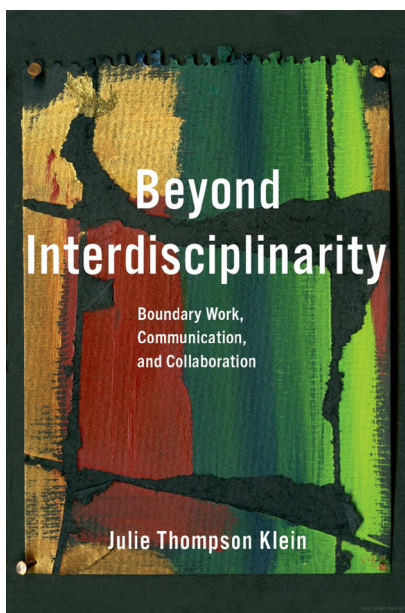


REVIEW OF J. T. KLEIN, *BEYOND INTERDISCIPLINARITY*. OUP. AND
SUPPLEMENTARY CRITICAL-PEDAGOGICAL REFLECTIONS ON INTER-
AND CROSSDISCIPLINARITY IN OUR CRISIS-RIDDEN TIMES

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Julie Thompson Klein, *Beyond Interdisciplinarity. Boundary Work, Communication, and Collaboration*. Oxford University Press, 2021. ISBN: 9780197571156

Magnum opus extraordinaire

This fascinating book by a magisterial senior scholar in interdisciplinary research theory cum practice, Prof. Julie Thompson Klein (1944-2023), her final scholarly opus, is dedicated to colleagues who in their research (and teaching) ‘never hesitate to question a boundary, cross a boundary’. Its Foreword by Frédéric Darbellay (Center for Children’s Rights Studies, Univ. of Geneva) and Catherine Lyall (Univ. of Edinburgh) bears the audacious epigraph from Carroll’s *Alice in Wonderland*: ‘The only way to achieve the impossible is to believe that it is possible.’ The Foreword also suggests in future ‘perhaps more provocative paths such as postdisciplinarity or indisciplinarity’ (p. x.). The epigraph of Dr. Klein’s Introduction limns a perspective for the entire volume: ‘How might one understand interdisciplinarity less as a unity and more as a field of differences, a multiplicity?’ (Barry and Born, 2013, p. 6, [downloadable](#)). Those two scholars urge

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'mapping the heterogeneity of the concept', which Klein pursues here in rigorous interpretive depth and incisive analysis, with some 300+ references (pp. 139-158). *Issues in Interdisciplinary Studies*, 37(2) 2019 published a [Special Volume: The Work of Julie Thompson Klein](#), comprising 10 articles, well worth exploring. Prof. Darbellay has an [open-access article](#) in that volume: 'From Interdisciplinarity to Postdisciplinarity: Extending Klein's Thinking into the Future of the University'. Importantly, his article bears the memorable epigraph: 'We are not students of some subject matter, but students of problems. And problems can be cut right across the borders of any subject or discipline' (Karl Popper). In future academic research the question of *crossdisciplinarity* will doubtless be critical, a term Dr. Klein at times preferred to inter-and transdisciplinary. For most colleagues in nearly all disciplines and departments, the book is potentially mind-changing, a treasure house of relevant insights about what academics do, what they dare & envision. Obtain, share & discuss, this exceptional book, perhaps within a 'community of practice'. Today we're all increasingly '*crossdisciplinary*' in umpteen ways in our thinking, theorizing and action, ever more so digitally. Hyperlinks throughout are [underlined](#).

Her book marks a personal academic involvement of some four decades in engaging with the challenges of *questioning* and *crossing* disciplinary boundaries. Prof. Klein was committed to crossbridging and overcoming 'disciplinary silos'. She held a doctorate in English language & literature (Univ. of Oregon), and was long connected with the English Dept. at Wayne State University in Detroit, Michigan. This book's reflections and insights are relevant to multiple aspects within the research of all authors in *Lyuboslovie* 23. In Klein's section on 'Learning in Situ', for example, she comments on the value of project-based learning (p. 114), relevant to Gergana Gerova and Irina Ivanova's article in this issue. Konstantinov et al. reports on work in archaeology near the small village of Velino, a short distance NW of the impressive ancient ruins of Pliska, [first Bulgarian capital](#) (680 C.E.). It combines several geographic lenses. The long history of Velino is sketched [here](#). N. Vitanova's article on 'Interdisciplinarity in the Educational Process' cites several publications by Julie Thompson Klein. I also refer below to an excellent interdisciplinary article by Dr. Vitanova on freedom vs. coercion in pedagogy. Historiography and pedagogy are inherently *crossdisciplinary*, as is the journal [Logos](#), explore!

In memoriam

Prof. Klein passed away (age 78) on 15 Jan. 2023. her brilliance and spirit will be missed by many. [HASTAC](#) (Humanities, Arts, Science and Technology Alliance and Collaboratory) at Wayne State Univ., an interdisciplinary research hub she helped cofound, marked her passing with a touching [memorial statement](#), written by a colleague in the English Dept. where Julie was professor emerita. See also the news posting '[In Memoriam](#)' by her colleagues in HASTAC. Colleagues over many years at the TdLab, ETH, Zurich, Switzerland published a moving 'In Memoriam' for Julie likewise in *Ingenta*, 32(1) 2023, 84-85, [downloadable](#) as pdf. And [here](#) a

double detailed 'In Memoriam' tribute to Prof. Klein published in *Brasilia*, 14(1), 14-16 (2023), scholars from Uruguay and Switzerland. Prof. R. Mansilla at [CIECH-UNAM](#) in Mexico City also published an [obit tribute](#). *Issues in Interdisciplinary Studies*, 41(1), 2023 contains a [35-page](#) SPECIAL SECTION: JULIE THOMPSON KLEIN (1944-2023)–BEYOND APPRECIATION, with articles by 5 colleagues.



<https://www.comecso.com/obituarios/julie-thompson-klein-1944-2023>

Article overview

The review below focuses on the book's complex content in selective survey, also suggesting further links to Prof. Klein's other related publications. A Critical-Pedagogical Supplement by this author follows, comprising 8 subsections, relating to current and future challenges for critical interdisciplinary education in Bulgaria and to several articles in *Lyuboslovie* 23:

- Universities 'Paying Lip Service' to Interdisciplinary Research
- Confronting a Major Contradiction: Truth ↔ Manufactured Consent and Propaganda
- Interdisciplinary Critical Pedagogy: CLIL and Self-Determined Democratic Learning
- Freinet Pedagogy and Buber's Dialogic Educational Theory
- Transdisciplinary Research as an Arena of Political Struggle and Mindchange
- The Inter- and Undisciplinary Optic of Forensic Architecture
- Six Virtuoso Masters of Critical Alternative Investigative Journalism
- On a Closing Note: Tourism as an Exemplary Crossdisciplinary Research Object

Prefatory *caveat lectorum*

Whether you are a curious newcomer to theories and practices of interdisciplinarity or already have some experience within this focus area, bear in mind that Prof. Klein's masterful study is complex and often touches on knowledge production

theory, epistemics and changing reality, discourse ecology and myriad modes of collaboration and communication, existential digitality. It also explores how universities and research centers, academic disciplines are structurally organized, and thus is a challenging read. For the most part, these are questions and thematic foci lesser discussed in the broad spectrum of articles in *Lyuboslovie* 23 – except at points in Natalia Vitanova's chapter. Several of Prof. Klein's shorter articles accessible online (see below) are doubtless an easier preparatory basic read when exploring the labyrinthine byways of *crossdisciplinarity* and what may well surface on those winding research pathways and challenges in near future, also within your own research and teaching.

In launching a personal journey into the landscapes of interdisciplinary theorizing and concrete practice, I strongly recommend you acquire and explore the [Oxford Handbook of Interdisciplinarity](#), eds. R. Frodeman, J. Thompson Klein and R.C.S. Pacheco, 2nd ed., Oxford UP 2017. It can be downloaded as pdf [here](#). Ponder// discuss//share with students, mentees, colleagues, a handbook with a broad range of articles and contributors. Notably however, the handbook lacks any mention of Bulgarian scholarship focused on inter- and transdisciplinary research theory and practice. But note a remarkable exception: the *European Journal of Tourism Research (EJTR)* published in Varna/Bulgaria, introduced in this review's final section dealing with tourism research, which is by proven praxis a superbly interdisciplinary field.

Beyond Interdisciplinarity. Boundary Work, Communication, and Collaboration

Abstract

- It presents the first conceptual framework for broadening meaning and heterogeneity of interdisciplinarity
- Examines inter- and trans-disciplinary boundary work across sectors of the academy, government, industry, and communities in the North and South
- Includes updated authoritative definitions, strategies, models, and resources for a wide audience of scholars, educators, students, administrators, and members of professional organizations, policy bodies, funding agencies, and libraries.

Read the [publisher synopsis](#), plus Table of Contents and brief review statements.

The book begins with an explanatory Introduction: Beyond Interdisciplinarity (14 p.) that sets out its focus, followed by PART I: DEFINITION, with three subsections: Boundary Work; Discourses of Boundary Crossing; Interdisciplinary Fields (54 p.). PART II: DYNAMICS OF PRACTICE, with three subsections: Communicating and Collaborating; Learning; From Failing to Succeeding (59 p.). It ends with copious References (19 p.) and an excellent Index (10 p.). So theory is balanced by discussion of concrete, empirical interdisciplinary academic practices and diverse projects across the globe, a rich spectrum of exempla for team work & idea share.

Preceding the Introduction is a unique and special Glossary (pp. xv-xix) that presents a digest of key conceptual terms in the book. Among these is Cross-sector, a composite term for bridging academic, governmental, industrial, and community perspectives and expertise. Various terms related to boundaries and boundary work are defined there. Prof. Klein stresses: "The conceptual framework of this book is a composite of claims, activities, and structures by which individuals and groups work directly and through institutions to create, maintain, break down, and reformulate knowledge units" (p. xv.). Other terminology she discusses there relates to Communication and Collaboration, Disciplinarity and Multidisciplinarity, Discourses of Interdisciplinarity, Ecology of Spatializing Practices, Integration, Learning and Transdisciplinarity.

The Foreword underscores: "The book you hold in your hands or under your digital eye is timely. It is remarkable and will be noticed by all researchers, teachers, all people who are directly or indirectly interested not only in interdisciplinarity in all its forms but also in the future of disciplines in a changing world. Interdisciplinarity as a concept, an epistemological posture and a practice is characterized more by its heterogeneity than by theoretical and methodological uniformity. It is not one and indivisible, but plural and shareable beyond disciplinary, national, and international differences." It also stresses: "Beyond" interdisciplinarity means in spatial terms what there is history behind and below the concept in a complex and ramified definitional space; in temporal terms it means what there is after with the idea to go beyond and to go further, toward renewed practices of interdisciplinarity and perhaps more provocative paths such as postdisciplinarity or indisciplinarity."

Prof. Klein seeks to develop 'mapping the boundary work of activities often linked with, but not entirely encompassed by, the core word *interdisciplinarity*.' She sketches the need especially to illuminate what 'intersectioning' is between what normally are understood as separate disciplines, and develops an extensive overview of how interdisciplinarity has developed as a concept and mode of research vantage since the 1920s. This has been accompanied by a broadening orientation toward 'problem-solving' in research interwoven with high degrees of complexity of the realities involved, research collaboration, contextualization and co-production of knowledge with stakeholders in society. One key watchword in how Klein wishes to reorient thinking in and about interdisciplinarity and its 'beyond' is that 'context matters'. As Popper observed, we are 'students of problems', wherever that journey may lead (or mislead) us. Through epistemological prisms that are 'cross-disciplinary' and 'cross-social sector'. The book contends 'that *interdisciplinarity* is no longer an adequate term to account for heterogeneity of activities currently circulating' and that is analyzed in detail. Klein underscores in her own approach here that 'the book itself and my prior work are interdisciplinary by triangulating rhetorical, sociological, and historiographical approaches' (p. 28), with a strong focus on 'boundary work'. In her analysis, she prefers the term *crossdisciplinary* as a generic term for multi-, inter-, and transdisciplinary work. Space precludes describing Klein's very detailed analysis in Parts I and II

of the extensive discussion within the literature since the 1970s (and before) on interdisciplinarity, and I have selected but a few points and foci.

Part I: Definition

Chapter 1: Boundary Work, with its keywords: boundaries, ecology of spatializing practices, trading zones, communities of practice, boundary objects, boundary organizations, boundary agents. Particularly interesting is her discussion of the centrality of [heterarchy](#), an organizational concept worth considering in depth. Heterarchy ‘provides a framework for collaboration in transdisciplinary problem solving, associated with mutual accountability, interdependence, power sharing, and inclusive decision-making. Relations are heterogeneous, while boundaries are fuzzy and permeable’ (p. 24). She examines various boundary object examples relating to areas like climate modeling, human ecology and others. Klein develops a brilliant discussion of what a ‘discipline’ actually is, a largely *hierarchical* system anchored by ‘journals, professional associations, graduate training, control of promotion and tenure, and conferral of grants’ and a ‘locus of specific competencies, forms of communication, and a job market’ – ‘academic tribes and territories’ with a distinctive ‘habitus’ (pp. 17-18). Many scholars are ‘covert boundary crossers all along’ and ‘the complexity of their interest belies the linearity of departmental affiliations’ (p. 19). Examples discussed include biology, comprised of umpteen subfields, and art history. ‘Disciplines, in short, are neither static nor monolithic’ (p. 20).

Klein also often refers to power differentials between disciplines. She notes: ‘Bridging biology and chemistry or history and literature, for example, is a lesser challenge than bridging disciplines with different epistemologies and methodology such as biology and literature or physics and art history’ (p. 21). Analyzed is also the notion of an emergent ‘New Disciplinarity’. Explored are also projects for redesigning a university permeated by ‘transdisciplinary departments, centers, institutes, schools, and colleges’. Arizona State University ‘unbundled and dispersed disciplines across units. Biology, microbiology, and plant biology departments, for example, were merged with a program in molecular and cellular biology to form a School of Life Sciences’ (pp. 25-26). This is part of what is examined as ‘ecology of spatializing practices’.

Chapter 2: Discourses of Boundary Crossings looks inter alia at two major lines of argument in current discourse about interdisciplinarity: an epistemological, theoretical orientation that transcends disciplinary boundaries and a pragmatic, participative orientation to problem solving. Klein’s analysis traces developments over time in depth, with numerous references, also focusing in part on [ATLAS](#), the Academy of Transdisciplinary Learning & Advanced Studies based in Texas, paradigmatic in approaches to socially relevant problem solving and transdisciplinary education and teacher training. She also spotlights the [td-net](#), Network for Transdisciplinary Research, based in Bern/Switzerland, noting that ‘Case studies were reported in all fields of human interaction with natural systems

(e.g., agriculture, forestry, industry, megacities) and technical development (e.g., nuclear and biotechnology, genetics) as well as fields where social, technical, and economic development interact with value and culture (e.g., aging, energy, healthcare, nutrition, sustainable development, landscape, housing and architecture, urban land, waste management)' (pp. 41-42). Klein notes that since the early 2000s, 'the emerging field of *science of team science* has been advancing a new form of crossdisciplinary and cross-sector work. Its claim to transcendence lies in generating new methodological and conceptual frameworks for analyzing social, economic, political, environmental, and institutional factors in health and well-being. A range of stakeholders are involved, including scientists, trainees, funders, policymakers, and clinical and community partners' (italics added). She also recommends the Team Scholarship Acceleration Lab ([TSAL](#)) at the University of California Irvine (p. 42), perhaps a model for something similar in Bulgaria or elsewhere. Also discussed are various critiques of interdisciplinarity, and the failure to recognize academic capitalism, the corporatization of neoliberal academe and the political economy of knowledge production.

Chapter 3: Interdisciplinary Fields examines the boundary work of major communities of practice classified as fields and interdisciplines, building on the notion that interdisciplinarity is an 'architectonic art' of creating new knowledge forms and outcomes. It draws insights from patterns of interdisciplinary majors in higher education and taxonomies of both research and education, inter alia using the lens of women's studies as an exemplary illustrative prism. The chapter has subsections on the 'nature of interdisciplinary fields', 'trajectories', 'change', 'identities', 'contexts and intersections', and uses the term 'interdiscipline'. She comments very briefly on 'artificial intelligence' (pp. 61-62). Klein notes that the most in-depth study of interdisciplines is Harvey J. Graff's *Undisciplining Knowledge* ([2015](#)). Graff looks there inter alia at genetic biology, sociology, the humanities, communications, social relations, operations research, cognitive science, materials science, nanotechnology, cultural studies, literary studies, and biosciences through an interdisciplinary lens. Dr. Graff is Professor of English and History at Ohio State Univ. His book is downloadable as pdf [here](#).

Part II: Dynamics of Practice analyzes more closely the dynamics of boundary work with particular attention to communicating and collaborating, and learning, followed by lessons from failure and shortfalls in projects, programs, and fields.

Chapter 4: Communicating and Collaborating explores the dynamics of boundary weaving. The chapter looks at collective identity in teams and stages of collaboration, the nature of 'talk across boundaries' and relational thinking, community-based research. It focuses in terms of concrete examples inter alia on two cross-sector case studies, an urban planning project and a waste management project involving both academics and community stakeholders. Collaborating involves in any case myriad elements, among which are affective, organizational, and instrumental dimensions along with linguistic, relational, cultural, and socio-political variables. It is noted that 'all group communication involves boundary

spanning. However, spanning, transferring information, sharing meaning, and negotiating take on greater importance in crossdisciplinary collaboration because it requires bridging knowledge domains with different logics, methods, and languages' (p. 80).

An interesting question is how the contributors to *Lyuboslovie* 23 would communicate and collaborate if working together in a single group. Discourse analysis groups meeting with some focus has 'suggested that collaborators occupy epistemic domains individuated by what they know and the epistemic stance by which they situate themselves. Epistemic rights and status flow to individuals whose knowledge is deemed most relevant' (p. 82). The chapter discusses how physical and social scientists may struggle to communicate and 'make sense'. Collective identity is also a factor and the concept of relational capital highlights the importance of trust, reciprocity, and strong ties in arriving at 'we'. Transdisciplinarity research is an 'interface' practice. This involves cognitive shifts that 'foster collective thinking or sense-making through open, deep, and continuous interactions and reflections that foster both self- and collective efficacy' (p. 84). When launching a project, participants can use a variety of tools to externalize individuals' values, assumptions, and knowledge. Subsequent integration is also a key factor, examined in depth by Klein (pp. 87-92). Public engagement is likewise a dimension discussed in detail (pp. 92-94). A case study of a waste management project in Alaska revealed many concrete factors at play in communication and collaboration: "The research team brought pertinent experience. One was a microbiologist with Indigenous and public health expertise. Consultants were also experienced in STEM, participatory design, and trans disciplinary projects, including arctic engineering of water and sanitation systems. Yet, no member of the team had formal qualifications in social sciences and humanities' (pp. 97-98). Klein discusses the research findings in this case study.

Chapter 5: Learning Learning occurs on multiple levels: from individuals, teams, and projects to fields and large, cross-institutional initiatives. Settings also vary. 'After identifying individual and collective competencies and expertise in both education and training, the chapter draws insights from two cross-sector case studies, beginning with a sustainability project in the East India Plateau that bridged academic and community knowledge, followed by healthcare in two hospital settings that bridged disciplinary and occupational expertise' (p. 100). Interdisciplinary learning is a key focus here (pp. 100-102), as well as a subsection From Identification to Transformation (pp. 102-105). This is followed by subsections on Competencies and their Cultivation (pp. 105-112), leading to a subsection on Learning in Situ (pp. 113-117) and a final subsection Toward Failure and Success (pp. 117-118).

Chapter 6: Conclusion: From Failing to Succeeding begins by condensing barriers and impediments into a digest of challenges for both crossdisciplinary and cross-sector work, detailing reasons for shortfalls. It then elaborates on six overarching principles for success, with subsections on Principles for Succeeding

(pp. 125-130), a key intriguing final subsection The Future of Interdisciplinarity? (pp. 130-135) and a subsection on Resources (pp. 135-138). That last subsection lists five sites providing gateways into a greater abundance of resources:

Association for Interdisciplinary Studies ([AIS](#)) Their site has a wealth of stimulating open-access resources for interdisciplinary studies of all kinds, including inter alia a research manual for interdisciplinary student [senior projects](#), a section [About Interdisciplinarity](#) and a section [Interdisciplinary General Education](#). These are well worth exploring. It also features [Interdisciplinary Connections](#), many useful sites. You can explore their journal *Issues in Interdisciplinary Studies* (mentioned above). Its archive (open-access) [here](#), founded in 1982. [AIS conference](#) 26-28 Oct. 2023 in Texas. In the [conference program](#) on p. 13, note: '5:30 pm – 6:30 pm Special Panel Presentation: Beyond Appreciation: AIS Members Remember Julie Thompson Klein'.

[Short Guides](#) The four-page digests there cover a broad range of topics, including Developing and reviewing research proposals, building and managing research teams, supervising doctoral students, and troubleshooting common challenges of management, as well as designing research for policy and practice and developing strategies for research groups. They also address funding, evaluation, leadership, and careers.

[i2S](#) (Integration and Implementation Sciences) This Australian-based network aims to improve research on complex real-world problems while providing a common identity for researchers across domains.

Network for Transdisciplinary Research ([td-net](#)) The toolbox covers knowledge synthesis and integration, stakeholder engagement, participatory research, team research, disciplinary collaboration, design thinking, and impact-oriented research. Users can link to selected methods with answers to questions, definitions, purposes, and strategies.

International Network for the Science of Team Science ([INSciTS](#)) InSciTS is a home for team science researchers, educators, and others advancing the field. The SciTS and Team Science Resources link leads to selected references, kindred organizations, and information from annual meetings.

Approaching Dr. Klein's copious corpus of research

Prof. Klein's first major book was *Interdisciplinarity: History, Theory and Practice* (1990), here a [review](#), accessible at [Internet Archive](#). I strongly recommend that scholars read and share her last posthumous article, published Feb. 2023: Advancing transdisciplinarity: Learning, teaching, and institutionalizing. *GAIA - Ecological Perspectives for Science and Society*, 32(1) 2023, 162-166 ([pdf](#)), a good brief introduction to her thinking about learning, pedagogy and its spaces, institutionalized and more free. Discuss with students, create a community of practice with that focus. Explore some of her [publications](#) up to ca. 2010. The

References section of her 2021 book (pp. 139-158) also has several 100 titles by authors around the globe that interested readers can track down, all dealing with the questions she addresses regarding interdisciplinarity, transdisciplinarity and beyond. Among her recent key books is *Interdisciplining Digital Humanities: Boundary Work in an Emerging Field* (U Michigan Press 2015). It is [downloadable](#) as pdf. Another key book that can spark new ideas in Bulgarian academe and well beyond is her volume *Creating Interdisciplinary Campus Cultures: A Model for Strength and Sustainability* (John Wiley & Sons 2009). She coedited *Institutionalizing Interdisciplinarity and Transdisciplinarity. Collaboration across Cultures and Communities* (Routledge 2022), see this [link](#). Here the [link](#) to a book she coauthored in Spanish in the UNESDOC Digital Library, *Transdisciplinarietà y complejidad en el análisis social* (2004). Various books (PDF/EPUB) by Prof. Klein are available downloadable at this [site](#). See her article 'Alliances for Interdisciplinarity and Transdisciplinarity: A Call for Response' (2021 pdf). And her article in *Minerva* on 'refiguring the landscape of science' (2022). As noted, *Issues in Interdisciplinary Studies* honored Julie's achievements with a [special issue](#) in 2019 with articles on her copious trailblazing research. And mentioned above, Vol. 41(1), 2023 contains a [SPECIAL SECTION: JULIE THOMPSON KLEIN \(1944-2023\)–BEYOND APPRECIATION](#). You can explore that journal's archive (open-access) [here](#), founded in 1982, a journal of the AIS.

Perhaps a development unit or community of practice & discussion oriented to a broad range of interdisciplinary research questions and challenges could be created at Shumen University or elsewhere in Bulgarian academe, modeled in part on the [Transdisciplinary Lab](#), ETH, Zurich, with which Dr. Klein long collaborated. The TdLab looks in depth at sustainability in all its complexity and beyond. Another multidisciplinary research paradigm centered on education is the [Learning Lab](#) at Univ. of Queensland in Australia. Here a recent [brief article](#) on their ongoing research into emotions and learning. [TEMA](#) (Department of Thematic Studies) at Linköping Univ. in Sweden is another such interdisciplinary structural academic paradigm worth exploring, as is the [School of Social Ecology](#) at U California Irvine, focused on science based solutions to social and environmental problems. See also the [School of Sustainability](#) at Arizona State University, a degree-granting hub in research and students. [ABF](#) in Bulgaria could assist such efforts in Bulgarian academe, at Shumen Univ. and elsewhere, what ABF now calls the "[Power of &](#)". ABF could do far more to promote [BETA](#).

Critical-Pedagogical Supplement

This Supplement develops a range of reflections on the politics of knowledge and knowledge production, and also on aspects of crossdisciplinary critical pedagogy and its politics, exposing and resisting clandestine machinations of state power and control, the 'politics of truth', the optic of forensic architecture; explore the many relevant hyperlinks. It refers to several articles in *Lyuboslovie* 23, although I have only had Prof. Vitanova's article, who cites Julie Klein's work, to read in full. One question Prof. Klein comments on only in brief mention (pp. 61-62) is AI,

artificial intelligence. AI is now surging, largely unregulated, potential malicious uses, [invasive technologies](#), disinformation, dangers to democracy: ponder this *AJ* [video](#). Have any articles in *Lyuboslovie* 23 touched on the promises of AI and controversy around it, and if so how?

Universities 'Paying Lip Service' to Interdisciplinary Research

Times Higher Education (THE) in Britain published a well-researched article 18 Oct. 2023 worth reading, here below a brief introduction. Best to read and ponder the article:

Most universities profess a commitment to ridding the academy of its long-held obsession with siloed study and fostering a culture of interdisciplinarity. The world's major problems - the mantra goes - cannot be solved unless researchers work together in a coordinated fashion. Perhaps unsurprisingly, these things are easier to say than to do and universities are still failing to walk the walk on interdisciplinarity, [new THE data suggest](#). More than 700 universities across 100 countries and regions submitted qualitative data on several measures relating to interdisciplinarity. The vast majority provide specific physical facilities and administrative support for interdisciplinary teams. But lower numbers say they have measures in place that reward interdisciplinary success. 'Even though interdisciplinarity is increasingly being promoted, the infrastructure and environment is still not up to the task in many ways,' says Machiel Keestra, assistant professor in the Institute for Interdisciplinary Studies at the University of Amsterdam. 'Everything is still very much disciplinarily organised' in universities and journals,' he said.

Confronting a Major Contradiction: Truth ↔ Manufactured Consent and Propaganda

Crossdisciplinary knowledge production and the quest for truth about our world in many fields, especially in the social sciences, is embedded in a hyper-propagandized highly digitalized blanket of social and news media designed to control a mainstream 'narrative', saturated with lies. Visionary critical journalist Caitlin Johnstone addresses that in an [ironic prose poem](#) (Sept. 16, 2023). I think we sorely need interdisciplinary research about existing realities Vs. ruling class- and corporate-controlled brainwash of the mass public. It dominates the air waves, it permeates much public schooling. In umpteen countries. This is little addressed in Klein's 2021 book under review. It has been evident in [western media coverage](#) of the Israel-Gaza war Oct. 2023. Edward Herman and Noam Chomsky's *Manufacturing Consent* (1988) analyzes the political economy of the mass media in great depth. Watch this Dec. 2022 *AJ* video, on [Manufacturing Consent](#), also interviewing Chomsky et al. Early on, it features an [animated AJ film](#) on the book. Here an [animated 6-min. summary](#) of the book, discuss with students, pdf [here](#). Here a [brief basic extract](#) from the book useful to read. Chomsky in brief interview on the [propaganda model](#) several years ago. Read also Paul Street, 'Imperial Hypocrisy and Manufacturing Consent' ([23 Oct. 2023](#)), on current US

propaganda. And watch [an interview](#) with Noam (May 2022) on the mayhem situation today. Moreover, state public schools need more crossdisciplinary holistic teaching and CLIL (Content and Language Integrated Learning), and new modes of cross-subject team teaching, one section below; and we all need more critical education about confronting the real problems in our current global/glocal dystopia, another timely section. Critical education is crossdisciplinary in its very DNA. The article ends with a section on one of *THE* most crossdisciplinary global research areas not examined in Klein's book: tourism & hospitality, plus a journal *EJTR* based in Varna.

Interdisciplinary Critical Pedagogy: CLIL and Self-Determined Democratic Learning

Following up on Natalia Vitanova's insights in her *Lyuboslovie* 23 article on the need for interdisciplinary curricular holistic teaching, important to stress is that still rare in Bulgarian state public schools are small groups of teachers at the same school mind-sharing and team-teaching (and/or co-teaching) on diverse issues across multiple disciplinary subjects in the curriculum, such as foreign languages, Bulgarian language & literature, history, biology, math, geography, [civics / Граж. 06.](#), art, religion, philosophy – focusing on issues important in [democratic, critical place-based](#) education. With a focus on interweaving curricular subjects or examining various pressing social issues with students. This on [6 models of co-teaching](#). Watch also this superb webinar on [Interactive Teaching](#) from TESOL Kuwait (7 Oct. 2023), foregrounding the 'inter' in EFL. Explore the [Alliance for Self-Directed Learning](#). Watch this A-1 interview on [SML College](#) in the UK. And SML on FB: [self-managed learning](#). A [review](#) of Ricci & Riley, *Joys of Self-Determined Learning* (Kindle 2022), ideas akin to SML. On self-determined learning, see [The Learning Expedition](#). And check out B. and S. Templer, on self-determined democratic alternative education, *BETA E-Newsletter* ([April-May 2023](#)), pp. 32-47. Read '[Three Strategies to Boost Civics Education](#)', useful ideas. And this on '[Nurturing Changemakers](#)'. Wayne State Univ. in Detroit has a [Center for the Study of Citizenship](#), multidisciplinary. What about such a Center in Bulgaria? Colleagues at UK universities are calling for making '[sustainability integral to all teaching](#) and a "way of life" on campus.' In my view, shared by many colleagues, teachers in Bulgaria need to cooperate more in creating various CLIL-oriented multiple-subject learning experiments, combining several school disciplines in looking at some issue, theme or focus. And also focusing on [Participatory ESOL](#), grounded in students' lives, experiences and interests, combined with community action; see likewise [NATECLA](#) Scotland, superb links for teaching ESOL/EFL. Julie Thompson Klein earned all 3 her degrees in the English Department at the University of Oregon in the 1960s-70s. Today that department strives to offer numerous [interdisciplinary opportunities](#). Note how strongly they [stress](#) multi- and interdisciplinarity in their departmental description. Delve into this article on [CLIL and foreign language teaching](#), and a [CLIL-focused bibliography](#) (2018), Explore! Here a basic insightful article on CLIL by a Czech colleague [online](#). CLIL

can also generate *team teaching* (crossdisciplinary) collaboration in a concrete way, and can encourage critical pedagogy, critical thinking and education cutting across several subject areas, geography, history and the natural sciences in particular. It also can be undergirded by [task-based language teaching](#) (TBLT), as stressed by Geoff Jordan (and Mike Long) in their new book *English Language Teaching Now and How It Could Be* (2022), well worth sharing/ discussing, here is an [extract](#). The TaWSIG blog has a new two-part eye-opening [interview with Geoff Jordan](#) on his new book. See also this [article](#) on TBLT. TBLT incorporates aspects of [PBL](#) as discussed in the *Lyuboslovie* 23 article by Gerova & Ivanova. PBL is hands-and minds-on 'learning by doing', share this [PBL teaching guide](#), this [article + video](#), [this article](#), and this animated A-1 [PBL video](#). The site *Edutopia* offers a stash of [60-sec. 'strategies'](#) for TEFL, K-12. More from *Edutopia*: asking questions that [engage the whole class](#) of youngsters. Students seem a bit bored? Read this for some [counter-strategies](#) to re-stimulate curiosity. Explore [changemaking ideas galore](#) from Near East U in Northern Cyprus. And use [bookcreator!](#) – students creating their own [digital mini-books](#). A team of students could also be creating a 'school newspaper' to exchange with students in other schools, other cities and villages (pioneered in Freinet pedagogy). ► The Hands Up Project, headed by Nick Billbrough, creates [remote theatre](#), from Gaza across the globe, truly a great idea: **Join up!** No colleague or student in Bulgaria is as yet an HUP online volunteer. Ponder this [video](#) from HUP with young teacher Diana in bombarded Gaza and [The Screen](#) play. Watch [Nick's interview on Gaza](#) war (23 Oct. 2023). This by Vijay Prashad on [Palestine](#). Here a *Handbook for Exploratory Action Research* ([pdf](#)). Integral Education centers on engaging in transdisciplinary models that embody multiple ways of knowing, and recognize the student as a whole person, as reflected in L. Ma & J. L. Subbiondo (Eds.), *Theories and Practices of Integral Education and Integral Drama Based Pedagogy* ([Brill 2023](#)), very relevant to HUP theatre pedagogy. See also *BIRE* 3(4) (2022).

Freinet Pedagogy and Buber's Dialogic Educational Theory

In moving toward autonomous, self-directed, learner-centered pedagogies, I recommend delving deeply into [Freinet democratic education](#). Explore this A-1 [Freinet site](#). And this [article](#). It is also useful in [research skills development](#). In Bulgaria, [Britanica Park School](#) exemplifies Freinet pedagogy. Freinet schools are widespread in [France](#), [in Germany](#), [Austria](#), [Belgium](#), [Netherlands](#), [Finland](#). Here a [Bachelor's Thesis on Freinet schooling](#) based on interview research in Vienna. Freinet's ideas are superb for [citizenship education](#). Freinet pedagogy is also akin and germane to reflections by colleague Vitanova on holistic education in this issue. In that thematic frame, see likewise this instructive article by Dr. Vitanova, Freedom or Coercion – One of the Eternal Questions of Pedagogical Science, *Pedagogy* 85(4), 2013: 489-505 ([in Bulgarian](#)). Martin Buber's [dialogical theory](#) of education grounded on *I-Thou* ↔ *I-It* is noted there in its conclusion: 'За М. Бубер свободата е началото на собствената отговорност, тя не е цел, а в голяма степен е условие за необходимост. Свободата във възпитанието

е осъзната необходимост' (p. 504, citing Buber's [Reden über Erziehung](#) [1953]: 27-28). Watch a very informative 11-min. [video talk](#) by colleague [Hathib K.K.](#) in Kerala, southern India on Buber's dialogic educational theory. Numerous other online [talks by Hathib](#) on education are worth exploring. In addition, insightful is [this article](#) by Guilherme & Morgan on Buberian pedagogy within adult non-formal education (2009). Buber's thinking on education and other areas are well represented in his *Between Man and Man* (2004 [1947]) and his 1923 classic *I and Thou* (pdf). An A-1 [talk](#) on *I and Thou* is by Prof. Paul Mendes-Flohr (Univ. of Chicago). Read/share Prof. Mendes-Flohr's *Martin Buber: A Life of Faith and Dissent* (2019).

Transdisciplinary Research as an Arena of Political Struggle and Mindchange

In these turbulent times, multidisciplinary/transdisciplinary collaborative education and research on Global Issues ([GISIG](#)) are especially urgently needed. Explore *Creating Global Change* (2020), from [GISIG](#). See [GILE](#) in JALT in Japan, explore their superb [Newsletter #128](#) as an exemplum of fightback. Much critical thinking pedagogy is in significant measure interdisciplinary, post- and undisciplinary. Henry A. Giroux stresses that [educators as public intellectuals](#) must join the struggle, organizing in a politics of outspoken truth and resistance, galvanizing students and citizens as real [changemakers](#). Listen to Giroux's video talk [on education today](#) at a historical juncture in our darkling times. He stresses the need 'to make the political more pedagogical, and the pedagogical more political', and underscores: 'pedagogy is always political' (min. 20: 10), lest we forget! Take the online [cost-free course](#) 'How Social Transformation Occurs' by [Popular Resistance](#). Discuss Giroux's *On Critical Pedagogy* (2nd ed. 2020) and *Pedagogy of Resistance: Against Manufactured Ignorance* (2022), at [zlibrary](#).

We live in an existential world where multiplex global/glocal problems dynamically beckon for transdisciplinary research (and teaching) in engaged depth: be it the COVID-19 pandemic and its multiplex aspects and lethal impact, for example on [school absence and kids' mental health](#) 2023 in the UK, [banned books](#) in US schools, [global overheating](#) and its deepening climate disaster, [Amazon dolphins dying](#) due to heat, [Just Stop Oil](#) in fightback against our corporate-ruled industrial addiction to fossil fuels, the insane war in Ukraine, NATOology and the [US military-industrial complex \(MIC\)](#), racism, the aporias of [Israeli apartheid](#), xenophobia and colonialism 2023 in all its toxic oppressive imperial perseverance, extreme inequality, [poverty](#), the refugee and migrant crisis, human trafficking, the plight of [subaltern, marginalized Roma](#) in BG and across Europe, world hunger vs. hyper-consumerism, [class warfare](#) across the planet – and enfolding and driving it all, the [capitalist system](#) and its propaganda machine and myriad aporias, oligarchic control over the public means of public perception. [Degrowth is central](#) to sustainability, a co-sharing economy, decentralized, community sovereignty, people learning to take care of one another, see *The Care Manifesto* (2020 download). For peace education resources, see the open-access *Journal of*

Transdisciplinary Peace Praxis (JTTPP), numerous A-1 articles there, for example the [August 2023 issue](#). I also strongly recommend reading & sharing Astra Taylor, *Democracy May Not Exist But We'll Miss It When It's Gone* (2019), *Remaking the World* (2021) and her new book *The Age of Insecurity. Coming Together As Things Fall Apart* (2023), a brilliant [analyst/activist](#), available as EPUB at zlibrary.

Meanwhile, ***urgent action is crucial now in Bulgaria***: mounting verbal and physical abuse against children in Bulgaria at home and in school, also online, must be identified, addressed and prevented, read this *btv* [article cum video](#) (Sept. 23, 2023). The degree of risk of [child poverty](#) and social exclusion in Bulgaria 2023 is the 2nd highest in the EU. There is a serious [lack of protection](#) for children in BG, [online harassment](#), and 'children left behind' in labor migration. Discuss these problems based on a [children's rights education](#) focus. It is a strong topic for student PBL, examining how learners see their rights personally, as lived concretely, perceived through the multidisciplinary lens of the [UN Convention on the Rights of the Child](#).

► Re **Palestine** and its current maddening crisis, ponder a brief animated history of the [question of Palestine](#). For numerous links/data on Gaza, a huge array, see: <https://ongaza.org/>. Students can also discuss *Caging Childhood*, a film about three Palestinian children in Israeli military jails. This on [settler colonialism](#), central to Israeli reality and its Occupation. Is Israel possibly planning a [mass expulsion](#) of all Gazans into Egypt? *Electronic Intifada* is a superb source to follow on Palestine as is *Aljazeera*, like [this critical panel](#) and [this](#); see also [UNAC](#) on Palestine, and [Prof. Ilan Pappé](#), a brilliant lecture 19 Oct. 2023 on the humanitarian disaster and genocide in Gaza and the West Bank. Read also Prof. Mazin Qumsiyeh's '[Letter to Gaza](#)' (10/23/2023) at his [blog](#) (U Bethlehem); watch [this video](#) with Mazin 2022 and this Xcellent [dialogue](#) with him 13 Oct. 2023. Watch *The Occupation of the American Mind*, an [extraordinary doc-film](#) (2016) in the current context, on how Israel has created a dominant narrative regarding Palestinians over decades, a public relations war, the huge Israel lobby in the US.

► Re **Ukraine and NATO**, follow Vijay Prashad at [TISR](#), ponder Prashad & Chomsky on '[collaboration-not confrontation](#)', and Prof. William I. Robinson in interview (2023) on the global police state and its aporias; see his [website](#). On the multi-dangers of US foreign policy and Cold War 2.0 is the crossdisciplinary [analysis of Prof. John Mearsheimer](#) (U Chicago). Listen also to Jeffrey Sachs (Columbia U) [on the Ukraine war](#) and its [myriad contradictions](#). Fears deepen that this war (or Gaza) may morph into [World War III](#), as Antony Blinken asserts US global '[full spectrum dominance](#)'. Profs. Mearsheimer and Sachs are key political scientists.

The Inter- and Undisciplinary Optic of Forensic Architecture

Importantly, Klein does not address our cyber worlds of clandestine mass surveillance by the state and powerful corporate interests, the machinations of unjust regimes of state power and control, what the CIA, [MI5](#), or Israeli

Mossad engage in secretly: electronic spying, digitalized drone photography, the 'deep state' power politics of control, its abuses and unmasking. [Listen to](#) and ponder architect Eyal Weizman, his *interdisciplinary investigative methods* in forensic architecture, analyzing architecture as a means of potential control and violence, the 'DNA of separation', are powerful and unique. Listen to Dr. Weizman in A-1 video interviews [here](#) (April 2022) & [here](#) (May 2023). See Fuller & Weizman, *Investigative Aesthetics: Conflicts and Commons in the Politics of Truth* (2021 EPUB), Weizman, *Forensic Architecture: Violence at the Threshold of Detectability* (2019 PDF). Explore the site [Forensic Architecture](#) and its many [transdisciplinary studies](#), a [mini-introduction](#). Read this on Shireen Abu Akleh's death [in Jenin](#).

Ponder and enjoy also Trevor Paglen and Eyal Weizman, in idea exchange, *Aljazeera*, [May 2023](#). Listen to Trevor Paglen on [invisible images of surveillance](#), spy satellites, body cameras.

Six Virtuoso Masters of Critical Alternative Investigative Journalism

In that multiplex critical ethos, I suggest enjoying/sharing the mindset-changing well-researched work of Australian poet/activist/critical journalist Çaitlın Joħnştonę, as in: 'We Must Never Let Ourselves [Become Desensitized](#) To This'. Striking is her piece 'The More Inner Work You Do, The More You See How Humanity is [Dominated by Narrative](#)'. And '[Why Propaganda Works](#)', the war in [Ukraine](#) and its tragic [sick insanity](#), coupled with [weapons profiteering](#) on a huge scale. Caitlin on the [US-centralized empire and its propagandists](#). And on the October 2023 [attack by Hamas](#) in response to Israeli oppression: 'All This Death is The Fault of The [Western Press](#)'. Caitlin writes open access regularly, [subscribe cost-free](#). Follow also poet/activist/ writer Raçhel Doğald at [Planet: Critical](#), a site for visionary mindshift, self-transform, well-being, equity & community. Ponder her lyrical reflection: 'The gift of [being human](#)'; 'Fixing our [food systems](#)'; [ecosocialism](#); [climate crisis](#). This on [Palestine](#). [Subscribe](#) cost-free. Follow veteran US journalist/ activist Çhris Hedges at [Scheerpost](#): his multiple [books](#), myriad articles, like this on [universities incorporated](#) and Hedges on [Israel/Gaza](#). Watch Amy Goodman daily at her [Democracy Now!](#) site, with [incisive reportage](#), including her [43-min. video](#) on a striking new book by [Nathan Thrall](#), *A Day the Life of Abed Salama* (2023 EPUB) on Israeli apartheid in Occupied Jerusalem; [watch this](#). Here she [interviews M. El-Kurd](#), Palestinian poet/journalist. And hear Stella Assange in her plea for husband Julian Assange's release and [press freedom](#): 'We must defend the right to offend', confronting 'the power brokers with the truths that they so eagerly wish to conceal.' Caitlin is incisive on [Assange's cruel detention](#). On Palestine's liberation, follow Dr. Ramzy Baroud '[Politics for the People](#)'. Listen to Ramzy on the '[new Gaza generation](#), rising against desperation' 12 Oct. 2023. All six 'freelancers' are gifted with an interdisciplinary expertise and keen insight that critical investigative journalists aspire to and achieve. Listen to Caitlin on her [radicalizing journey](#).

On a Closing Note: Tourism as an Exemplary Crossdisciplinary Research Object

One complex multifaceted complex industry, in Bulgaria and across the planet, is tourism. Tourism over decades has galvanized an ever-growing crossdisciplinary conglomerate of interdisciplinary research hubs, centers and initiatives. Two articles in *Lyuboslovie* 23, by Zuzana Slobodová on storytelling to promote tourism and Nevrie Chufadar on tourism discourse also have a touristic multidisciplinary focus. [English for the tourism industry](#) is a key subarea developed (Erasmus+) and inviting new research in Bulgaria. Moreover, [archaeological sites](#) in Bulgaria are also [touristic magnets](#), as Dr. Konstantinov's team is aware; he spoke in this multidisciplinary conference on the 100th anniversary of the Archaeological Association Razgrad (Nov. 2022), see the [diverse program](#). A recent find near Provadia/BG is a bone-carved [Scythian septr 2,500 years old](#). Explore the archaeological journal [Arkeonews](#). [Museology](#) is megadisciplinary, [Kotel](#) is an urban heritage museum itself, famous for [folk carpets](#) and more.

For basic orientation, read this [article](#) by Frédéric Darbellay and Mathis Stock, colleagues of Julie Thompson Klein in Switzerland: 'Tourism as Complex Interdisciplinary Research Object', *Annals of Tourism Research*, 39(1), 441-458, 2012. It provides a well-grounded introductory analysis to interdisciplinary tourism research and interdisciplinarity in knowledge production more generally. *Annals of Tourism Research* has numerous inter- and transdisciplinary articles, some also dealing with Bulgaria, such as M. Ivanova and D. M. Buda, Thinking Rhizomatically about Communist Heritage Tourism, *ATR*, 84, [September 2020](#). Explore the journal *ATR*, now 103 volumes: <https://tinyurl.com/2p8nen3v> (use browser to access). *ATR* also features [curated article collections](#) on many topics. Note also the work of the [University of Glasgow Tourism Studies Group](#). Roam through the excellent interdisciplinary journal [Tourism Planning and Development](#) published at the Univ. of Mazandaran in northern Iran (established 2012, open-access), many fascinating articles, and also the [Journal Sampurasun: Interdisciplinary Studies for Cultural Heritage](#), Pasundan University in Indonesia.

Within cultural heritage research, **folklore studies** are a striking interdisciplinary example, see the journal [Bulgarian Folklore](#). Excellent was a folkloric celebration of the [Historical Museum ABRITUS](#) and 'White Nights of Razgrad' (June 2022). A [folkloric event at ABRITUS](#) (July 2023) with children, [civic education in action](#), explored Razgrad's past; here a [folkloric sampler](#), and a [folkloric dance festival](#) in Novi Pazar (Oct. 2023). AFB Foundation in BG also supports interdisciplinary [cultural heritage research](#), [student cinematics](#) and the [arts](#).

Last but by no means least, discover *The European Journal of Tourism Research*, an English-language [open access academic journal](#), vol. 35 current, published by [Varna University of Management](#) (VUM) in Bulgaria. Share with colleagues, students. *EJTR* offers a multitude of interdisciplinary articles, reflecting what tourism research richly comprises. Its stated aim is 'to provide a platform for discussion of theoretical and empirical problems in tourism. Articles from all

fields, connected with tourism, such as tourism management, tourism marketing, tourism sociology, psychology in tourism, tourism geography, political sciences in tourism, mathematics, tourism statistics, tourism anthropology, culture and tourism, heritage and tourism, national identity and tourism, information technologies in tourism and others are invited.' VUM offers a range of [bachelor degree](#) programs relevant to tourism and hospitality as well as a [master's degree](#) in international tourism and a [PhD degree](#) centered on tourism. Its [Master of International Hospitality and Tourism Management](#) degree program was ranked 14th worldwide in 2021 by the Eduniversal Best Masters ranking system. VUM also offers a [master's degree in anti-corruption](#): 'The program is a combination of 6 legal and 3 economic disciplines, with a focus on various aspects of the fight against corruption, media and corruption, and marketing and image management of public institutions in Bulgaria.' How do Bulgarians today perceive corruption and efforts to counter it? See a [new study](#) by the Basel Institute on Governance, a globally engaged strongly multidisciplinary Swiss research center.

References

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