

Guest Editor's Introduction

It is with both great delight and some trepidation that I introduce this special volume of *Issues in Interdisciplinary Studies* with its very fitting subtitle, *The Work of Julie Thompson Klein: Engaging, Extending, and Reflecting*. The volume has the distinction of being the first collection of articles addressing the work of Julie Thompson Klein. At least some of my delight stems from knowing that the arrival of such a volume is long overdue. After all, it goes without saying that the impact and influence of Klein's scholarship on interdisciplinarity have been far reaching, crossing many disciplinary and geographical divides. While Klein herself remains a bit of an enigma (she makes it no secret that she prefers not to be the center of attention), I do know from my interactions with her over the years that as a scholar she is a stickler for accuracy. To say that I have stayed up some nights worrying that I would overlook some typo or factual error in the production of this volume would be an understatement – hence my bit of trepidation.

When the Association for Interdisciplinary Studies Executive Board considered a proposal to dedicate a special volume of *Issues* to Klein's work during its annual meeting in October 2016, its members immediately approved the idea and were cautiously optimistic that Klein would not object. When I emailed Klein about the project, her response was swift and to the point – she would reject and not support any possibility of a mere celebration of her work. She did mention that she might be interested in seeing how other scholars would engage and possibly extend her ideas – a hint of an alternative that quickly developed into the special volume's organizational principles. She insisted that she would not get involved in any way with the editorial process – with the sole exception of her being available to answer questions regarding matters of accuracy. However, she brainstormed with me as I conceptualized the special volume's call for articles, and gave me valuable feedback once it was done. She also reviewed my initial list of potential contributors and made some additional suggestions. But after that initial brief period of exchange, I was on my own.

Well, not exactly. *Issues* co-editors Gretchen Schulz and Sven Arvidson had my back throughout the entire publication process. I steadfastly (stubbornly?) insisted that all the articles in this volume were to address Klein's work in substantive ways. I made some tough editorial decisions while adhering to that agenda, which both Schulz and Arvidson supported. They kept me on track, and helped tremendously with handling all the final bits and pieces to ensure that the volume would come out on time. I am greatly indebted to them both.

To be clear: this special volume is a critical examination of the work of Julie Thompson Klein. Eight out of the following nine articles were written specifically for this volume. They address many aspects of Klein's work, including all of the following: interdisciplinarity, interdisciplinary education, theories of integration, boundary work, typology, digital humanities, team science, collaboration, and transdisciplinarity. This special volume has no pretense to be comprehensive as time and length limitations prevented additional considerations of significant areas of Klein's research, but those that are addressed certainly deserve the attention they receive.

The special volume begins with two introductory articles. In addition to the usual "Editor's Introduction," it includes the written version of Daniel Stokols' presentation honoring Klein on the occasion of her receiving the 2016 Science of Team Science (SciTS) award in Phoenix, Arizona. Stokols, who is Chancellor Professor Emeritus at University of California, Irvine, invoked the well-known baseball metaphor of the "Five Tools Player" to introduce Klein (a great baseball fan) as a "Six Tools Player" in the interdisciplinary field of Team Science. Stokols added a sixth "Tool" in order to underscore one of Klein's rarefied talents: "She makes her colleagues and students better in their own right." Stokols' valuable insights about Klein and her achievements spotlight what it takes to be an exemplary interdisciplinarian. He places special emphasis on her quality of resilience, while mentioning additional qualities such as endurance and stamina that scholars who are interested in capacities that enable interdisciplinary work may wish to examine further.

The rest of the volume features the tripartite thematic structure of "engaging, extending, and reflecting" in the critical examination of Klein's work. Although the verb "to engage" has many meanings (indeed, the *Oxford English Dictionary* lists 19 definitions), I understand that "to engage" in this case means (to borrow from the OED's 13th definition) "to entangle" with Klein's work, certainly, but also to "involve and commit" to her work, and perhaps to question if not challenge that work...or, as the OED puts it, to "mix up (in an undertaking, quarrel, etc.)."

Karri Holley, who is a professor of higher education at the University of Alabama, starts off the "Engaging" section with her article, "Learning from Klein: Examining Current Interdisciplinary Practices within U.S. Higher Education." Holley draws from Klein's longstanding commitment to mapping American interdisciplinary higher education while offering a comprehensive overview of contemporary interdisciplinary education in the United States. Holley builds upon Klein's previous writings by asking questions: "Who engages in interdisciplinary work?" "How is interdisciplinary work supported?" "How is interdisciplinary work organized?" She then addresses

the question of “What’s next?” by examining issues of access and new delivery modalities. In so doing Holley follows Klein’s footsteps (and encourages other scholars to do so) insofar as she is interested in considering how emergent trends can be opportunities for supporting and advancing interdisciplinarity.

In the second article in the “Engaging” section Bethany Laursen, a graduate student, and Michael O’Rourke, a professor of philosophy, both at Michigan State University, critically engage with Klein’s writings on integration. They compare Klein’s recent socio-linguistic model of integration (as developed from her earlier step-wise model) with what they call an IPO (input-process-output) model in their illuminating article, “Thinking with Klein about Integration.” While they make the case that the IPO model is a more generally applicable framework than Klein’s socio-linguistic model, they use an example of integrative argumentation from a Toolbox workshop to demonstrate the complementarity of the two models, concluding that “we can understand instances of cross-disciplinary integration better with both models than with only one or the other.” And they note that this “theoretical stereoscope opens new avenues of research” in integrative work.

Can “engaging” be a synonym for “applying”? For the purposes of this special volume it can. In the third and final article in the “Engaging” section, Christian Pohl, of ETH Zurich, Dena Fam, of the University of Technology, Sydney, Australia, Sabine Hoffman, of the Swiss Federal Institute of Aquatic Science and Technology, and Cynthia Mitchell, also of the University of Technology, Sydney, call attention to Klein’s recent focus on boundary work, which happens to be the subject of her highly anticipated forthcoming volume, *Beyond Interdisciplinarity: Boundary Work, Collaboration, and Communication in the 21st Century*. With Klein’s permission, Pohl and his collaborators apply Klein’s conceptual framework for boundary work in order to evaluate its effectiveness for actual transdisciplinary teamwork. Drawing on two case studies – one that involved the installation of a sanitation system in a campus building at the University of Technology Sydney, Australia, and the other that involved a sustainable urban water management project in Switzerland – Pohl and his co-authors “explore and assess the heuristic value of the framework” and suggest how it might benefit from some modification. They make a persuasive case for the versatility and adaptability of Klein’s conceptual framework while ultimately making a case for its further elaboration.

The two articles in the next section of this special volume, “Extending,” push Klein’s ideas forward in ways that have yet to appear in print. Frédéric Darbellay, a professor at the Centre for Children’s Rights Studies of the

University of Geneva, Switzerland, has shared Klein's longstanding interest in typology and definitions of varieties of interdisciplinarity. In his article, "From Interdisciplinarity to Postdisciplinarity: Extending Klein's Thinking into the Future of the University," Darbellay revisits Klein's influential definitions in light of new developments and critique, inviting "further reflection on more or less likely scenarios" in "university institutions, scenarios more or less transgressive of the disciplinary status quo." As the university's attachment to disciplinarity becomes increasingly challenged, radical visions of revision, activism, and revolution in the name of postdisciplinarity emerge, well worth pursuit by scholars in the field.

In his article, "Imagination and Actionability: Reflections on the Future of Interdisciplinarity, Inspired by Julie Thompson Klein," former AIS President Machiel Keestra, assistant professor at the Institute for Interdisciplinary Studies at the University of Amsterdam, credits Klein's work on interdisciplinarity's history as a catalyst for his considerations of its present practice and future possibilities. Keestra charts similarities between the aims of interdisciplinarity and transdisciplinarity and those of action research before turning his attention to the role the arts, creativity, and the imagination can and should play in establishing actionability as a criterion for the best work in the field. In proposing new directions for thinking about ID and TD both, Keestra, a philosopher of mind by training, not only extends Klein's work in new directions but extends his own, as well, and encourages all of us to follow suit.

After reading about possible futures for interdisciplinarity in several of the articles in the first two sections of this special volume (that by Holley as well as those by Darbellay and Keestra), readers may deem the placement of the three reflective pieces in the third and last section of the volume a bit odd, given that the act of reflection involves looking back at the past. However, while not concerned with imagining the future, reflection aims to learn from the past in order to move forward. And our reflectors all feel that they have learned much from their past engagement with the work of Julie Thompson Klein (and often with Klein herself) and expect to learn still more as their engagement (with the woman and her work) extends into the future. As I considered their contributions to this volume, I was interested in highlighting the uniqueness of their writing styles and forms, which challenge the conventional form and exacting writing style of the usual peer-reviewed academic article. I find their transgressions of "the scholarly" innovative and liberating. They unveil new understandings of Klein's contributions that perhaps could not have been conveyed otherwise.

In the first of these articles, Cathy Davidson, Founding Director of the

Futures Initiative in the Graduate Center at the City College of New York (CUNY), and her co-author, Bruce Janz, a professor of philosophy at the University of Central Florida, break with strict expository writing rules in their article, "Theory into Practice: Julie Thompson Klein's Boundary Work and Institutional Change." Their first sentence, which conflates the literal with the metaphoric, simultaneously summarizes Klein's life and work: "Julie Thompson Klein lives at the border." Davidson, as many *Issues* readers will know, is no stranger to border work in interdisciplinary education herself, having served as the first Vice-Provost of Interdisciplinarity so-designated in the United States at Duke University prior to accepting her current position as a Distinguished Professor at CUNY. Davidson and Janz, recount Klein's vital role in the creation and continuation of HASTAC, the Humanities, Arts, Science, and Technology Alliance and Collaboratory, which they see as exemplary of the boundary-breaking efforts that Klein not only theorizes but also enacts, enabling others to do the same.

Gabriele Bammer, the founder of Integration and Implementation Sciences (i2S) and a professor at The Australian National University, gathered reflections of nine of her Australian colleagues and one New Zealander – in addition to writing her own – to offer what the title of their intriguing article denotes: "A Rich Mosaic of Impact: Julie Thompson Klein's Scholarly Influence in Australia and New Zealand." Bammer and her co-authors make explicit what should be quite evident in this special volume's Table of Contents: Klein is to be acknowledged and credited not just for advancing the discourse of interdisciplinarity, but also for connecting scholars interested in interdisciplinarity all around the globe. Their article also "demonstrates the value of reflective narratives in providing a more rounded and richer picture of an academic's influence than traditional metrics" do.

The third article in the "Reflecting" section and the final article of this special volume, "The Impact of Julie Thompson Klein's Interdisciplinarity: An Ethnographic Journey" by Gaetano Lotrecchiano, of George Washington University, and Andi Hess, of Arizona State University, is a special treat as it is chock-full of Klein's *own* reflections about her work and career. Lotrecchiano interviewed Klein via teleconferencing and email exchanges, and in processing the results of the extended dialogue, he and Hess focus on three major aspects of her work: "interdisciplinary educational activities, contributions to the professionalizing of interdisciplinarity, and discourse on teams." Accompanying Lotrecchiano and Hess on this "ethnographic journey" towards understanding how [Klein] herself views her scholarly evolution over the last five decades" is nothing short of revelatory.

Lotrecchiano and Hess's respective biographical notes are also uncon-

ventional for *Issues* in terms of both length and content. It's not often that biographical information proves to be deeply moving. While they each express how Klein's work has impacted their own work and their academic trajectories, they also take care to emphasize how personal interactions with Klein have impacted their very lives. It was a bit of a surprise to learn that someone whom I consider a personal mentor has been a mentor for so many others as well. But then again, my feelings about guest editing this special volume are similar to Lotrecchiano's feelings about preparing his article for this special volume. He describes the effort as "a labor of love and dedication to the kindness, encouragement, and trust afforded me by Julie." I would describe my own efforts in the same way.

In closing, I need to reiterate that this volume is not a mere celebration of Klein's work. It truly does engage, extend, and reflect on that work and, in so doing, should be inspiring of further work in its testimony to Klein's ongoing influence and impact, the results of her scholarship, her teaching, her collaboration, her networking, her mentoring, her consulting, and – dare I say it – her friendships. The Association of Interdisciplinary Studies owes a great deal to its former president, Julie Thompson Klein, but, as the articles in this collection attest, so do people involved in the many varieties of interdisciplinary endeavor worldwide. It is no wonder that the AIS Board of Directors found it fitting to schedule the publication of this special volume in the same year as the first AIS conference in Europe (its second international conference, after that held in Canada at the University of Ottawa in 2016). On behalf of AIS and the *Issues* co-editors, Gretchen Schulz and Sven Arvidson, I wish to thank our decidedly international roster of contributors for their work inspired by the work of Julie Thompson Klein. Without exception, they assert that they are immensely appreciative of and grateful for all she has done to advance the understanding – as well as the application – of interdisciplinarity. And so say we all.

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