŠTINE: IVAN STOJKOVIĆ (OKO 1390. – 1443.)**

Postdigitalnost nije zaobišla ni istraživanja hrvatske filozofske baštine. Tu ćemo tvrdnju ovom prilikom oprimirati istraživanjem govora *Erit tibi gloria* (1424.) dubrovačkog ranorenesansnog mislioca Ivana Stojkovića (projekt FFOS-003).

*Erit tibi gloria* je govor čiji je latinski autograf, kao i, uostalom, brojne druge svoje autografe, Stojković oporučno ostavio baselskim dominikancima. Taj se govor u tamošnjoj sveučilišnoj knjižnici čuva pod signaturom A VI 35.

Za potrebe našeg istraživanja, govor *Erit tibi gloria* pribavili smo u digitalnu obliku. Rad na njegovu prijepisu, pa prijevodu na hrvatski jezik i analiziranju sadržaja uvelike je bio potpomognut digitalnim izvorima, alatima i istraživačkim metodama. U izlaganju ćemo ponuditi odgovor na sljedeće pitanje: je li moguće istraživati hrvatsku filozofsku baštinu Stojkovićeve vremena bez posezanja za digitalnim materijalima?

**Ključne riječi:** Ivan Stojković, *Erit tibi gloria*, hrvatska filozofska baština, post-digitalnost

## DEJAN PERNJAK

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### DIGITALNA POVIJEST – PERSPEKTIVE U HRVATSKOJ

*Digitalna povijest* relativno je novi pojam koji se pojavljuje u Hrvatskoj i hrvatskoj historiografiji kao dio grane digitalne humanistike. S obzirom na opće stanje digitalizacije u Hrvatskoj, ne treba čuditi da su rasprave i literatura o tom području u pionirskoj fazi, odnosno gotovo da ih i nema. Zlatko Bukač još je 2011. godine istaknuo da se oko definicije »digitalnih humanističkih znanosti« već nekoliko godina pokušava dostignuti određena razina konsenzusa među mnogim istraživačima i teoretičarima, dok se termin konstantno reformulira, proispituje, promišlja i demonstrira kroz razne primjere, projekte i kolaboracije različitih vrsta. Upravo zbog širine i niza mogućnosti koje ta disciplina otvara istraživačima u različitim humanističkim područjima, i nije tako jednostavno niti moguće jednoznačno odgovoriti na pitanje što je to digitalna humanistika, istaknuli su 2023. godine u svojoj knjizi *Digitalna humanistika – neka viđenja* Iva Rosanda Žigo, Nikolaj Lazić i Marko Čubrilo. Digitalnu povijest u širem smislu možemo shvatiti kao pristup proučavanju i prezentiranju prošlosti koristeći se novim komunikacijskim tehnologijama računala, internetske mreže i softverskih sustava. Cilj je ove prezentacije prikazati kakvo je stanje prikupljanja, prezentiranja i širenje digitalnih materijala iz povijesti i historiografije općenito preko različitih *online* platformi u Hrvatskoj.

**ključne riječi:** digitalna povijest, digitalna humanistika, historiografija

### DIGITAL HISTORY – PERSPECTIVES IN CROATIA

*Digital history* is a relatively new term that appears in Croatia and Croatian historiography as part of the branch of digital humanities. Taking the general state of digitization in Croatia into consideration, it should not surprise that discussions and literature on the subject matter are in their pioneering phase, i.e. they are almost non-existent. Back in 2011, Zlatko Bukač pointed out that a certain level of consensus among many researchers and theoreticians has been trying to be reached on the definition of “digital humanities” for several years, while the term is constantly being reformulated, examined, thought through, as well as demonstrated through various examples, projects, and different sorts of collaborations. Exactly because of the breadth and range of possibilities that his discipline opens up for researchers in different fields of humanities, it is not so simple or possible to unambiguously answer the question of what digital humanities are, as Iva

Rosanda Žigo, Nikolaj Lazić, and Marko Čubrilo pointed out in their book *Digitalna humanistika – neka viđenja* published in 2023. Digital history in a broader sense can be understood as an approach to the study and presentation of the past using new communication technologies of computers, the Internet, and software systems. The aim of this presentation is to show the current state of collecting, presenting, and disseminating digital materials from history and historiography in general through various online platforms in Croatia.

| **Key words:** digital history, digital humanities, historiography



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### ECSTASY OF (HUMAN) DISAPPEARANCE: A VIRILIAN VISION

In the year 1936 Edmund Husserl published *The Crisis of the European Sciences*, a work of art in which he claimed that human “resides” in two different “realities”: life-world and scientific world. Today, we could take this division even further and together with Paul Virilio claim that the invention of multimedia lead to bifurcation of reality into actuality and virtuality. Actual reality represents our embodied being situated in space and active movement. On the contrary virtuality requires sedentariness of the body and submission of the eyes, the primary sense through which our intentionality engages in space, to prosthesis and machines which are changing our being *in situ* into telepresence. This telepresence is based on the cinematic perception of images and the speed of flowing information which we do not get to see due to user-friendly interface. Our bodies are becoming part of the technological prosthesis. In a virtual world of information users themselves are just information rushing through the net in a speed of light. Our embodied existence is disappearing in favour of “liquid, personal and standardized avatars.” In this lecture we outline some of the pleasant as well as dangerous aspects of this disappearance.

| **Key words:** Paul Virilio, disappearance, reality, virtuality, prosthesis

### ZANOS (ČOVJEKOVA) NESTAJANJA: VIRILIOVA VIZIJA

Edmund Husserl objavio je *Krizu europskih znanosti* 1936. godine, umjetničko djelo u kojem je tvrdio da čovjek »prebiva« u dvjema različitim »stvarnostima«: svijetu života i svijetu znanosti. Danas bismo tu podjelu mogli odvesti još i dalje te zajedno s Paulom Viriliom tvrditi da je izum multimedije doveo do bifurkacije stvarnosti na aktualnost i virtualnost. Stvarnu stvarnost čini naše utjelovljeno biće koje je smješteno u prostoru i aktivno se u njemu kreće. Nasuprot tome, virtualnost zahtijeva sjedilaštvo tijela i podvrgavanje očiju, primarnog osjetila putem kojeg se naša intencionalnost uključuje u prostor, protezama i strojevima koji mijenjaju naše biće *in situ* u teleprisutnost. Ta teleprisutnost temelji se na kinematografskoj percepciji slika i brzini protoka informacija koje ne vidimo zbog korisničkog sučelja. Naša tijela postaju dio tehnološke proteze. U virtualnom svijetu informacija korisnici su tek informacije koje jure mrežom brzinom

svjetlosti. Naše utjelovljeno postojanje nestaje u korist »tekućih, osobnih i standardiziranih avatara«. U ovom izlaganju ocrtat ću neke od ugodnih, ali i opasnih aspekata tog nestanka.

▮ **Ključne riječi:** Paul Virilio, nestajanje, stvarnost, virtualnost, proteza

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### **DIGITALNI SUSTAVI I OTUĐENJE: POGLED IZ KLASIČNE SOCIOLOGIJE**

U novoj digitalnoj stvarnosti, u kojoj svi cijene našu privatnost, ali mi nemamo efektivnu kontrolu nad njom, čini se relevantnim primijeniti Marxovu teoriju otuđenja za analizu položaja pojedinca u ekonomiji umreženog društva (Castells, 2000; Castells, 2003). Prošireni doseg digitalnog okruženja najizraženiji je u kontekstu otuđenja od proizvoda. Otisak ili proizvod naše društvenosti koji ostavljamo na digitalnim platformama Mreže nije naš – on postaje tuđi kapital. Komunikacija, socijalizacija i društvenost kao temelji za društveni razvoj osobe (Enfield & Levinson, 2006) postaju nagomilani rad pod okriljem digitalnih platformi, a posljedice tog procesa postaju sve vidljivije u medicinskim (Spitzer, 2016) i socio-psihološkim istraživanjima (Twenge, 2018; Keles i sur., 2020). Istodobno je prisutan klasični oblik otuđenja radnika – sve što je proizvod plaćenog rada preko platformi, programa i slično, također služi kao kapital Mreže i u novom vremenu predstavlja objekt za treniranje umjetne inteligencije. U toj perspektivi dimenzija otuđenja važna je sociološka ideja, koncept koji rasvjetljuje pozadinu aktualnih procesa izgradnje društvene strukture svodeći ih na osnovna pitanja društvenosti, proizvodnje, znanja i moći. I opet se u konačnici postavlja Marxovo pitanje: dolazimo li u situaciju da svijet stvari sve intenzivnije obezvrjeđuje čovjekov svijet?

**| Ključne riječi:** alijenacija, digitalne platforme, društvenost, mreža

### **DIGITAL SYSTEMS AND ALIENATION: A VIEW FROM CLASSICAL SOCIOLOGY**

In new digital reality where everyone values our privacy, but we do not have effective control over it, it seems relevant to take Marx's theory of alienation and apply in analysis of individual's position in the economy of network society (Castells, 2000; Castells, 2003). The extended overreach of the digital environment is most expressed in alienation from the product itself. The imprint or product of our sociability that we leave on digital platforms on the network is not ours—it becomes someone else's capital. Communication, socialization and sociability as grounds for social development of person (Enfield & Levinson, 2006) become accumulated labour under the shell of digital platforms, and consequences of this process are increasingly visible in medical (Spitzer, 2016) and socio-psychologi-

cal research (Twenge, 2018; Keles et al., 2020). The classical form of alienation of worker is simultaneously present—every product of paid work over platforms, software and similar, also serves as network capital, and in the present becomes an object for training artificial intelligence. From that perspective types of alienation are important sociological idea and a concept that elucidates central questions of sociability, production, knowledge and power. In the end comes Marx's question: are we in a situation where the world of things devalues the human world?

| **Key words:** alienation, digital platforms, sociability, network

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### UPORABA TISKANIH IZVORA U PISANJU RADOVA U (POST)DIGITALNOM DOBU

Kada govorimo o digitalnom ili postdigitalnom dobu, rijetko pomišljamo na nešto papirnato i opipljivo. Novi trendovi u društvu i znanosti mogu stvoriti negativnu sliku prema održivosti knjižnica u budućnosti, njihovoj ulozi i potrebi, ali sve više i o potrebi za tiskanom literaturom. No, treba istaknuti da neki izvori upućuju na to da je prva knjižnica postojala i 3000 godina pr. Kr. Toliko je godina odolijevala promjenama i uspijevala se prilagoditi društvu i odgovoriti na potrebe. Kolike su danas potrebe za tiskanim izvorima u akademskoj zajednici, u kojoj je trend objavljivanja u elektroničkom obliku popularan već dugo? Zahtijevaju li mentori i dalje da se u različitim vrstama rada koristi određen broj tiskanih izvora? Podrazumijeva li to i uporabu tiskanog digitaliziranog izvora?

Kroz istraživanje u koje će biti uključeni znanstvenici, istraživači i osobe koje su završile minimalno sveučilišni preddiplomski studij ili stručni preddiplomski studij, pokušat će se odgovoriti na spomenuta pitanja te pokušati saznati je li u posljednje tri godine smanjen broj novih, objavljenih tiskanih izvora stručne i znanstvene literature. Također, cilj je saznati smatraju li se tiskani izvori relevantnijima od elektronski dostupnih ili autori smatraju izbor forme literature irelevantnim. Lokacija ispitanika ograničit će se na područje sveučilišta u Republici Hrvatskoj.

**Ključne riječi:** tiskani izvori, akademska zajednica, pisanje radova, izbor literature

### THE USE OF PRINTED SOURCES IN WRITING PAPERS IN THE (POST)DIGITAL ERA

When we talk about the digital or postdigital era, we rarely think of something paper and tangible. New trends in society and science can create a negative image regarding the sustainability of libraries in the future, their role and need, but increasingly also about the need for printed literature. However, it should be noted that some sources indicate that the first library existed in 3000 BC. For so many years, she resisted changes and managed to adapt to society and respond to needs. What are the needs for printed sources in the academic community to-

day, where the trend of publishing in electronic form has been popular for a long time? Do mentors still require that a certain number of printed sources be used in different types of work? Does this include the use of a printed digitized source?

Through a survey that will involve scientists, researchers and people who have completed at least university undergraduate studies or professional undergraduate studies, an attempt will be made to answer the above questions and try to find out whether the number of new published printed sources of professional and scientific literature has decreased in the last three years. Also, the goal is to find out whether printed sources are considered more relevant than those available electronically or whether the authors consider the choice of literature form irrelevant. The location of the respondents will be limited to the area of the university in the Republic of Croatia.

**Key words:** printed sources, academic community, writing papers, literature selection

## NEMANJA SPASENOVSKI

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# INTERDISCIPLINARAN PRISTUP ISTRAŽIVANJU KONZUMERIZMA

Koristeći se terminom *konzumerizam* u svakodnevnicima, najčešće se referiramo na tendenciju ljudi da se u suvremenom društvu opredijele za način života koji uključuje stjecanje materijalnih dobara i korištenje usluga koji im nisu neophodne (Miles i sur., 2005). Da bi se znanstveno pristupilo interpretiranju tog fenomena, potrebna je analiza koja zahtijeva interdisciplinarni pregled društvenih i humanističkih znanosti unutar kojih se konzumerizam istražuje u svojem spektru značenja koji pojam obuhvaća (Miles i sur., 2005; Jacobsen & Poder, 2008; Smart, 2010). Zygmunt Bauman tvrdi da je najširi opis onaj u kojem je konzumerizam »vrsta društvenog uređenja« (Bauman, 2007, str. 28). Prema Baumanovu mišljenju, konzumerizam proizlazi iz »ljudskih želja koje su pretvorene u glavnu pogonsku i operativnu snagu društva, silu koja koordinira sustavnu reprodukciju, društvenu integraciju, i društvene slojeve a formira i identitete ljudskih jedinki, te igra glavnu ulogu u procesima samoidentifikacije pojedinca« (Bauman, 2007, str. 28). Ben Fine tvrdi da se konzumerizam pojavio kada je »potrošnja preuzela ulogu proizvodnje« (Fine, 2002, str. 3). Interdisciplinarnom analizom povijesne, ekonomske, filozofske, antropološke, sociološke i psihološke literature moguće je utvrditi zajedničke pojmove koji se koriste u proučavanju konzumerizma, kao što su *proizvodnja*, *potrošnja* te *potrošačko društvo*. *Potrošnja* služi kao termin kojem se konzumerizam suprotstavlja radi lakšeg razumijevanja, jer potrošnja je prvenstveno aktivnost kojom ljudi zadovoljavaju svoje osnovne životne potrebe, dok je konzumerizam aktivnost unutar suvremenog društva kojom se zadovoljavaju želje pojedinca. *Potrošačko društvo* je jedini oblik društva unutar kojeg su obrasci konzumerističkog ponašanja mogući (Lodziak, 2002; Bauman, 2007). Pojam *potrošača* nalazi se u središtu filozofskih, socioloških, ekonomskih, psiholoških i antropoloških istraživanja konzumerističkog društva. I u svakodnevnoj praksi kreatori politika, trgovci, političari, ekolozi i novinari vrlo se lako koriste pojmovima *konzumerizam* i *potrošač* (Lodziak, 2002; Miles i sur., 2005). U 21. stoljeću dogodio se prelazak s definiranja pojedinca kao radnika ili građanina na definiranje pojedinca potrošačem (Gabriel & Lang, 2006). Prava i obveze suvremenog čovjeka proizlaze iz njegova položaja potrošača. Politički su izbori pojedinca glasovi za one koji potrošačima obećavaju najbolju ponudu, a uživanje u životu gotovo je sinonim za kvantitetu onoga što se konzumira (Gabriel & Lang, 2006). »Potrošač je postao bogolika figura« (Gabriel & Lang, 2006, str. 1). S jedne se strane tvrdi da

potrošači diktiraju proizvodnju, potiču inovacije te kreiraju modernu politiku. S druge strane protivnici konzumerizma tvrde da je potrošačko društvo iluzija slobode ovisna o apsurdnim težnjama za sve većim životnim standardom (Lodziak, 2002; Bauman, 2007). Potrošnja je svakako prestala biti sredstvo zadovoljenja osnovnih životnih potreba te je počela prožimati društvene odnose, osobne identitete, životne stilove i vrijednosti (Gabriel & Lang, 2006). Konzumerizam je stoga u drugoj polovici 20. stoljeća postao fenomen istraživanja u akademskim raspravama unutar širokog spektra društvenih i humanističkih znanosti. »Ako je 19. stoljeće sinonimno za označavanje ljudi kao radnika i stvaratelja bogatstva, konzumerizam je neizostavan u svakoj interpretaciji 21. stoljeća.« (Gabriel & Lang, 2006, str. 1). Interdisciplinarni pristup istraživanju konzumerizma stoga omogućuje kategorizaciju pojmova koji pomažu boljem shvaćanju i razumijevanju tog suvremenog fenomena.

**Ključne riječi:** interdisciplinarni pristup, konzumerizam, potrošnja, proizvodnja, potrošačko društvo

## **INTERDISCIPLINARY APPROACH IN CONSUMERISM RESEARCH**

Using the term consumerism in everyday life, we most often refer to the tendency of people in modern society to opt for a way of life that includes the acquisition of material goods and the use of services that are not necessary (Miles et al., 2005). In order to scientifically approach the interpretation of the phenomenon, an analysis of the phenomenon of consumerism is needed, which requires an interdisciplinary review of social and humanistic sciences within which consumerism is investigated in its spectrum of meanings that the term encompasses (Miles et al., 2005; Jacobsen & Poder, 2008; Smart, 2010). Zygmunt Bauman claims that the broadest description is one in which consumerism is “a type of social order” (Bauman, 2007, p. 28). According to Bauman, consumerism stems from “human desires that have been transformed into the main driving and operational force of society, a force that coordinates systemic reproduction, social integration, and social layers and forms the identities of human individuals, and plays a major role in the processes of individual self-identification.” (Bauman, 2007, p. 28). Ben Fine argues that consumerism emerged when “consumption took over the role of production” (Fine, 2002, p. 3). Through an interdisciplinary analysis of historical, economic, philosophical, anthropological, sociological and psychological literature, it is possible to determine common concepts used in the study of consumerism, such as *production*, *consumption* and *consumer society*. *Consumption* serves as a term to which consumerism is opposed for easier



understanding, because consumption is primarily an activity by which people satisfy their basic life needs, while consumerism is an activity within modern society that satisfies individual desires. *Consumer society* is the only form of society within which patterns of consumer behavior are possible (Lodziak, 2002; Bauman, 2007). The term *consumer* is at the center of philosophical, sociological, economic, psychological and anthropological research on consumerist society. And in everyday practice policy makers, marketers, politicians, ecologists and journalists very easily use the terms consumerism and consumer (Lodziak, 2002; Miles et al., 2005). In the 21st century, there was a shift from defining the individual as a worker or citizen to defining the individual as a consumer (Gabriel & Lang, 2006). The rights and obligations of modern man derive from his position as a consumer. Individual political choices are votes for those who promise consumers the best offer, and enjoyment of life is almost synonymous with the quantity of what is consumed (Gabriel & Lang, 2006). “The consumer has become a godlike figure” (Gabriel & Lang, 2006, p. 1). On the one hand, it is claimed that consumers dictate production, encourage innovation and create modern politics. On the other hand, opponents of consumerism claim that consumer society is an illusion of freedom, dependent on absurd aspirations for an ever-increasing standard of living (Lodziak, 2002; Bauman, 2007). Consumption certainly ceased to be a means of meeting basic life needs and began to permeate social relations, personal identities, lifestyles and values (Gabriel and Lang, 2006). Therefore, in the second half of the 20<sup>th</sup> century, consumerism became a research phenomenon in academic discussions within a wide spectrum of social and humanistic sciences. “If the 19th century is synonymous with labeling people as workers and creators of wealth, consumerism is indispensable in any interpretation of the 21st century” (Gabriel & Lang, 2006, p. 1). An interdisciplinary approach to the research of consumerism therefore enables the categorization of concepts that help to better understand and analyze this contemporary phenomenon.

**Key words:** interdisciplinary approach, consumerism, consumption, production, consumer society

## **ETIČKI IZAZOVI ZNANOSTI U (POST)DIGITALNOM DRUŠTVU: KONSEKVENTNA DETRONIZACIJA FUNDAMENTALNIH PARADIGMI**

Ovaj rad prezentira rezultate sociološkog istraživanja koje polazi od hipoteze o potpunom odbacivanju fundacionalističkih paradigmi kao preduvjeta za novi *ethos* suvremenog (post)digitalnog društva. Ovaj heterodokсни zaokret od tradicionalnih normi, esencijalnih vrijednosti i apsolutnih istina, na kojima je utemeljen samospoznajući i samoodređujući ‘usidreni’ identitet, analiziran je kroz kritički anti-fundacionalni i anti-dogmatski pristup suvremene znanosti, koja bez obzira na pretpostavljenu slobodu mora odgovoriti na neizbježne etičke zahtjeve kojima se osigurava ljudski integritet i humanistička aksiologija društvene zbilje. Tijekom istraživanja analitičko-deduktivnim metodama propitivani su mogući dometi utjecaja etičkih ograničenja koja bi imala zadatak da determiniraju predmetna područja, metode i probleme znanstvenih istraživanja da bi epistemologija (post)digitalnog društva sačuvala ‘humano lice’ ljudskih identiteta. Kompleksnost istraživanja ogleda se u metodološki ekstenzivnim kvalitativnim pristupima koji propituju kauzalne veze između bezgraničnih mogućnosti suvremene znanosti u (post)digitalnom društvu s jedne, i etičkih ograničenja s druge strane, koja nužno deriviraju iz fundamentalnih paradigmi. Aporije osiguranja etičkih imperativa u tehniciziranom, (post)digitalnom društvu zauzimaju središnju poziciju ovog istraživanja i kreiraju epistemički okvir unutar kojeg suvremena znanost fungira. Istražujući reperkusije etičkog interveniranja u strukturu suvremenih znanstvenih paradigmi, kroz rad se analitički propituju funkcionalni modeli utjecaja koji kreiraju znanstveno-istraživački ambijent, određujući predmete i ciljeve istraživanja kao i svojevrsnu kontrolu razvoja i tendencije kretanja (strukture i dinamike) (post)digitalnog društva. Rezultati istraživanja ukazuju na deficijentan repozitorij etičkih kategorija kojima bi se suvremeno (post)digitalno društvo trebalo koristiti kao korektivnim ili usmjeravajućim indikatorima da bi, unutar ekstenzivnog holističkog znanja, digitalna tehnologija i društvena ontologija sinergično i kumulativno osiguravale postulirani univerzalni *telos* – kontrolu znanosti nad prirodom i društvom.

**Ključne riječi:** etika, (post)digitalno društvo, znanost, epistemologija, identitet

## **ETHICAL CHALLENGES OF SCIENCE IN (POST) DIGITAL SOCIETY: CONSEQUENT DETRONIZATION OF FUNDAMENTAL PARADIGMS**

This paper presents the results of sociological research that starts from the hypothesis of the complete rejection of foundationalist paradigms as a prerequisite for the new *ethos* of contemporary (post)digital society. This heterodox turn from traditional norms, essential values and absolute truths, on which a self-knowing and self-determining “anchored” identity is based, is analyzed through a critical anti-foundational and anti-dogmatic approach of contemporary science, which, regardless of the assumed freedom, must respond to the inevitable ethical demands that ensures human integrity and humanistic axiology of social reality. During the research, analytical deductive methods were used to question the possible scope of the influence of ethical restrictions that would have the task of determining the subject areas, methods and problems of scientific research so that the epistemology of the (post)digital society preserves the “humane face” of human identities. The complexity of the research is reflected in methodologically extensive qualitative approaches that question the causal links between the boundless possibilities of contemporary science in (post)digital society on the one hand and ethical limitations on the other hand that necessarily derive from fundamental paradigms. The aporias of securing ethical imperatives in a technicized, (post)digital society occupy the central position of this research and create the epistemic framework within which modern science functions. Investigating the repercussions of ethical intervention in the structure of contemporary scientific paradigms, the work analytically questions the functional models of influence that create the scientific-research environment, determining the subjects and goals of research as well as a kind of control of the development and movement tendencies (structure and dynamics) of (post)digital society. The research results point to a deficient repository of ethical categories that contemporary (post)digital society should use as corrective or guiding indicators so that, within extensive holistic knowledge, digital technology and social ontology synergistically and cumulatively ensure the postulated universal *telos*—the control of science over nature and society.

**| Key words:** ethics, (post)digital society, science, epistemology, identity

## **ROMAN ŠIMUNOVIĆ**

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### **PARASOCIJALNI ODNOSI U DIGITALNOM DOBU: FILOZOFSKI PRISTUP**

U kontekstu (post)digitalnog doba, uzorak umjetne inteligencije (UI) mijenja osnove međuljudskih veza i istovremeno inicira pojavu složenih parasocijalnih odnosa: emocionalnih povezanosti s virtualnim entitetima. Ovaj rad ističe važnost interdisciplinarnosti, koja bi uključivala sociološke, medijske, komunikološke i filozofske perspektive, s ciljem dubinske analize unutar kapitalističkog okvira. Sociologija istražuje na koji način društveni konstrukti formiraju našu interakciju s umjetnom inteligencijom, dok istovremeno kapitalizam pruža pozadinu za razvoj tehnologije. Medijska teorija otkriva kako UI oblikuje emocionalne veze socijalnih aktera putem analize medijskog sadržaja i komunikacije. Filozofija postavlja ključna etička pitanja o povezanosti s tehnologijom te se stavlja naglasak na kritičkom promišljanju parasocijalnih odnosa. Sve to odvija se u postdigitalnom okruženju, u kojem UI postaje sastavnim dijelom svakodnevice unutar okvira kapitalističkih struktura. Integritet ovih raznolikih perspektiva doprinosi dublje ukorijenjenom razumijevanju suvremenih društvenih dinamika i njihove povezanosti s tehnološkim napretkom.

**Ključne riječi:** parasocijalni odnosi, umjetna inteligencija, interdisciplinarnost, filozofija

### **PARASOCIAL RELATIONSHIPS IN THE DIGITAL ERA: PHILOSOPHICAL APPROACH**

In the context of the (post)digital era, the pattern of artificial intelligence (AI) is reshaping the foundations of human connections while simultaneously giving rise to complex parasocial relationships: emotional bonds with virtual entities. This paper underscores the significance of interdisciplinary sociological, media, communication, and philosophical perspectives, aiming for an in-depth analysis within the framework of capitalism. Sociology delves into how societal constructs shape our interaction with AI, with capitalism concurrently providing the backdrop for technological advancement. Media theory unveils how AI molds emotional connections among social actors through the analysis of media content and communication. Philosophy raises pivotal ethical questions about the association with technology and emphasizes critical contemplation of para-

social relationships. All of this unfolds in the postdigital environment, where AI becomes an integral part of daily life within the context of capitalist structures. The integrity of these diverse perspectives contributes to a more deeply rooted understanding of contemporary social dynamics and their alignment with technological progress.

**Key words:** parasocial relationships, artificial intelligence, interdisciplinarity, philosophy

## **ZRINKA ŠIMUNOVIĆ, VIŠNJA VEKIĆ-KLJAIĆ**

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### **OBRAZOVANJE 4.0: NADOGRAĐNJA I ULAGANJE U OBRAZOVNI SUSTAV**

Tehnološki napredak koji proizlazi iz industrijskih revolucija ima izravan utjecaj na područje obrazovanja. Obrazovanje 4.0 suočava se s promjenama (post)digitalnog društva koje zahtijeva prilagodbu novim tehnologijama i zahtjevima tržišta rada. Ovi transformativni pomaci zahtijevaju od obrazovnog sustava određeni stupanj fleksibilnosti, inovativnosti i naglasak na izgradnji ključnih kompetencija. Očekivanja od obrazovnog sustava brzo su poduzimanje neophodnih poboljšanja i prilagodbi, čime bi se učenike na vrijeme pripremilo za nadolazeće izazove, a s tim u vezi i pedagoge koji bi trebali biti pripremljeni i senzibilizirani za kritičko promišljanje o njihovu poučavanju pokazujući stalnu predanost stjecanju novog znanja. Obrazovanje 4.0 obuhvaća cjeloviti pedagoški pristup koji predlaže raznolikost i individualizirani modalitet poučavanja, čime se uspostavlja temelj za cjeloživotno učenje. Iako je riječ o novoj paradigmi obrazovanja, izazovi s kojima se taj sustav suočava nisu novina. Riječ je o općenitom otporu prema promjenama, nedostatku resursa i potrebi za prilagodbom institucijskih okvira. Unatoč tome, Obrazovanje 4.0 neizbježan je korak za pripremu društva budućnosti. Nadogradnja postojećih obrazovnih sustava, podrška učiteljima, inoviranje kurikuluma i poticanje cjeloživotnog učenja ključni su elementi 4.0 obrazovne paradigme.

**Ključne riječi:** industrijska revolucija, obrazovni sustav, (post)digitalno društvo, suvremeno društvo, tehnološki napredak

### **EDUCATION 4.0: UPGRADING AND INVESTING IN EDUCATIONAL SYSTEM**

Technological advancements resulting from industrial revolutions have a direct impact on the field of education. Education 4.0 faces the changes of the (post)digital society, which requires adaptation to new technologies and the demands of the labour market. These transformative shifts require a certain degree of flexibility, innovation and an emphasis on building key competencies from the education system. Expectations from the educational system are to quickly undertake the necessary improvements and adjustments, which would prepare the

students in time for the upcoming challenges, and in this regard, pedagogues who are prepared and sensitized for critical reflection on their teaching, showing a constant commitment to acquiring new knowledge. Education 4.0 includes a comprehensive pedagogical approach that proposes diversity and individualized teaching modality, thus establishing the foundation for lifelong learning. Although it is a new paradigm of education, the challenges that this system faces are not new. It is about general resistance to change, lack of resources and the need to adapt institutional frameworks. Nevertheless, Education 4.0 is an inevitable step to prepare the future society. Upgrading existing educational systems, supporting teachers, innovating curriculum and encouraging lifelong learning are key elements of the 4.0 educational paradigm.

**Key words:** industrial revolution, educational system, (post)digital society, contemporary society, technological progress

## **PRIMJENA DIGITALNE TEHNOLOGIJE U NASTAVI**

Primjena digitalne tehnologije u našim životima tolika je da ju uglavnom primjećujemo prema njezinom odsustvu. U ovom se radu analiziraju dosadašnja teorijska promišljanja i istraživanja o primjeni digitalne tehnologije u nastavi, njezinim prednostima i nedostacima, kao i izazovima koje nosi sa sobom. Također se prikazuju i stavovi učitelja osnovnih i srednjih škola o primjeni digitalne tehnologije u nastavi. U konačnici, očekuje se da će rad doprinijeti razumijevanju potreba za primjenom digitalne tehnologije u nastavi, ali i razumijevanju potreba i stavova učitelja s obzirom na nedostatke i izazove koje digitalna tehnologija nosi sa sobom.

**| Ključne riječi:** digitalna tehnologija, nastava, učenik, učitelj

## **APPLICATION OF DIGITAL TECHNOLOGY IN TEACHING**

The application of digital technology in our lives is so great that we mostly notice it by its absence. This paper analyzes the previous theoretical reflections and research on the application of digital technology in teaching, its advantages and disadvantages as well as the challenges it brings with it. The views of primary and secondary school teachers on the application of digital technology in teaching are also presented. Ultimately, it is expected that the work will contribute to the understanding of the needs for the application of digital technology in teaching, but also to the understanding of the needs and attitudes of teachers regarding the disadvantages and challenges that digital technology brings with it.

**| Key words:** digital technology, teaching, student, teacher



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## **ANDRAGOG – OSNOVA KVALITETNOG SUSTAVA OBRAZOVANJA ODRASLIH**

Unatoč stoljetnoj tradiciji institucionalnog obrazovanja odraslih u Republici Hrvatskoj te kontinuiranom razvoju andragoške teorije i prakse, tek su se posljednjih godina, a u skladu s Hrvatskim kvalifikacijskim okvirom, počeli propisivati standardi za profesionalizaciju andragoških kadrova kroz stvaranje standarda zanimanja i standarda kvalifikacije za andragoge.

Ovaj rad ima za cilj predstaviti tijek nastajanja standarda za profesionalizaciju andragoških kadrova te dokazati potrebu za provedbom sveučilišnog obrazovanja andragoga kroz analizu potrebnih kompetencija za obavljanje poslova u obrazovanju odraslih.

Odgovor na navedeno dao je Filozofski fakultet u Rijeci, koji će provoditi studijski program za Sveučilišni izvanredni diplomski studij Andragogije. Tek provedbom tog studijskog programa i stvaranjem kvalitetnih profesionalnih andragoških kadrova, razvit će se i kvaliteta sustava obrazovanja odraslih.

**Ključne riječi:** Hrvatski kvalifikacijski okvir, profesionalizacija andragoških kadrova, Sveučilišni izvanredni diplomski studij Andragogije, kvaliteta sustava obrazovanja odraslih

## **ANDRAGOGIST – THE BASIS OF A QUALITY SYSTEM OF ADULT EDUCATION**

Despite the centuries-old tradition of institutional adult education in the Republic of Croatia and the continuous development of andragogical theory and practice, only in recent years, and following the Croatian Qualification Framework, have standards been prescribed for the professionalization of andragogic staff through the creation of Occupational Standards and Qualification Standards for andragogist.

This paper aims to present the development of standards for the professionalization of andragogical staff and to prove the need for the implementation of university education of andragogist through the analysis of the necessary competencies for performing tasks in adult education.

The answer to the above was given by the Faculty of Humanities and Social Sciences in Rijeka, which will implement the study program for the University part-time graduate study in Andragogy. Only through the implementation of that study program and the creation of quality professional andragogical staff will the quality of the adult education system develop.

**Key words:** Croatian Qualification Framework, professionalization of andragogical staff, University Part-Time Graduate Study in Andragogy, the quality of adult education system

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### **DRUŠTVENI ANGAŽMAN OSJEČANA/KI ZAPOSLENIH U SEKTORU INFORMACIJSKIH TEHNOLOGIJA**

Tijekom posljednjih 15 godina Osijek se istaknuo kao vodeći grad u Hrvatskoj po pitanju razvoja IT sektora, što ga je stavilo na kartu kao grad u kojem se može graditi uspješna karijera, s brzim mogućnostima zaposlenja i prostorom za napredovanje. Samim time, osobe koje rade u IT sektoru imaju mogućnost steći značajan društveni kapital, postavljati trendove i utjecati na način života u gradu. Unatoč tome, postoji percepcija da su IT profesionalci udaljeni od lokalne zajednice zato što često rade za klijente izvan grada, pa čak i izvan Hrvatske. Da bismo izgradili odgovorniju i povezanu zajednicu, ključno je poticati IT stručnjake na aktivno sudjelovanje u društvenim inicijativama i na promišljanje o lokalnoj zajednici.

S ciljem analiziranja dosadašnjih iskustava i identificiranja čimbenika koji utječu na njihovu aktivnu ulogu u lokalnoj zajednici, provedeno je istraživanje na uzorku od 100 Osječana/ki zaposlenih u IT sektoru. Istraživanje se temeljilo na ispitivanju različitih aspekata društvenog angažmana, uključujući afektivnu, bihevioralnu i kognitivnu dimenziju, da bi se dobila cjelovita slika o motivaciji ispitanika i razini sudjelovanja u lokalnoj zajednici. Ovaj rad, osim što će prikazati rezultate spomenutog istraživanja, pružit će i prijedlog preporuka za stvaranje aktivnosti u zajednici koje bi privukle i angažirale osobe iz IT sektora prema njihovim interesima i sposobnostima.

**Ključne riječi:** aktivna participacija, društveni angažman, IT sektor, civilno društvo

### **SOCIAL ENGAGEMENT OF THE PEOPLE OF OSIJEK EMPLOYED IN THE IT SECTOR**

The During the last 15 years, Osijek has stood out as a leading Croatian city in terms of the development of the IT sector, which has put it on the map as a city where you can build a successful career, with fast employment opportunities, and room for advancement. By doing so, people working in the IT sector have the opportunity to acquire significant social capital, set trends, and influence the way of life in the city. Despite this, there is a perception that IT professionals are distant from the local community, often working for clients outside the city, and

even outside of Croatia. In order to build a more responsible and connected community, it is crucial to encourage IT professionals to actively participate in social initiatives and to reflect on the local community.

With the aim of analysing past experiences and identifying factors that influence their active role in the local community, a survey was conducted on a sample of 100 people employed in the IT sector. The research was based on the examination of various aspects of social engagement, including affective, behavioural, and cognitive dimensions, in order to obtain a complete picture of the respondents' motivation and level of participation in the local community. This paper, in addition to presenting the results of the mentioned research, will also provide recommendations for creating activities in the community that would attract and engage people from the IT sector according to their interests and abilities.

**| Key words:** active participation, social engagement, IT sector, civil society

## **SPOLNI ODGOJ U ODGOJNO-OBRAZOVNIM USTANOVAMA – STARI I NOVI IZAZOVI 21. STOLJEĆA**

Adolescencija predstavlja izazovno životno razdoblje velikih i burnih promjena koje se odražavaju kroz tjelesne, emocionalne, psihosocijalne i kognitivne promjene osobe. Svjetska zdravstvena organizacija (WHO, 2015) definira adolescente kao osobe između 10 i 19 godina, dok neke definicije govore o mladima između 15. i 24. godine ili mladima između 10. i 24. godine života. Razvidno je da su dobne granice razdoblja adolescencije različite i disperzivne te da se tijekom vremena mijenjaju i prilagođavaju specifičnim biološkim potrebama osobe u razvoju, kao i što na razvoj osobe utječu i brojne socijalne promjene i uvjeti života (kvaliteta života, zdravstveni uvjeti, tehnološka razvijenost i drugi).

Jedan od ključnih aspekata adolescencije je razvoj spolnosti i stvaranje identiteta povezanog sa spolnošću, pri čemu je iznimno važno informiranje i poučavanje odgovornom spolnom ponašanju. Mladi u periodu adolescencije skloni su eksperimentiranju, impulzivnom ponašanju, pokazuju osjećaje svemoćnosti, romantiziraju intimne odnosa, podložni su socijalnim pritiscima vršnjaka i medija, pokazuju odlike nezrelosti u promišljanju o posljedicama osobnog ponašanja, što ih čini podložnim rizicima i rizičnom ponašanju. Adolescenti ulaze u spolne odnose sve ranije. Pritom su nedovoljno ili neadekvatno informirani o spolnosti i spolnom zdravlju, a mediji i vršnjaci predstavljaju glavne izvore informacija, koje su često netočne i pružaju iskrivljenu sliku o spolnosti i stvaranju spolnog identiteta.

Rizična spolna ponašanja potenciraju kompleksne i dugotrajne posljedice na mlade i reproduktivno zdravlje mladih (spolno prenosive bolesti, maloljetničke trudnoće i dr.). Za razliku od niza drugih zemalja Europe (primjerice Njemačka, Austrija, Švicarska, Nizozemska), u hrvatskom obrazovnom sustavu ne postoji sustavan pristup koji se bavi ovim problemom, a malobrojne teme o spolnosti integrirane su u sadržaje drugih predmeta (uglavnom biologija) te često sadržajem i načinima izvedbe ovise o subjektivnim procjenama i svjetonazoru izvoditelja (nastavnika, ravnatelja, stručnih službi), osobnim zahtjevima i svjetonazoru roditelja, a izvedba tih tema ovisi i o mogućim sukobima mišljenja o ljudskim pravima.

Ovim istraživanjem želio se dobiti uvid u spolno ponašanje mladih ljudi, točnije studenata kao starijih adolescenata, u njihovu informiranost o spolnosti i

spolnom zdravlju za vrijeme stupanja u prve spolne odnose, načine na koji su se informirali o navedenim temama kroz svoje odrastanje te odgoj i obrazovanje, ulogu škole u educiranju o spolnom zdravlju te mišljenja studenata o potrebi uvođenja spolnog odgoja u odgojno-obrazovne ustanove. Svrha je istraživanja pridonijeti boljem razumijevanju spolnog ponašanja adolescenata i njihovoj kvalitetnijoj informiranosti o spolnosti i spolnom zdravlju, prikazati njihovo iskustvo u educiranju o spolnosti zbog kvalitetnijeg pristupa primarnoj prevenciji očuvanja reproduktivnog zdravlja. U istraživanju je sudjelovalo 100 redovitih i izvanrednih studenata visokih učilišta u Hrvatskoj. Istraživanje se temelji na kvantitativnom istraživačkom pristupu i metodi snježne grude.

Prema rezultatima ovog istraživanja prosjek dobi stupanja u prve spolne odnose za ispitanike obaju spolova iznosi 16,1 godinu, što je komparabilno s podacima Hrvatskog zavoda za javno zdravstvo iz 2022. godine, prema kojima je prosječna dob stupanja u spolne odnose u Hrvatskoj 16–17 godina (HZJZ, 2022). Rezultati pokazuju rizično spolno ponašanje studentske populacije za vrijeme dok su polazili u srednju školu, što se posebice odnosi na nedostatnu informiranost o spolnosti i nedostatak kvalitetne spolne edukacije tijekom školovanja. Osim toga, pokazuju da ispitanici iskazuju potrebu za uvođenjem spolnog odgoja u odgojno-obrazovne ustanove, bilo kao zasebnog predmeta bilo kao sustavnog sadržaja koji je moguće provoditi primjenom digitalnih sustava. Prema mišljenju ispitanika, edukacija o spolnosti obuhvaćala bi teme poput odgovornog spolnog ponašanja, upotrebe zaštite i kontracepcije, prevencije i liječenja spolno prenosivih bolesti, testiranja na spolno prenosive bolesti, uspostavljanja pozitivnih međusobnih odnosa i pozitivne komunikacije, redovite i pravilne higijene te potrebe redovitih odlazaka na ginekološke i urološke preglede. Odgojno-obrazovne ustanove u vrijeme 'informacijskog društva' i razvijenih digitalnih sustava na različite i prikladne načine mogu djelovati u ovom području i omogućiti mladima bolju educiranost, zdravstvenu podršku i savjetovanje. Osim na mlade, odgojno-obrazovne ustanove trebaju se usmjeriti na uključivanje i jačanje partnerstva s roditeljima, lokalnom zajednicom, organiziranje suradnje sa zdravstvenim ustanovama i stručnjacima putem različitih edukativnih radionica, predavanja, kongresa i seminara. Moguće je i kreiranje *online* platformi koje bi mladima omogućavale pristup raznim edukativnim sadržajima i izvan škole. Razvitak digitalnih sustava i njihova primjena razvidna je u različitim područjima ljudske djelatnosti, zbog čega autorice ovog rada smatraju da uz pomoć digitalnih sustava odgojno-obrazovne ustanove mogu napraviti značajne pomake i u ovom, često za neke nastavnike, roditelje, pa i mlade, delikatnom području života. Na izostanak fokusa o jednom od bitnih aspekata života kao što je to spolnost i stvaranje spolnog identiteta, upućuju i znanstvena istraživanja međusobnih odnosa roditelja i djece, u

kojem je jedna od najistaknutijih tabu tema razgovor roditelja i djece o spolnosti i intimnim odnosima.

Rezultati ovog istraživanja upućuju na potrebu za daljnjim unapređenjem odgojno-obrazovne prakse s ciljem podizanja svijesti mladih o odgovornom spolnom ponašanju i spolnom zdravlju. Adolescentsku spolnost potrebno je prije svega razumjeti te promišljati na koji način odgojno-obrazovna ustanova može pridonijeti informiranju i edukaciji mladih o ovoj i drugim važnim i delikatnim temama. U tom kontekstu, ukazuje se na važnost uvođenja sveobuhvatnog spolnog odgoja i edukacije u svrhu univerzalne prevencije rizičnih ponašanja, koji će respektirati znanstveno utemeljene spoznaje da bi se, prilagođeno dobi djece i mladih, omogućilo pružanje pravovremenih i provjerenih informacija o spolnosti i spolnom zdravlju. Autorice rada zastupaju mišljenje da današnje spoznaje i digitalna tehnologija mogu doprinijeti univerzalnoj prevenciji posljedica na reproduktivno zdravlje mladih kao jedan kompleksan osobni i zdravstveni problem, koji na mladu osobu ostavlja neželjene posljedice tijekom čitavog života.

**Ključne riječi:** odgoj i obrazovanje, spolni odgoj, rizično spolno ponašanje, reproduktivno i mentalno zdravlje

## **SEX EDUCATION IN EDUCATIONAL INSTITUTIONS – OLD AND NEW CHALLENGES IN THE 21<sup>ST</sup> CENTURY**

Adolescence represents challenging life period of immense and fiery changes that reflect in person's physical, emotional, psychosocial and cognitive changes. World Health Organization (WHO, 2015) defines adolescents as individuals between 10 and 19 years of age, while other definitions place them in either 15 to 24 or 10 to 24 age group. It is evident that age limits of adolescence are different and dispersive as they change and adapt over time to specific biological needs of the still developing individual, while numerous social changes and life conditions (quality of life, health conditions, technological development, etc.) influence their development.

One of the key aspects of adolescence is the development of sexuality as well as the creation of identity related to it, during which it is extremely important to inform and teach adolescents about sexual responsibility. During adolescence, individuals tend to experiment, show feelings of invulnerability, romanticize intimate relationships, act impulsively and become vulnerable to both peer and media's social pressure. They also tend to show signs of immaturity while thinking about the consequences of their own actions, which makes them prone to risk and risky behaviours.

Adolescents start being sexual earlier than ever, usually insufficiently or inadequately informed about sexuality and sexual health, all the while media as well as peers represent main sources of false information which ultimately create distorted picture of sexuality and sexual identity.

Risky sexual behaviours potentiate complex and long-lasting consequences on the youth and their reproductive health (STD's, minor pregnancies, etc.). Contrary to the other European countries (Germany, Austria, Switzerland, the Netherlands, etc.), systemic approach that deals with this problem does not exist in Croatian educational system, while few topics that deal with sexuality are usually integrated into other subjects' curricula (mostly Biology), whereas its content as well as the way in which they are being taught depend on subjective evaluations and believes of the lecturer (teacher, principal, expert associates), personal requests and believes of parents and potential conflict of opinion regarding human rights.

The aim of this study was to gain insight into sexual behaviour of the youth—students as older adolescents, their knowledge regarding sexuality and sexual health during their first sexual experiences, the ways in which they have been informed and educated about the abovementioned topics while growing up, the role of school in education about sexual health and their opinions on the need to introduce sex education in educational institutions.

The purpose of this study was to contribute to the better understanding of the adolescents' sexual behaviour, the creation of higher quality ways to inform them about sexuality and sexual health as well as to show their experiences in being educated about sexuality due to the need for higher quality approach in primary prevention in order to maintain reproductive health. In total, 100 full and part-time university students in Croatia participated in the study. The study was based on quantitative research approach as well as snowball sampling.

According to the results of this study, the participants enter sexual relationships at an average age of 16,1, which is comparable to the data found in Croatian Institute of Public Health from 2022 which show that individuals in Croatia start becoming sexually active at 16–17 years of age (HZJZ, 2022). The results show risky sexual behaviours of student population during their high school years, especially their insufficient knowledge regarding sexuality and the lack of quality sex education during their general education. Additionally, the participants expressed the need to implement sex education in educational institutions either as an individual subject or as a systemic content which can be taught by using digital systems. Sex education, according to the participants' opinion, should encompass topics such as responsible sexual behaviour, safe sex and contraception, prevention and treatment of STD's, testing for STD's, establishing positive



mutual relationships and positive communication, regular and adequate hygiene as well as the need for regular gynaecological and urological check-ups. Educational institutions in the era of “information society” and highly developed digital systems can act in various and appropriate ways to ensure better education, health support and counselling to the youth. In addition to the youth, educational institutions should focus on the strengthening of partnership with parents and local community as well as their inclusion into this area, organising of cooperation with healthcare institutions and experts via various educational workshops, lectures, congresses and seminars. Lastly, institutions could potentially create online platforms which would provide the youth the access to the various educational content outside of school.

The development of digital systems and their application is evident in various fields of human activity, thus the authors of this paper believe that, with the help of digital systems, educational institutions could significantly improve this, for certain teachers, parents, and even adolescents, delicate aspect of life. Furthermore, certain scientific and expert studies on mutual relationships between parents and children also indicate the lack of focus on sexuality and the creation of sexual identity as the conversation between the abovementioned subjects about this aspect represents one of its most prevalent tabu topics.

The results of this study point towards the need for further improvement of educational practice with the aim of raising awareness among the youth about sexual responsibilities and sexual health. Adolescent’s sexuality should firstly be understood and the experts should ponder how can educational institution contribute to higher quality informing and education of the youth about this and other important and delicate topics. In this context, it is important to implement comprehensive sex education with the aim of primary prevention of risky behaviours that will respect expert and scientifically based notions and which would provide the youth the access to well-timed and verified information about sexuality and sexual health adapted to their age. The authors of this paper believe that today’s knowledge and digital technology can contribute to primary prevention of consequences on the youth’s reproductive health as a complex personal and health problem that leaves undesirable effects on them during the rest of their lives.

**Key words:** education, sex education, risky sexual behaviour, reproductive and mental health

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## **A CHILD IN THE WORLD OF INFORMATION AND COMMUNICATION TECHNOLOGIES**

The main issues of the article are related to the challenges of modernity in the period of digital turbulence and the need to introduce new digital technologies into education. A large number of children from an early age get access to technology and interact with similar devices for the first time in the family and the immediate environment. By the older preschool age, interest is becoming stable and the percentage of pupils using a variety of information and communication tools is increasing. Many children have personal ICT funds donated for holidays and birthdays. The article discusses the information culture of preschool children, cybersecurity issues in preschool age. The article discusses the types of educational activities that are carried out with the help of digital technologies. The author talks about the use of digital technologies in preschool age, their advantages and disadvantages. The main skills of information activity are listed. The basic rules of children's health care during computer-gaming activities are described.

**| Key words:** digital technologies, children, education

## **DIJETE U SVIJETU INFORMACIJSKE I KOMUNIKACIJSKE TEHNOLOGIJE**

Glavna pitanja rada povezana su s izazovima suvremenosti u razdoblju digitalnih previranja i potrebom uvođenja novih digitalnih tehnologija u obrazovanje. Veliki broj djece od malih nogu pristupa tehnologiji i prvi put komunicira pomoću sličnih uređaja već u svojoj obitelji i neposrednom okruženju. Do starije predškolske dobi interes postaje stabilan i povećava se postotak učenika koji koriste različite informacijske i komunikacijske alate. Brojna djeca imaju osobna sredstva za IKT donirana za praznike i rođendane. U izlaganju se razmatra informacijska kultura djece predškolske dobi i pitanja kibernetičke sigurnosti u predškolskoj dobi. Razmatraju se i vrste obrazovnih aktivnosti koje se provode pomoću digitalnih tehnologija. Autorica govori o korištenju digitalnih tehnologija u predškolskoj dobi, njihovim prednostima i nedostacima. Navedene su osnovne vještine informacijskih aktivnosti. Opisana su osnovna pravila za zaštitu zdravlja djece tijekom računalnih igara.

**| Ključne riječi:** digitalna tehnologija, djeca, obrazovanje

*INTER\_CON 2023:*

*»Društvo, znanost i umjetnost u (post)digitalnom dobu«*

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## **INTERDISCIPLINARNA PANEL RASPRAVA**

*INTER\_CON 2023:*

*“Society, Sciences, and Arts in the (Post)Digital Era”*

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## **INTERDISCIPLINARY PANEL DISCUSSION**



## **INTER\_AKCIJA: mogućnosti suradnje organizacija civilnog društva, znanosti i umjetnosti**

Premda se znanost i umjetnost u potpunosti opravdano mogu sagledavati kao dva zasebna područja ljudskog djelovanja, podjednako je opravdano promišljati o njihovim dodirnim točkama i o mogućnostima njihove suradnje. Argument za taj stav moguće je pronaći u njihovu dinamičnom i isprepletenom odnosu tijekom povijesti, ali i u sadašnjosti, kao i u tome što se jedno i drugo područje zbivaju u specifičnom kontekstu: društvu. I znanost i umjetnost neprestano se mijenjaju, razvijaju te ostvaruju značajan utjecaj na živote ljudi, točnije na društvo u okviru kojeg nastaju, ostavljajući iza sebe ono što se naziva kulturom u širem smislu. Međutim, taj utjecaj nikako nije jednosmjernan, jer i znanost i umjetnost oblikuju se povratnim informacijama od društva. Upravo je zato relevantno u razmatranje o odnosu znanosti i umjetnosti uključiti i organizacije civilnog društva kao one organizacijske strukture koje za cilj imaju opći interes građana i zajednice u kojoj djeluju. Je li moguća suradnja organizacija civilnog društva, znanosti i umjetnosti? Kako je ostvariti? Kako od nje mogu profitirati svaka od sastavnica te trijade?

O dosadašnjim iskustvima suradnje, o teškoćama pri njezinoj realizaciji, o prednostima i koristi takvih nastojanja te o brojnim drugim povezanim temama, tijekom plenarne rasprave govorit će: izv. prof. dr. sc. Sarina Bakić (Fakultet političkih nauka Univerziteta u Sarajevu), doc. dr. sc. Dinka Caha (Pravni fakultet Sveučilišta Josipa Jurja Strossmayera u Osijeku), Martina Globočnik, mag. act. soc. (Fade In) i Lejla Šehić Relić, struč. spec. javne uprave (DKolektiv - organizacija za društveni razvoj). Raspravu će moderirati dr. sc. Hrvoje Potlimbrzović (Filozofski fakultet Sveučilišta Josipa Jurja Strossmayera u Osijeku).

## **INTER\_ACTION: Opportunities for Cooperation Between Civil Society Organizations, Sciences, and Arts**

Although sciences and arts can be seen as two separate areas of human action, it is equally justified to think about their interconnectedness and possibilities of their cooperation. The argument for that can be found in their dynamic and intertwined relationship throughout history but also in the present, as well as in the fact that both areas take place in a specific context: society. Both sciences and arts are constantly changing, developing and exerting a significant influence on people's lives, more precisely on the society in which they are created, leaving behind what is called culture in a broader sense. However, this influence is by no means unilateral, because both sciences and arts are shaped by the feedback they receive from society. That is why it is relevant to include civil society organizations, as organizational structures whose goal is the general interest of citizens and the community in which they operate, when considering the relationship between sciences and arts. Is cooperation between civil society organizations, sciences, and arts possible? How to achieve it? How can each of the components of that triad profit from it?

Past experiences of cooperation, difficulties in its implementation, advantages and benefits of such efforts and other related topics will be discussed by: Associate Professor Sarina Bakić (Faculty of Political Sciences, University of Sarajevo), Assistant Professor Dinka Čaha (Faculty of Law, Josip Juraj Strossmayer University in Osijek), Martina Globočnik, mag. act. soc. (Fade In), and Lejla Šehić Relić, expert specialist in public administration (DKolektiv – organisation for social development). The discussion will be moderated by Hrvoje Potlimbrzović, PhD (Faculty of Humanities and Social Sciences, Josip Juraj Strossmayer University in Osijek).

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## **INTERDISCIPLINARNA STUDENTSKA RADIONICA**

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## **INTERDISCIPLINARY STUDENT WORKSHOP**





## DRUŠTVENO ANGAŽIRANE PREDSTAVE

Prema definiciji, angažirana umjetnost jest ona koja u sebi, osim estetske i zabavljачke funkcije, nosi i eksponirane unutarnje potrebe pojedinaca koji se odlučuju na aktivizam u umjetničkom izričaju. Društveno angažirani rad podrazumijeva aktivističku notu, odnosno njega karakterizira uključivanje društveno bitnih tema u umjetnost i zastupanje stavova o temi koju konkretni rad predstavlja. Razumijevanje kazališta razumijevanje je svijeta, jer ono može bitno utjecati kako na izvođače tako i na publiku. Brojna istraživanja rezultirala su spoznajom da dramski umjetnici u svojem radu (temama i izvedbama) posrednu i neposrednu publiku žele potaknuti na više akcija, od kojih se najviše ističe poticanje promišljanje i razvijanje kritičkog mišljenja. Također se nadaju da će svojom djelatnošću preko publike utjecati i na cjelokupnu društvenu zajednicu. Kazalište nije jednosmjerni medij. Naime, ono traži reakciju ili povratnu informaciju, izvodi se i stvara zbog publike koja će ga tijekom i nakon izvedbe procjenjivati, promišljati i s njime na neki način komunicirati.

Radionicu o društveno angažiranim predstavama održat će Daniela Taslidžić Herman i Marko Sabljaković, doktorandi na doktorskom studiju Književnost i kulturni identitet na Filozofskom fakultetu u Osijeku. Radionica će se sastojati od dva dijela. U prvom će studenti biti upoznati s obilježjima angažirane umjetnosti, posebice one dramske, i to na primjeru Gradskog kazališta Beli Manastir koji takvu vrstu umjetnosti promovira od 2015. godine, a u kojem su dosad obrađene teme trgovine ljudima (*Novac moje krvi*), govora mržnje (*Pruži mi ruku*), vršnjačkog nasilja (*Želim život bez nasilja*) i nasilja nad ženama (*Za nju*). Većina navedenih tema i predstava rađena je u suradnji s Odjelom prevencije Policijske uprave osječko-baranjske, a dio predstava temeljio se na stvarnim životnim pričama. Drugi dio radionice bit će usmjeren na vježbu postavljene problematike kroz formu Kazališta potlačenih (improvizacijska gluma) te raspravu.

Po završetku radionice studenti će znati što je to angažirana umjetnost, s naglaskom na obilježja angažirane dramske umjetnosti. Osim toga, razumjet će glavne funkcije dramske umjetnosti, kao i interakciju s drugim umjetničkim i kulturnim praksama i područjima. Također, doživjet će iskustvo dramske umjetnosti sudjelovanjem u oblicima i procesima dramskog stvaranja i izražavanja. Nadalje, moći će izraziti svoju kreativnost i njezine sastavnice (inovativnost, istraživanje, kritičko mišljenje). Naposljetku, stvaralačkom uporabom izražajnih sredstava, konvencija i kodova te drugih sastavnica dramskoga medija, individualnim i skupnim radom, studenti će izražavati i oblikovati misli, osjećaje, iskustva, stavove i vrijednosna opredjeljenja.

## **SOCIALLY ENGAGED PLAYS**

According to the definition, engaged art is that which, in addition to its aesthetic and entertaining function, also carries the exposed inner needs of individuals who decide to activism in artistic expression. Socially engaged work implies an activist approach characterized by inclusion of socially relevant topics in art and the representation of views on the topic that the specific work represents. Understanding theater is understanding the world, because it can significantly influence both the performers and the audience. Numerous researches have reached the conclusion that drama artists, in their work (themes and performances), want to encourage the indirect and immediate audience to take several actions, the most prominent of which is the stimulation of reflection and the development of critical thinking. They also hope to influence the entire social community through their activities through the audience. Theater is not a one-way medium. Namely, it requires a reaction or feedback, and it is performed and created for the sake of the audience, which will evaluate it during and after the performance, think about it and communicate with it in some way.

The workshop on socially engaged plays will be held by Daniela Taslidžić Herman and Marko Sabljaković, doctoral students at the Postgraduate study programme in Literature and Cultural Identity at the Faculty of Humanities and Social Sciences in Osijek. The workshop will consist of two parts. In the first, students will be introduced to the characteristics of engaged art, especially the dramatic art, using the example of the City Theater Beli Manastir, which has been promoting this type of art since 2015 and which has so far dealt with the topics of human trafficking (*Blood Money*), hate speech (*Give me a Hand*), peer violence (*I Want a Life Without Violence*) and violence against women (*For her*). Most of mentioned plays were made in cooperation with the Prevention Department of the Osijek-Baranja County Police Administration, and some were based on real life stories. The second part of the workshop will be focused on the exercise of the set issue through the form of Theater of the Oppressed (improvisation) and discussion.

At the end of the workshop, students will know what engaged art is, with an emphasis on the features of engaged dramatic art. In addition, they will understand the main functions of dramatic art, as well as its interaction with other artistic and cultural practices and fields. Also, they will experience dramatic art by participating in the forms and processes of creation and expression. Furthermore, they will be able to express their creativity and its components (innovativeness, research, critical thinking). Finally, through the creative use of expressive means, conventions, codes, and other elements of the dramatic medium through individual and group work students will express and shape thoughts, feelings, experiences, attitudes and values.

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## **IZLOŽBA PLAKATĀ**

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## **POSTER EXHIBITION**



## **Izložba plakata za *scientific inter\_view***

U proljeće 2020. godine Centar za interdisciplinarna istraživanja Filozofskog fakulteta Osijek započeo je prvi ciklus popularno-znanstvenih događanja pod nazivom *scientific inter\_view*. Dosad je održano pet punih ciklusa, a početkom listopada ove godine započeo je i šesti ciklus. Tijekom prvih pet ciklusa održan je 21 događaj tijekom kojih je gostovalo ukupno 28 gostiju, koji su govorili na razne teme, ali uvijek s naglaskom na interdisciplinarnost i/ili na interdisciplinarnan način. Dakako, Centar je svaki događaj i najavio u medijima, na mrežnim stranicama Filozofskog fakulteta Osijek i na društvenim mrežama, a svaka je najava bila popraćena pripadajućim plakatom. Autor svakog od tih plakata bio je dr. sc. Marin Seleš, vlasnik obrta za usluge kreativnog pisanja, dizajna i organizaciju događanja *Čas posla* i ravnatelj Pučkog otvorenog učilišta Osijek. U znak zahvale na suradnji koja još uvijek traje, Centar organizira izložbu svih tih plakata. Izložbu će prigodnim razgovorom otvoriti dr. sc. Demian Papo, član Povjerenstva Centra za interdisciplinarna istraživanja Filozofskog fakulteta Osijek, i autor plakata Marin Seleš.

## **Exhibition of *scientific inter\_view* Posters**

In the spring of 2020, the Centre for Interdisciplinary Research of the Faculty of Humanities and Social Sciences in Osijek started the first cycle of popular scientific events called *scientific inter\_view*. Five full cycles have been held so far and the sixth cycle started at the beginning of October this year. During the first five cycles, 21 events were held during which a total of 28 guests spoke on various topics, always with an emphasis on interdisciplinarity and/or in an interdisciplinary manner. Of course, the Centre announced each event in the media, on Faculty's website, and on social networks. Each announcement was accompanied by a related poster. The author of each of these posters was Marin Seleš, PhD, CEO of *Čas posla design & copywrite* IT company, and principal of the Public Open University Osijek. As a sign of gratitude for the cooperation that still goes on, the Centre is organizing an exhibition of all these posters. It will be opened by a talk between Demian Papo, PhD, member of the Committee of the Centre for Interdisciplinary Research of the Faculty of Humanities and Social Sciences in Osijek, and Marin Seleš.



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## **PRIKAZ PRETHODNOG KONGRESA**

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## **REVIEW OF THE PREVIOUS CONGRESS**







## Challenges of Education

*International Interdisciplinary 2<sup>nd</sup> Congress of the Centre for Interdisciplinary Research of the Faculty of Humanities and Social Sciences in Osijek: “Challenges of Education”, Osijek, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> November 2022*

From November 3<sup>rd</sup> to 5<sup>th</sup> 2022, the eagerly awaited second International Interdisciplinary Congress of the Centre for Interdisciplinary Research at the Faculty of Humanities and Social Sciences took place, focusing on the theme “Challenges of Education”. In their introductory text within the bilingual (Croatian and English) book of abstracts edited for the event, its editors Zlatko Miliša, Demian Papo, and Hrvoje Potlimbrzović highlighted the Centre’s unwavering dedication to the advancement of interdisciplinary research, a commitment that shone brightly during the second Congress. This congress demonstrated remarkable growth and evolution. It drew scholars and experts from various corners of the world and featured distinguished keynote speakers, including some of the leading theoreticians of interdisciplinarity in the world: Julie Thompson Klein (USA), Rick Szostak (Canada), and Jan Cornelius Schmidt (Germany). The program expanded to incorporate a diverse array of activities, from student workshops to the presentation of scientific publications and engaging roundtable discussions. Furthermore, this dynamic development earned recognition and support from both the Ministry of Science and Education of the Republic of Croatia and the Faculty of Humanities and Social Sciences at the Josip Juraj Strossmayer University of Osijek. These achievements solidify the second congress as one of the central hubs for interdisciplinary research in Europe, with exciting prospects for further growth in both quantity and quality.

The Centre’s second congress witnessed a notable rise in participation when compared to the previous year. In contrast to the forty-four attendees of the first one in 2021, organizers were delighted to host fifty-eight participants at last year’s event. Attendees comprised a diverse group, including scientists, experts, practitioners, and students hailing from six different countries: Bosnia and Herzegovina, Croatia, Canada, China, Germany, and the United States of America. This increase in participant numbers unmistakably signifies a quantitative improvement over the previous congress. It is important to highlight that the congress was again conducted in two official languages, Croatian and English. Unlike the first congress which was largely affected by the COVID-19 pandemic in terms of physical participation, most of the participants of the second congress presented their papers at the Faculty of Humanities and Social Sciences in Osijek while other participants presented online via Zoom platform.

On the morning of Thursday, November 3<sup>rd</sup>, 2022, the congress commenced with an opening ceremony featuring prominent speakers. Full professor Vlado Guberac, Rector of the Josip Juraj Strossmayer University of Osijek, delivered a warm welcome, which was followed by speeches held by the County Prefect Ivan Anušić and Mayor Ivan Radić who extended their greetings. Full professor Josip Stepanić, president of the Croatian Interdisciplinary Society, underscored the congress's significance, while full professor Zlatko Miliša, president of both the Organization and Programme Committee, stressed the vital role of interdisciplinary research. Finally, Associate professor Ivan Trojan, Dean of the Faculty of Humanities and Social Sciences in Osijek, passionately embraced the congress's theme, emphasizing the imperative of interdisciplinary approaches in tackling contemporary global challenges. Collectively, these distinguished speakers affirmed the pivotal role of interdisciplinary research in advancing our comprehension of intricate real-world issues.

The first day of the congress was opened by Zlatko Miliša, Igor Josipović, and Nemanja Spasenovski, and their presentation entitled "Contribution of Liberal Theory to the Criticism of the Egalitarian Conception of Work and Education". Miliša, Josipović, and Spasenovski assert that the education system is in crisis due to the abandonment of core liberal principles, emphasizing the negative impact of mass education on critical thinking and the shift from equality of outcomes to equality of opportunity. After Miliša, Josipović, and Spasenovski, Demian Papo and Hrvoje Potlimbrzović presented their paper "Blaženka Despot's Criticism of Specialization". Papo and Potlimbrzović highlighted Blaženka Despot's critique of specialization in labor and science. She was concerned that specialization led to 'craft-idiots' in both fields, emphasizing the need for comprehensive educational reform to create well-rounded individuals. Marija Milošević and Lucija Pintek in their presentation "Presence of Research Papers by Croatian Social Sciences and Humanities Researchers on Interdisciplinarity in Databases" presented research findings from a study conducted within the *Croatian Social Sciences and Humanities Scholars' Assessments of Interdisciplinarity* project, examining databases, interdisciplinary integration, prominent authors, and the timeline of relevant works, aiming to provide a foundation for future research in the field of interdisciplinarity in Croatian social sciences and humanities.

Second session was opened with presentation "Unrecognized Success: Ecocriticism in Southeast Europe" held by Goran Đurđević and Suzana Marjanić, in which they highlighted notable authors and institutions contributing to ecocritical research in the region and concluded that ecocriticism shows promise and success in Southeast Europe. Following up, Dušanka Slijepčević and Ewa Dąbrowska Prokowska in their presentation "Green Higher Education in the Function of Green

Economy” point out how GHE is crucial in addressing climate change in high-carbon economies, like the Western Balkans, by promoting environmental awareness and sustainable development. Yarong Chen’s presentation “An Unfinished Mission: UNESCO in Deploying Education and Science for Global Development, 1945–1975” explores how UNESCO, led by figures like Huxley and Needham, played a key role in global development post-World War II. Despite challenges, it aligned education, science, and development with the UN’s Sustainable Development Goals. In her presentation “Space, Body and Power at the Intersection of Virtual Reality and Peace Education”, Julijana Mladenovska-Tešija explores the link between virtual reality and peace education at the Vukovar Homeland War Museum, investigating its effects on our perception of the past and trauma using interviews with peace activists from 1991 to 1995 and 2021.

Next session started with Amanda Glavaš and Azra Stašćik and their presentation “Is it Time to Change the Assessment System in Primary School Education in Croatia?”, in which they discussed reforms in Croatia’s primary school assessment system due to the 2022 introduction of national exams for eighth-grade students, aiming to address the subjectivity of internal assessments for fairer primary education assessments and secondary school enrolment. Alen Hasikić in his presentation “Education Systems of Croatia and Singapore from a Comparative Perspective” pinpoints factors for successful education systems, including social context, reforms, teacher training, and PISA results, to assess the Croatian education system over the past 30 years. Following up, Nebojša Mudri in his presentation “Does Education Make Sense in Contemporary Culture of Idleness?” questions today’s education in a leisure-focused culture, urging it to foster purposeful contributors who collaborate for positive change. Helena Dragić in her presentation “Communication in Teaching – Contemporary Challenges and Opportunities” addresses the challenges and opportunities presented by the coronavirus pandemic in the context of teaching, emphasizing the need for harmony between verbal and non-verbal communication for successful educational outcomes. Anita Dremel and her student Vlatka Fapali in their presentation “Gender Equality at the University: Challenges and Opportunities” highlight efforts, such as the UNIGEM project led by Zilka Spahić Šiljak, to promote gender equality and combat gender-based violence in academic institutions. Irena Kiss and Aleksandra Možar in their presentation “Ethical Issues in the Work of Educational Institutions” highlight the code of ethics’ importance in defining acceptable behavior, fostering ethical awareness, and guiding sensitive interactions with diverse stakeholders to enhance educational practices.

The first keynote lecture was given by Julie Thompson Klein. She held a lecture entitled “Inter- and Transdisciplinary Teaching and Learning for the 21<sup>st</sup> Centu-

ry”, in which she emphasized the need for cognitive and social integration skills to address complex global challenges. Thompson Klein recognizes that the 21<sup>st</sup> century demands a blend of cognitive and social integration skills, extending from early schooling to professional development and lifelong learning. After Thompson Klein’s presentation, there was an Interdisciplinary student workshop held for the students to participate in and learn new ways about incorporating interdisciplinarity in their fields of study and how to apply it in their future work.

The final event of the first day of Congress was a database search workshop for students. It was held by Marija Milošević and Lucija Pintek, second year graduate students of Informatology and Information Technologies. After the first, theoretical part of the workshop, students explored various search techniques, especially Boolean and proximity operators, phrase searches and document field searches.

The second day of the Congress started with a keynote lecture by Jan Cornelius Schmidt entitled “Philosophy of Interdisciplinarity. Towards a Critical-Reflexive Research Program”. Schmidt emphasizes the need for a critical-reflexive *Philosophy of Interdisciplinarity* to counter the loss of critical perspective and original spirit of interdisciplinarity. Schmidt also discusses the complex relationship between interdisciplinarity and transdisciplinarity, highlighting arguments for a problem-oriented, critical-reflexive concept of interdisciplinarity.

Marin Seleš, Tanja Hercog and Andrea Sudarević in their presentation “The Need to Introduce Non-Formal Education: The Basis of Information Literacy for Four-Year High School Students” underscored the importance of non-formal education for high school students in developing critical information literacy skills, including digital research and evaluation. Ivana Martinović, Dejana Golenko, and Boris Badurina in their presentation “Digital Literacy in the Service of Higher Education” stressed the importance of students developing digital literacy alongside traditional literacy to effectively meet the demands of higher education. Dejan Pernjak in his presentation “Education in the Media Space on the Example of the Local Web Portals” discussed the increasing role of media in education over the past decade. Using the northwestern Croatian region as an example, Pernjak examined the extent and focus of education-related content on these portals, focusing on their tendency to prioritize positive news about local politics while often lacking criticism.

Emina Alešević and Smaila Balić Rahmanović closed this session with their presentation “The Role and Significance of 4C Competence in Training for Helping Professions”, in which they drew attention to the growing importance of 4C competencies (critical thinking, communication, collaboration, creativity) in prepar-

ing students to address the complex challenges inherent to the fields of humanities and social sciences. In their presentation “The Importance of Sensory Integration in Promoting Inclusion in Preschool Children” Marija Matulin Jelić and Nikoleta Špoljarić pointed out the significance of sensory integration in fostering inclusion among preschool children. Prioritizing inclusion in education involves recognizing the benefits of sensory integration, especially for children with conditions like cerebral palsy, autism, and attention disorders, and integrating sensory activities into daily routines. Damir Marinić’s paper “Educational Challenges in Global Society” promotes an integration-processing approach in education to prepare children for success in our interconnected world. Sanda Milošević in her presentation “Supporting Students in Learning and Behaviour” suggests that educators in the education system need to recognize the importance of individual variations of learning as a crucial tool for effective pedagogy.

In the following session, Ivana Šarić Šokčević in her presentation “System in Crisis – an Attempt to Overcome the Contemporary Challenges of Educational System” spotlighted the teachers’ role to equip their students with critical thinking skills as an important tool to interpret and evaluate receiving information, especially in the context of crises. In her paper “Compass for Redesigning Educational Systems”, Amina Smajović recommended a shift from traditional teaching to emphasize skills, critical thinking, creativity, and wisdom through lasting curriculum changes, not just short-term measures. Nemanja Spasenovski in his presentation “The Educational System in Selected Economic Theories” studied economists’ historical views on the educational system’s role and its contemporary impact, aiming to derive valuable insights for improving education policies. Furthermore, Josip Berdica in his presentation “Humane Education and Some Current Virtues of Legal Education” highlights a crisis in education. Berdica advocates a “humane education” which is centered on human dimensions and aims to prompt a re-evaluation of the role of the individual within education through a critical examination of legal education.

After this presentation, Demian Papo and Hrvoje Potlimbrzović presented the book *Philosophy of Interdisciplinarity: Studies in Science, Society, and Sustainability* authored by Jan Cornelius Schmidt, published by Routledge in 2022. They pointed out some of the crucial Schmidt’s ideas, such as inaugurating the critical-reflexive and problem-oriented type of interdisciplinarity. Subsequently, an engaging discussion ensued, marking the conclusion of the second day of the Congress.

On the third day of the Congress, the program commenced with an interdisciplinary round table discussion titled “Knowledge Convergence: Humanities, Social Sciences, Arts, and STEM”. This session convened a diverse and esteemed panel

of participants, featuring associate professor Marita Brčić Kuljiš, representing the Faculty of Humanities and Social Sciences at the University of Split, Jelena Ćosić Lesičar, PhD, representing the Faculty of Mechanical Engineering and Naval Architecture at the University of Zagreb, and assistant professor Zlatko Koziņa, from the Academy of Arts and Culture at the Josip Juraj Strossmayer University of Osijek. They gave their opinions on a lot of pressing problems regarding the gap between humanities, social sciences, arts, and STEM, as well as on the prejudices about their incompatibility. The speakers agreed that there is a serious potential for cooperation between these fields, which should be seized for the betterment of every one of them.

Next, the event also featured a presentation of the book of proceedings *Interdisciplinarity in Theory and Practice* edited by Davor Balić, Demian Papo, and Hrvoje Potlimbrzović, which was published in Osijek in 2022. The presenters of this work were associate professor Marita Brčić Kuljiš, assistant professor Željka Metesi Deronjić, Demian Papo, PhD, and Hrvoje Potlimbrzović, PhD. The book of proceedings from the prior, inaugural Congress underscores the ongoing significance of interdisciplinary dialogue and research in bridging diverse fields of knowledge and fostering collaboration across academic disciplines.

Kristina Horvat, Sanja Ježabek and Marija Radošević Čiča followed up with their presentation “Learning Based on Working in the Educational Sector of ‘Health and Social Care’” in which they point out the role of the educational environment in Health and Social Care education and the need for interdisciplinary approaches during work-based learning within this sector, promoting a holistic and effective educational experience. Next, Danijel Jelaš and Petra Plantosar in their presentation “Challenges of the Development of Archival Pedagogy in Croatia” emphasized the need for formalizing archival pedagogy, which enhances archival literacy through educational content in Croatian public archives. Denis Jurković in his presentation “Teacher’s Contribution to Students’ Intercultural Competence” notes how in the 21<sup>st</sup> century, multiculturalism is vital, with teachers playing a central role in promoting intercultural relations and effective pedagogy. In their presentation “Hybrid Work as a Challenge or Relief in Learning” Boris Rauš and Tea Žagar, from an organizational psychology perspective, discussed the pandemic’s impact on hybrid and remote work in the ICT sector, covering feasibility, skill development, onboarding, knowledge sharing, remote conferences, corporate trends, and worker perspectives.

Nikica Torbica in his presentation “The Role of Civil Society Organizations in Education for Active Citizenship – Waiting for GOODot” says how in Croatia, despite the advocacy since the late nineties, formal education lacks comprehensive



civic education, leading civil society organizations to provide programs for youth and citizens to promote democratic values and human rights. Sergej Filipović and Marija Filipović in their presentation “Challenges of Organizing *History* School Practice During COVID-19 Crisis” examined the issues faced by students, mentors and teachers during the COVID-19 pandemic and offer recommendations for handling similar situations in the future. Miljenko Hajdarović, in his presentation “Teaching History and Shaping Identity in Croatia”, analyses portrayal of history education in school curricula and considers its relevance amid contemporary challenges like globalization and digitization. Raul Raunić in his presentation “Normative Concept of Education and Teaching of Philosophy” discusses the impact of instrumental rationality and capital dominance on education, advocating integration of normative principles to foster reflective thinking in line with teaching philosophy.

Last event of the Congress was the keynote lecture by Rick Szostak from Canada, titled “Teaching About Interdisciplinarity”. In it, he provided valuable guidance for instructors responsible for teaching interdisciplinary analysis courses, particularly those who are new to this field. Szostak underscores the significance of firsthand learning and encourages open discussions focused on tackling research challenges.

As the Congress draws to a close, a final discussion serves as the culmination of the event. Additionally, participants have been handed an invitation to submit their research papers for the forthcoming book of proceedings, scheduled for publication in the academic year 2023/2024. Collectively, papers presented at the second congress delve into essential aspects of education, philosophy, and interdisciplinary studies, providing valuable perspectives and guidance for educators and researchers alike.

To conclude, the Congress demonstrated a laudable commitment to precise and efficient organization, emphasizing its dedication to the seamless execution of scholarly gatherings. By serving as a conduit for knowledge exchange across diverse disciplines, the congress underscored the pivotal role of interdisciplinary discourse in enhancing our comprehension of intricate subjects. It is our aspiration that the Centre will persist in its mission to orchestrate meaningful gatherings that enhance interdisciplinary discourse within the academic community.

**Roman Šimunović**





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## **ADRESE SUDIONIKA**

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