TEACHING HETERODOX ECONOMICS MALANA

TABLE OF

05 FOREWORD

Clara Dallaire-Fortier, Lund University

PROBLEM SOLVING IN TIMES OF CRISES

06 HETERODOX ECONOMICS FOR TRANSFORMATIONAL GOVERNANCE Patricia E. (Ellie) Perkins, *York University*

08 REAL(ER) WORLD
MICROECONOMICS
Chandni Dwarkasing, SOAS University of London

10 TEACHING A CRISIS:
PERSPECTIVES FROM THE
RETHINKING ECONOMICS NETWORK
Ross Cathcart, Rethinking Economics

12 USING PLURALISM TO CREATE USEFUL DOUBT TO CREATE MORE SPACE FOR PLURALISM: A CLASSROOM EXERCISE ON THE TOPIC OF MINIMUM WAGES Andrew Mearman, *University of Leeds*

INNOVATIVE CLASSROOM EXERCISES

14 A NEW PEDAGOGICAL TOOL FOR TEACHING PLURALIST ECONOMICS Constantine Passaris, *University of New Brunswick*

16 MOVING AWAY FROM THE FREE TRADE « CONSENSUS »
Mathieu Dufour, *University of Quebec in Outaouais*

18 ROBINSON CRUSOE AND
MULTILEVEL GEOPOLITICAL
ECONOMY: TWO EXERCISES IN
TEACHING POLITICAL ECONOMY
Tiago Camarinha Lopes, Universidade Federal de Goiás

20 ECONOMICS IN THE REAL WORLD: EXPERIMENTING WITH STORYTELLING WORKSHOPS IN INDIA Vrinda Chopra, Ashoka University

CONTENT

QUESTIONING THE MAINSTREAM

22 URGENCY AND STRATEGIES FOR TEACHING PLURALISTIC PERSPECTIVES IN FINANCE Vicki Zhang, *University of Toronto*

24 THOUGHTS ON TEACHING FROM A PRACTITIONER

Eric Kemp-Benedict, Stockholm Environment Institute

26 TEACHING GENDER ECONOMICS IN A TRADITIONALIST SOCIETY

Mehak Majeed, *Islamic University of Science and Technology Awantipor*

STRATEGIES FOR CURRICULUM CHANGE

28 ACHIEVING CHANGE IN ECONOMICS TEACHING: STRATEGIES BEYOND ECONOMICS DEPARTMENTS

Tim Thornton, Boston & Tufts Universities

30 DECOLONIZING THE TEACHING OF THE HISTORY OF ECONOMIC THOUGHT

Jeff Powell & Yuliya Yurchenko, *University* of Greenwich

32 IS IT SIMPLE? IS IT COMPLICATED? NO, IT'S COMPLEXITY ECONOMICS!

Jan Schulz, *University of Bamberg* & Jan David Weber, *University Duisburg-Essen*

35 POPULAR EDUCATION IS ESSENTIAL FOR ADVANCING HETERODOX ECONOMICS Francisco Pérez, *University of Utah*

Teaching Heterodox Economics Magazine

Edited by Clara Dallaire-Fortier September 2023

DOI: 10.6084/M9.FIGSHARE.24175059

With the support of



Suggested Citations:

Dallaire-Fortier, Clara, Camarinha Lopes, Tiago, Cathcart, Ross, Chopra, Vrinda, David Weber, Jan, Dufour, Mathieu, Dwarkasing, Chandni, Kemp-Benedict, Eric, Majeed, Mehak, Mearman, Andrew, Passaris, Constantine, Pérez, Francisco, Perkins, Patricia E., Powell, Jeff, Schulz, Jan, Thornton, Tim, Yurchenko, Yuliya, and Zhang, Vicki. "Teaching Heterodox Economics Magazine." Special Edition, vol. 1, no. 1, 2023, pp. 36. *Figshare*. https://doi.org/10.6084/M9.FIGSHARE.24175059

Dallaire-Fortier, Clara. (ed.) "Teaching Heterodox Economics Magazine." Special Edition, vol. 1, no. 1, 2023, pp. 36. *Figshare*. https://doi.org/10.6084/M9.FIGSHARE.24175059

FOREWORD

The idea for this simple yet strategic collection of stories emerged during a session about teaching political economy at the 2022 International Initiative for Promoting Political Economy (IIPPE) conference. I was inspired by the strong solidarity and energy emerging from the group. Interesting classroom exercises, different teaching contexts and their associated challenges were discussed at the session creating a feeling of togetherness and an acknowledgment that what we were doing was not a straightforward task.

After eight years in the Rethinking Economics movement, I was new to teaching only recently hired to design and teach university courses on my own. While having built a coherent critique on how a course *should* be constructed, the task of creating new content and activities was quite different. Like others in the movement, I hold this responsibility with great respect and know that this is an intrinsic part of our capacity to exist as heterodox within academic structures.

The questions shared with the authors are simple in wording yet have unraveled into complex answers: (1) How can we introduce heterodox discussions in classrooms within a mainstream economics program?, (2) Which innovative approaches can be used to teach real-world, heterodox, and pluralist economic content?, and (3) What are the main hindrances faced when trying to introduce heterodox content in classrooms? What needs must be addressed?

The responses are diverse, stimulating and gathered in the following pages. I hope you feel as much joy as I did while reading them. I sincerely thank the authors for participating in this project. It extends into a call for actively listening and engaging with students, their experiences of economic systems and their perceptions of the crises we are facing. It is also a collective thinking exercise on how to strategize for needed curriculum changes, notably through decolonizations and how to teach heterodox content both inside and outside economics departments.

Please circulate widely, this special issue has been created to share stories that can inspire teachers and students in the movement!

CLARA DALLAIRE-FORTIER

p.s. For any questions and if you wish to carry on the initiative, feel free to contact me at clara.dallaire-fortier@ekh.lu.se



HETERODOX ECONOMICS FOR TRANSFORMATIONAL GOVERNANCE

This was my first exposure to the pedagogical value of teaching students what they needed and wanted to know, by listening to their questions and constructing class priorities accordingly, while also bringing in critical discussion.

In the mid-1990s, I taught a course called "Environmental Economics" in the Faculty of Environmental Studies at York University, Toronto, Canada, where I have taught ever since. (Not working in an Economics department has given me welcome flexibility in teaching, with students who have a wide range of interests.) I designed the course to give environmentalists an overview of how neoclassical economics functions, and in particular how capitalism exploits environmental and social 'inputs' which are resistant to being commodified. We spent some time on the physiocrats, Ricardo's models, Say's Law, the Jevons 'paradox', Pareto optimality, and also the problems with basic Pigouvian taxsetting and the measurement of 'externalities'. Again, the focus was on theoretical arguments that students might encounter in their careers as environmental advocates or policy-makers. I wanted the students to be able to flip without trepidation to the "technical appendix" of any environmental report, and confidently understand the often-faulty assumptions, and the unquestioning application of problematic theories under imperfect market conditions such as those that exist for nearly all environmental, ecological and social "services."

Ecological economics counter-theories and textbooks were just appearing in those days. The critiques of neoclassical economics in a finite world were burgeoning. I obtained funding to establish a research network on feminist ecological economics, since (building on the work of Sheila Rowbotham, Maria Mies, Marilyn Waring, Vandana Shiva, Mary

My experience with teaching heterodox economics goes back more than thirty years. In the early 1990s, I taught International Economics and Economic Development in the Economics Department of Eduardo Mondlane University, Maputo, Mozambique. At that time, there was one university, with about 3000 students, in the country of roughly 13 million people, more than 70 % of whom were reported to be illiterate. My students were 'worker-students,' who worked half-days for government ministries or banks, and attended classes the other half-day. The 15year-old socialist post-independence government, buffeted by an apartheid-supported guerrilla war, had basically been forced to sign a structural adjustment agreement. I remember an Economics department faculty meeting where a vote was reluctantly taken to remove Dialectical Materialism from the course list. We didn't have economics textbooks in Portuguese, just a few reference books in the university library. I tried to introduce various economic concepts as the basis for discussing questions the students brought to class directly from their working lives: What is structural adjustment and how has it affected other countries, such as South Africa? (data on Mozambique itself being hard to find.) How do interest rates rapidly escalate debt payments and result in huge debt obligations? What's the Gini coefficient?

Mellor, and others), it was evident that unpaid work and unpaid ecosystem services were related dark holes of exploitation upon which the capitalist economy is based. But when we had assembled a book of cases and examples outlining the framework of feminist ecological economics, and published special issues of Ecological Economics on gender (1997), and Feminist Economics on ecological matters (2005), even in 2013 we were unable to find a publisher for our book. Routledge and other publishers said they just couldn't find scholars to review the manuscript and were thus convinced there was no market for it; the ecological economists professed unfamiliarity with feminist economics and the feminists were not comfortable addressing ecological economics arguments. I was also unsuccessful in attempts to teach the subject, or even feminist economics at all; gender courses were being dropped from academic curricula. feminist colleagues and I witnessed courses in Women and Development, Women and Environment, and Ecofeminism disappear from course lists, some of them cross-listed between Women and Gender Studies and Environmental Studies.

My colleagues Peter Victor and Eric Miller, meanwhile, were teaching excellent courses in Ecological Economics using outstanding, diverse methods; I hope they are also recounting their experiences and sharing their pedagogical insights. We at York University joined with colleagues at the University of Vermont and McGill University in the Economics for the Anthropocene partnership (2015-2021), with some courses offered remotely at each university for students at the other two. Courses each summer brought graduate students from the three universities together for shared experiential learning and field trips. I taught a twoweek course on Climate Justice in Toronto in Summer 2017, and students' papers became chapters in a book. Various E4A innovations, pedagogical experiences and learnings are recounted on the E4A website.

Most recently, I was asked in 2018 to teach an undergraduate course in Ecological Economics. I decided to use Dr. Ronald Trosper's wonderful book, Resilience, Reciprocity, and Ecological Economics, as the main text for the course. (His new book, Indigenous Economics, is even more detailed about how Indigenous peoples supported well-being for

people and ecosystems over thousands of years while not causing ecosystems to crash; in fact, governance systems were built to ensure that humans assisted with ecosystem flourishing). Professor Trosper is a member of the Confederated Salish and Kootenai Tribes of the Flathead Indian Reservation in what is now known as Montana. He gave a brilliant keynote address, "Caring not Competing: the meaning and relevance of Indigenous Economic Theory" at the Canadian Society for Ecological Economics conference in 2019 (see here and here). While very mindful of the Indigenous saying "nothing about us without us," and in humility before the complexity and majesty of these deeply ethical governance practices, students and I explored Trosper's book and the Northwest Coast Indigenous "game," slahal, to experience an aspect of wise community-building in combination with fun and dispute resolution / peace-building. We discussed how governance systems built to guard against greed and power accumulation by leaders were and can be constructed in relation to ecological care. I remember a question from a student one day: "But when are we going to start talking about economics?"

Economics, as traditionally understood, exists to buttress capitalist governance systems. As we move beyond the colonial-capitalist fossil fuel era, governance is being transformed. (One reason is that are renewable energy systems necessarily decentralized.) Professor Trosper's books offer many insights into how sustainable eco-socio-political governance can work. The creative pedagogies of heterodox economics continue to be applied in diverse situations around the world, in relation to governance transformations. Those of us with responsibility for 'teaching' should try to prepare students to think critically, creatively, collaboratively; they are the ones who will carry this forward.

PATRICIA E. (ELIE) PERKINS

REAL(ER) WORLD MICROECONOMICS

From January 2023 to March 2023, I was given the opportunity to teach Advanced Microeconomics to postgraduate students enrolled at the SOAS Department of Economics. My aim was to present students to more advanced ideas, concepts and principles of microeconomic theory from a heterodox and pluralist perspective. Unlike standard Advanced Microeconomics courses, I chose not to limit my focus on the rigorous proofs and theorems I had been taught over the course of my own economics education. Instead, my aim was to foster the development of students' understanding of both the usefulness and limits of abstraction, formalism and mathematical models in the field of economics.

Indeed, my first lecture for this course introduced students to the following definition of abstraction: 'simplifying assumptions that make up the structure of economic theories and the design of empirical studies to prove these'. I then contested this definition by stating that simplifying assumptions will always result in an inaccurate representation of the real world. So, what is modeling good for?

To answer this question, I used Sheila Dow's seminal book: 'Foundations for New Economic Thinking (2010)' in which she compares (mainstream) closed and open system characterizations of the economy in modeling practices. Dow explains that the former results in unified, rigid and law-like explanations of economic behavior and phenomena. By contrast, the latter strictly acknowledges that whatever an economist assumes to be a) the system boundaries, b) the variables of interest, c) the relation between them and d) mathematically derived results are all temporary. This temporality is informed by the fact that a single theory and set of assumptions (or methodology) is unable to accurately capture the



complexity of socio-edonomic systems in the real world. This means that mathematical models and the temporary set of assumptions embedded in them should be seen as but one method in a range of incommensurate methods. As Victoria Chick mentions in 'On Knowing One's Place: The Role of Formalism in Economics (1998): formalization and mathematical models render themselves useless once they become self-referential and expand results while failing to either demonstrate their applicability or test them against real-world facts.

All in all, this was the stage I aimed to set for my students at the beginning of my course. Granted, this wasn't always as easy for each of the topics I addressed in the course. But I did realize that my efforts to bounce back equations off of real-world phenomenon to either validate or challenge them was appreciated by my students. There are three examples where I think I managed to make this particularly clear for my students. One of the topics I addressed in my course was on Exploitation, Oppression and Working Conditions where I introduced students to the classical Marxist notion of exploitation. I also introduced my students to the post-Walrasian abstraction of the social relation between capitalists and workers in terms of a principal and an agent. After explaining the

assumptions pertaining to each theoretical framework, I discussed news articles on the working conditions at Amazon warehouses and gig-workers employed at Deliveroo and Uber platforms. In this way, I managed to highlight the relevance of these phenomena and concepts in the digital era. I explained that various technologies can be said to either a) drive exploitation through the increase of labor intensity or b) facilitate monitoring and desirable effort levels in the workplace (e.g., through the storage of data on pick-up rates and delivery times).

In another lecture I highlighted the limited perspective of the theoretical models that explain network effects, the utility of review and rating systems and the demand for network goods offered by digital platforms such as Facebook, Instagram, Netflix, Spotify, YouTube, etc. By drawing on the realworld example of multiple freelance platforms across the world existing side-by-side, I introduced students to the harsh reality of service arbitrage. And to do so, I actually used a platform! I showed my students a YouTube video of young man that wanted to show how to buy his partner a \$1000 steak using the Upwork platform in combination with a virtual job platform used in the Philippines. The young man agreed to do a job on Upwork and then posted this same job on the platform in Philippines at a much lower price than what he was going to get paid on Upwork. Evidently, this resulted in a whopping 200% profit.

Finally, my course has also facilitated students to independently engage in abstraction, formalism and modeling in their assignments. In one of the assignment exercises, I provided students with two news-article excerpts: one on the positive relationship between social media use and proenvironmental behavior and another on the impact of social media use on mental health. My students were then asked to formalize both of these relations in a post-Walrasian externalities framework and to

reflect on the results that this framework provides for these real-world phenomena.

Since this was the first time, I was teaching this course a lot of my preparation and design revolved around the content rather than embedding alternative pedagogies. This is to say that most of the course was delivered rather traditionally: 2-hour lectures, which were interrupted with open questions and discussion rounds. Other sessions involved either modeling exercises in R or required students to engage with interactive tools I had prepared in the open-source software Geogebra. Now that the content of my course is more established, my aim for next year is to improve its interactive element to heighten engagement. In doing so, I am also taking into account the feedback I have received from my students this year. Hence, I plan to introduce group modeling exercises and ask students to prepare short presentations and questions for some of the topics we address in the course. In this way, I hope to go beyond the one-directional pedagogies and accommodate more co-creative sessions. I think this is especially important in economics: instead of limiting learning outcomes to the understanding and usefulness of existing abstraction and modeling practices, students will be given the opportunity to co-create new models based on real-world problems they deem to be important.

All in all, I think there are plenty of ways to teach heterodox and pluralist approaches in the field of (micro)economics and I'm excited to broaden and expand my own practices even further in this direction. Of course, my personal advantage lies with my institution and department where critical thinking and real-world economics are core values.

CHANDNI DWARKASING

TEACHING A CRISIS: PERSPECTIVES FROM THE RETHINKING ECONOMICS NETWORK

Rethinking Economics, the student movement campaigning for a better economics education, was founded in the aftermath of the Global Financial Crash. If you're at all familiar with its work, you'll probably know the broad arc of the story: students assumed their economic degrees would inform something of the mess around them but instead found a world of abstraction, linear regressions, and rational agents. The global financial Crisis hadn't featured in mainstream models, it wasn't going to feature in its education. Many of the early successes of the student movement reflect this impetus, take for instance the Bubbles, Panics and Crashes module at the University of Manchester.

Ten years on where are we? Those starting University in 2023 were only 3 or 4 when the Lehman Brothers collapsed. What drives students today? This is the generation of Friday for Futures. A generation that has been grown up through a period of sustained public health, financial and ecological crises. It's the same story but with the ecological crisis at the core.

What does economics at large have to say on this? Over the past decade, taking the United Kingdom as a case study, economics education has changed. Partly as a response to the employer outcry, there is a greater focus on transferable soft skills - communication, group work, problem-solving. Similarly, it is very unlikely that you'd be able to go through an undergraduate degree without reference to the climate crisis (where this was previously not the case). It's maybe even possible that you'd be able to choose an elective on sustainability which



problematizes some of the issues of consumption, growth and technological innovation (although more than likely this will be delivered outside of the economics department). And yet, when you look at the core modules of undergraduate courses, the neoclassical model remains dominant. Indeed, the determination of universities over the past decade to row back on the promises made to dissatisfied students demonstrates that this is still business as useful. It is well documented how economics education suffers under the tyranny of the textbook but particularly stark is their woeful approach to the climate crisis. Economics answers to the climate crisis remain limited to market-based 'solutions' – carbon tax, cap-and-trade initiatives. Our learning

remains willfully ignorant of the scale and urgency of the crisis we face.

That is not to say that all is lost. Campaigning organizations like **EE4All** and **Economy Studies** produce ready-made resources for lectures. Economists for Future has effectively exposed the endemic avoidance that plagues the economics journal industry. And there are cases to celebrate. The LSE100 program asks students, among other questions, 'How can we transform our climate futures?'. Using a flipped classroom style, seminars focus on debate and discussion from an interdisciplinary perspective (the course is taken by all social science first-year undergraduates). Wicked problems are approached with a range of methodologies; participants are introduced to systems-thinking; the biases, strengths and limits of different disciplines are interrogated. Exposure to these questions at an early stage on an undergraduate degree leads students to apply the same critical thinking throughout their degree.

When students are given the space to interrogate their learning and pursue their own academic interests, empowering education is possible. Students in the Rethinking Economics Turin group organized a number of seminars around dynamic and participatory discussion. In Germany, Kriwis Berlin

has been <u>organizing a summer lecture series</u> for a number of years, with many elements of the content being shaped by the participants. One part of the process to ensure that the practice of education isn't just a simple knowledge-banking exercise is to give a greater role to students in their own learning.

Over the past year, economics students have been campaigning to their economics departments up to the crisis in teaching. All Barcelona students and academics will now take a mandatory climate crisis module from 2024 after the university bowed to sustained protests. Rethinking Economics members at the University of Oxford have been in negotiations with the Economics Department after hundreds of students supported an out-of-hours lecture series by Kate Raworth. At the time of writing, students in Germany are putting pressure on university departments to address the climate crisis.

The vanguard in rethinking economics teaching for the 21st Century lies are students. We are the generation that feels, and will continue to feel, the force of ecological collapse.

ROSS CATHCART

- ⇒ If you are an economics student that wants to think about how we can transform our climate futures, stand up and join Rethinking Economics.
- ⇒ If you are an economics lecturer or academic, engage with the students in your department and support in the production of new economics teaching materials that root education in a pluralist, interdisciplinary and diverse tradition. Get in touch!

USING PLURALISM TO CREATE USEFUL DOUBT, TO CREATE MORE SPACE FOR PLURALISM: A CLASSROOM EXERCISE ON THE TOPIC OF MINIMUM WAGES

Many arguments can be made for pluralism – embracing often *fundamentally different* perspectives – in economics. Pluralism is needed because of the complex nature of the world and within it, the non-linear processes of knowledge creation. Pluralism is perhaps more democratic, allowing voices to be heard. It may also have educational benefits, of allowing students to develop critical open-mindedness. However, it can be difficult to implement, depending on the power of the teacher to choose what and how to teach, in their institutional context.

Elsewhere, I have discussed ways in which economics teachers can bring pluralism into their economic teaching, and into their teaching of sustainability. Interventions range from complete course redesigns to very small interventions, twists on a popular technique. Here I discuss a classroom (lecture) exercise I have run times, usually many with first-year undergraduate university students in the UK. The focus of the exercise is minimum wages, controversial real-world topic. I shall consider the most recent run of the exercise: previous runs have yielded similar

First, students were asked if they think there should be minimum wages. Perhaps unsurprisingly, not least because in the UK younger workers benefit greatly from minimum wages, the students voted strongly for them. They are then asked whether minimum wages increase unemployment, as is often claimed. On this there is less agreement: below (Table 2) there is a high score for 'maybe', and even for 'don't know'. In other runs of the exercise, more than 60 per cent of responses answer 'yes'.

We often do not know why we hold the views we do, so I asked respondents what their basis for their view

was, given options of 'theory', 'empirical evidence' and 'other reasons'. A large majority said 'theory', while eight did not know. Here it is worth stressing that the students were reassured that 'don't know' was a reasonable answer, just as it was for the other questions, as is 'maybe'. This intervention speaks to ideas in developmental psychology that often, new students enter with a search

for dualist (yes/no, right/wrong) answers and need to be encouraged to think less dualistically. It is also an important pluralist intervention because

acknowledging doubt and uncertainty helps students accept there may be more than one answer to any question.

0

outcomes.

Given the claim that their views are based mainly on theory, it is interesting to explore which ones and why. I then discussed a standard micro supply and demand diagram showing the effect of a wage floor as unemployment. 39 respondents reported being persuaded by that argument – more than answered 'yes' to whether minimum wages increase unemployment, suggesting the students valued the familiar, simple model more than its outcomes.

I then showed the group a standard Keynesian macro model showing the effect of increasing the incomes of people with higher marginal propensity to consume – an argument for minimum wages and other redistributive policies.

So far, we had used models only, but I wanted to explore how arguments can be made using different types of evidence – another form of pluralism. Thus, I contrasted interpretations of Adam Smith – drawing on a quotation from the Wealth of Nations (book 1, chapter 8) that "No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable". I also told the parable of a Ford manager taunting a union official about how the robots would never join the union, to which the official asked how the robots would buy Ford cars.

TABLE 2: RESPONSES (FROM 2023 RUN)

	Do minimum wages increase unemployment? ROUND 1 ROUND 2 ROUND 3				
Yes	36	26	14		
No	20	23	25		
Maybe	33	40	50		
Don't know	11	6	3		
Total	100	95	92		

After considering this material, students were asked to re-consider their view of the effect of minimum wages on unemployment. As we can see below (Round 2), there is something of a shift, away from 'yes' but less towards 'no' than towards 'maybe'. This is perhaps evidence of students becoming less dualist.

That pattern is affirmed in the final stage, where students vote again after seeing two pieces of evidence of different types. First, we looked at a time series of UK unemployment, apparently showing that the introduction of a national minimum wage had no effect. Second, we discussed Card and Krueger's study¹ of minimum wages in fast food, which again showed no increase in unemployment where the minimum wage had been raised. The final vote (Round 3) shows a large swing away from 'yes', mainly to 'maybe'. Interestingly, contrary to their claims to base their view on theory, it appeared to have been empirical evidence that shifted students' opinions most.

Now, obviously, this example lacks scientific rigor and begs many questions about how individuals changed their views. We must note the falling number of responses. Possibly, too, students had decided that I wanted them to say 'maybe' and exhibited a social desirability bias. Indeed, all these methodological issues can be discussed, and help students understand evidence better, more critically: another dimension of pluralism.

Taking the data at face value – and noting that in other runs of this exercise, I always obtained similar outcomes – what does it mean for pluralism? First, by showing contending models and theoretical perspectives, different forms of persuasion, and various forms of evidence, the exercise embodies pluralism. Second, by interrogating the process, it offers insight on why students must be cautious with data. Third, the exercise created useful doubt – **not** as Mirowski² identifies, an agnotological form, designed to confuse and obfuscate – but to open discussion. It is pluralism for the sake of more pluralism, for better understanding.

ANDREW MEARMAN

¹ Card, D. and Krueger, A. 1993. *Minimum wages and employment: A case study of the fast-food industry in New Jersey and Pennsylvania*. NBER.

² Mirowski, P., 2013. Never let a serious crisis go to waste: How neoliberalism survived the financial meltdown. Verso Books.

A NEW PEDAGOGICAL TOOL FOR TEACHING

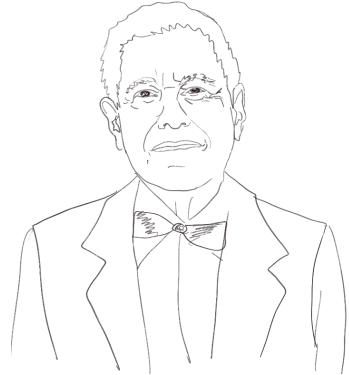
PLURALIST ECONOMICS

Last year I took a bold pedagogical leap of faith. It involved launching an experiential project for my first-year undergraduate students in their first semester of studies. In that instant, my students became the co-drivers of their learning process. They would be the first cohort to apply what they learn in their introductory economics course to solve real-world problems.

I serve as a Professor of Economics at the University of New Brunswick (UNB) in Canada. UNB is Canada's oldest English-speaking university. It was founded in 1785 with the Latin motto "Sapere Aude", which means "Dare to be wise." I decided to extend the motto's aspirational intent to embrace a new pedagogical tool for the benefit of my first-year undergraduate students studying economics. I assigned an experiential project to my mainstream microeconomics and macroeconomics courses.

I took that decision after careful reflection and painstaking evaluation of the advantages and disadvantages of introducing an experiential project to my first-year students. Although I had introduced experiential learning projects in the past to my upperclass courses and my travel study courses to France, Berlin, and Paris, never before had I attempted such a high-wire pedagogical act with my first-year students.

My initial trepidation rested with my concern that first-year undergraduate students were confronting the anxiety of their return to in-person learning after two years of online learning due to COVID-19. In addition, they were transitioning from high school to the challenges of their first-year university studies. In



consequence, I was apprehensive that my students would be overwhelmed with the additional burden of an experiential learning project.

Last September, I plucked up my courage and took a pedagogical gamble. It was in the form of a pedagogical investment that would either reap a huge learning dividend or fall flat. I took this daring and innovative educational initiative for the following reasons. First, I wanted to give my students an assignment that had an intimate personal component and would increase their engagement with the course content. Second, I wanted to excite them about economics by exposing them to a handson and solution-oriented economic issue. In effect, I wanted to duplicate the scientific approach that is practiced in the hard sciences such as biology, chemistry, and physics where students are exposed to laboratory experiments. Third, I wanted to nudge them to go beyond the frontiers of their mainstream economics textbook and incorporate a pluralist approach in their essay. In my opinion, an experiential project immediately reveals the obtrusive level of abstraction and the limitations of mainstream economics. In consequence, it forces the introduction of heterodox and pluralist economic tools and creates a more practical and realistic pathway towards resolving economic issues. All of this for the purpose of providing real-world and pragmatic solutions to contemporary challenges and opportunities.

For my introductory microeconomics course, I assigned the topic of improving student financial aid as the required experiential learning project. For my second semester in introductory macroeconomics, I gave my students a choice between two topics. The first topic was a student's perspective on inflation, and the second was youth unemployment. I initiated a conversation in class about those two different projects and then asked my students to vote on which project they preferred.

Overwhelmingly, the students voted for the topic of a student's perspective on inflation as their favorite for their macroeconomic experiential project. All this underlines that the process for selecting the topic for an experiential learning project is intrinsically important. It establishes an initial buy-in into the project and encourages a personal engagement in driving the learning process.

The benefits of an experiential learning project for teaching a pluralist approach to economics are numerous and diverse. They enhance an authentic intellectual experience, promote engaged academic learning, permit thinking outside the box, require reflective observation and embrace critical analysis. Experiential learning promotes an inquiry-based pedagogy, where students apply their knowledge of economics to real world and contemporary challenges in an international context.

In short, experiential learning contributes to building their professional and life skills such as self-reflection, critical thinking, and the empowerment of being innovative. In my opinion, experiential learning is the most effective way of transmitting knowledge and creating a pathway for informed decisions. It is worth noting that a recent article by the World Economic Forum on the future of jobs in the age of Artificial Intelligence lists the essential 10 top workplace skills. Among them are six that can be taught through experiential learning. These are:

creative and analytical thinking, curiosity and lifelong learning, motivation and self-awareness, systems thinking, resilience and flexibility.

To say that despite my initial hesitation this pedagogical initiative was a resounding success would be an understatement. My students loved it. Their feedback was that it was a great learning experience. It gave them the opportunity to be in control of their learning process. In effect, they concluded that this exercise was significantly more intellectually stimulating than memorizing from the textbook and the class notes for a sit-down exam of multiple-choice questions. The quality of their essays and consequently their grades in that portion of the course evaluation were outstanding. In their own words, they "nailed it and aced it".

It is worth noting that I did not approach this pedagogical experiment with an attitude that it was a sink or swim exercise for my students. On the contrary, I provided a safety net and a lifeline to ensure that my students were constantly supported throughout the duration of the experiential project. More precisely, they had a direct lifeline to me for any questions that they had as well as reading resources to consult. In addition, I arranged for a guest speaker on experiential learning and invited subject matter experts to speak on the topic.

In my opinion, an experiential learning project is the academic gift that keeps on giving. Initially it opens the door for an introduction to pluralist economics even in a first-year mainstream undergraduate course. It also extends the frontiers of our academic and pedagogical mission beyond providing them with a degree at the end of four years. In fact, it empowers our students with the intellectual and personal skills that contribute to their success in their professional careers and their personal lives for the duration of their lifetime.

CONSTANTINE PASSARIS

MOVING AWAY FROM THE FREE TRADE « CONSENSUS »

Among the Canadian economic mainstream, be it at the university or in the media, there is a general consensus that free trade is a good thing. However contentious this policy stance might have been in the past, and accords like NAFTA or the Free Trade Area of the Americas were certainly hotly debated in their times, few people question it nowadays. As a result, most students typically come to the classroom with a positive predisposition toward trade liberalization as a tool for economic development, which can sometime make it difficult to present alternative viewpoints such as structuralist thought or dependency theory. To address this, I designed an activity that I held on the first day (a three-hour long session) of a course on international economics and whose aim was to question right away the received wisdom. In what follows, I describe the exercise and

I got the idea for this activity over twenty years ago while I was a master's student in economics, reading a magazine published by the Fraser Institute, a think tank located in Alberta, Canada³. In it, a person described an experiment whereby they came to a classroom with a set of things bought in a dollar store. They gave them at random to the students and had the students rate the level of satisfaction derived from it. Trade was then allowed among the students (and did occur), after which they were asked again to

the outcome of the first time I tried it.

rate their satisfaction. Without much surprise, perceived satisfaction levels were higher after trading, which the author then took as a demonstration that free trade is good. At that time I recall thinking that the whole thing was overly simplistic, but I simply moved on to the next assignment and forgot about it until a few months back when I was designing an international economic course. I then decided to try a modified version.

I gave most students various types of candies, while the others received plain blue pens. I then had them rate their satisfaction levels out of 10, getting an average of 5.5. After giving them a few minutes to trade, a new satisfaction assessment resulted in an average of 6.9. So far so good, it would seem, for providing support to free trade. However, a first dissonant voice appeared upon further questioning: one student actually felt worse off after the exchange, having wrongly foreseen its outcome. Since this result is not very "rational" according to the usual tenet, it allowed for a discussion of the homo oeconomicus paradigm, for which I outlined the standard version before bringing in institutionalist or behavioralist elements. In the process, several students added that the trade process itself had a particular frame which gave it value and significance, so that the analysis should go beyond the traded

³ I've since lost the magazine, so I don't have the exact reference.

objects themselves. Quite a few students had decided to keep the object bestowed to them regardless of their preference in terms of candy, for example, precisely because of the symbolic value of getting a gift.

Next, some of the students who had been given pens reported difficulties in finding trade partners, apparently being in possession of a less desirable object. When asked if this was a fair representation of the current situation in the world, the first reflex of students was to answer yes and to discuss inequities among countries in terms of resource or industry availabilities. As the discussion went on, however, some pointed out that I had handed out the objects at random. This could perhaps mimic resource availabilities, for example, but industrial development involved a whole historical process. Moreover, this was a one-off distribution that did not say much of future potentialities. Whatever conclusion could be garnered from this exercise excluded dynamic effects. I took the opportunity to preface the coming lectures on the colonial and neoimperialist processes and their impact on shaping economies, but also Prebisch and Singer's viewpoint on the asymmetric potential of different industries.

Another strand of discussion involved the fact that the students had basically engaged in a barter process. Where was the money? Good question! Which I allowed them to ask again during the study of many a mainstream trade model during the ensuing weeks. Perhaps more to the point, it was made manifest that any serious analysis of trade had to involve an understanding of money and financial processes. This allowed some preliminary space for issues of monetary endogeneity, for example, or the association of capital and trade controls within a coherent industrial policy. Finally, some students also mentioned issues related to information, networks, repeated interactions (e.g., prior friendship with the trade partners) and physical distance in the classroom, all of which could allow a preview of various theoretical analyses to come.

The whole exercise lasted over an hour, with a fair majority of the 50+ students being able to chime in at various moments. The nature of the exercise itself, with candy being handed out in the first day and some encouragement to go around and seek trades seemed to help in making students comfortable to participate in the discussion. Many did not have much knowledge of economics, but in a way this may have been a blessing, leading them to simply voice opinions based on their intuition rather than trying to have their comments correspond to a given economic theory. Still, in effect, these interventions provided a richness of material from which to tap in order both to flesh out various concepts and initiate further rounds of comments on the students' part, by asking them what they thought of this or that element that had just been mentioned. This in turn provided encouragement to students who could see that they did not need a full-fledged understanding of economics to contribute usefully the conversation.

There was of course no space to go into depth on any of the elements brought forth, but students' interest was certainly whetted. I was also able to reference some of them right after the discussion, while going through the course outline. The course is now over and there have been many occasions to mention the exercise that was done in the first week. It thus appears that it can serve as thread that can be followed as various topics are covered throughout the semester. Moreover, problematizing a naïve and simplistic vision of international trade at the outset eases the adoption of a critical approach towards many traditional theories. All in all, I thought the exercise was a success, being both thought-provoking and playful.

MATHIEU PERRON-DUFOUR

ROBINSON CRUSOE AND MULTILEVEL GEOPOLITICAL ECONOMY: TWO EXERCISES IN TEACHING POLITICAL ECONOMY

Despite the fact that the undergraduate courses in economics at Universidade Federal de Goiás in Goiânia, Brazil, cover various disciplines dedicated to the study of the peripheral reality of capitalism (such as world economic history, formation and history of the Brazilian economy, theories of development and underdevelopment), the core disciplines of microeconomics and macroeconomics heavily focus on standard mainstream economics textbooks.

Our students mostly come from low-income

0

households, where neoliberal indoctrination has been strongly propagated through both traditional media and the internet via imperialist think tanks, especially after the 2008 crisis. Consequently, they are highly vulnerable to the < aggressive assault of the biased orthodox approach. In order to counteract this, we provide an obligatory class on Political Economy right in the first semester where two exercises are conducted.

The first exercise involves introductory discussion on the principles of economic science based on the Robinson Crusoe parable. In fact, I invite the students to read the original novel by Daniel Defoe before

coordinating the collective reflection on economic systems. This exercise has been enthusiastically received by students and I believe it is a great starting point considering the lack of non-technical literature economic undergraduates encounter throughout their four-year curriculum. I point out that there are many other artistic works (including movies, TV series, etc.) that resemble the same story and so all students realize they all have already had some contact with the basic narrative of a stranded person or a group in some isolated area.

> The aim here is to present Marx's thesis on the historical specificity of capitalism, using mainstream textbooks' standard logics as a starting point. Therefore, by starting with the simplistic model of an economic system involving a single person (something that does not exist in the history of human societies, but only serves as an extreme case of someone who has become separated from their original social group, which I always emphasize), the students can closely relate theoretical Political Economy to the other

core, abstract, mainstream neoclassical model being taught in another room during the same first semester.

The decisions Robinson Crusoe needs to make (such

prioritizing the search for water or building a shelter, collecting fruits or constructing a fishing rod) demonstrate that every economic system must somehow fulfill basic tasks in order to sustain itself materially. After establishing a solid concept of the economic system in the abstract, I then proceed to explain that the economist's attention will be mostly focused on understanding a specific form of economic system, namely capitalism. Particularly useful here is the episode when Robinson finds a treasure chest in the shipwreck, filled with gold coins. The contrast between use value and value, a fundamental aspect of value theory, is intuitively presented, which facilitates the comprehension of more advanced classes in Political Economy.

The theoretical and methodological foundations for this Robinson Crusoe exercise, which I have been developing since I began lecturing in 2013, can be found in the works of Polish economist Oskar Lange (1940-1965), a Marxist communist who possessed a thorough command of neoclassical marginalism tools. My current research focuses on his attempt to relate Marxian Political Economy to bourgeois economics, as systematized in his book *Political Economy*⁴.

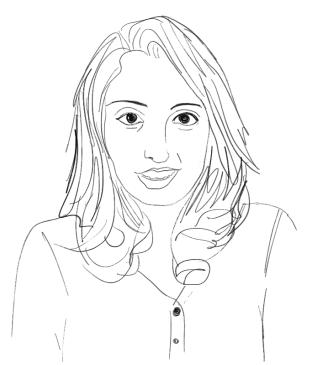
The second exercise is a weekly geopolitical analysis based on a current topic in public debate. I call it "Multilevel Geopolitical Economy" analysis because some themes are local, others national, and others global. The topics discussed in April and May 2023 included a new regional state tax on the agrarian and mining sector, the controversy over import tariffs related to the Chinese company Shein and its proposal to establish itself in Brazil, and the conflicting narratives surrounding the war in Ukraine. Students are encouraged to suggest topics, and as a result, participation is usually very high. Since we have around 40 participants, we work in small groups of 4 to 6 people before synthesizing the findings with the entire class.

The aim here is twofold: first, to demonstrate that all economic debates are inherently political and that before taking a side, we need to identify all conflicting interests involved. Second, to highlight that the original perspective of Political Economy, based on real nations and class conflicts, is not a discipline about the history of economic thought or economic history, as if it aimed at the past only, but a discipline encompassing the entirety of economic science capable of explaining current and even future events. It is not divided into a logical strand and a historical Although the Methodenstreit is mentioned, as it will be studied in a separate discipline at the end of the course, some introductory methodological remarks can be made. This second exercise is highly valuable in showing that the heterodox approach, which is open to various ways of investigating relevant geopolitical issues, is much more effective in analyzing the present and understanding the future trajectory of the world economy than the simplistic orthodox framework. It also demonstrates that this kind of approach contributes to the development of a real-world mindset, which is extremely important for future economists who aspire to change the world for the better.

In addition to the lecture on Political Economy for first-year students, I also teach courses on History of Economic Thought, Value Theory, and Solidarity Economy for more advanced students. I always strive to integrate my research into all these teaching activities and I am open to experimenting with ideas from both older and newer generations.

TIAGO CAMARINHA LOPES

 $^{^{\}rm 4}$ Lange, O. 1963. $\it Political Economy. Vol. 1: General Problems$. Oxford and London: Pergamon Press



ECONOMICS IN THE REAL WORLD: EXPERIMENTING WITH STORYTELLING WORKSHOPS IN INDIA

opportunity to experiment with pedagogy to introduce the social construction of economics as a discipline and uncover the entrenched hierarchies of economic knowledge production that constrain thinking.

Specifically, there is a need for an approach where contemporary issues can be thought about in semiformal, co-curricular spaces to access both "critical understanding and creative re-imagining"5. Such a pedagogical approach may seem untenable due to the constraints of formal disciplinary training and university structures. However, cultivating cocurricular spaces where students are not bound by the traditional shackles of learning can offer a compelling solution to inspire heterodox and pluralistic thinking. In this essay, I share my experience with one such space where I developed a workshop analyzing aspects of storytelling and narratives in International Development. The field of International Development is based on real-world issues, and the framework of storytelling offers both critical and creative possibilities for understanding complexity and imagining alternatives to the problems that plague our world.

The open-to-all workshop, "Storytelling in International Development", was designed based on my academic and professional experiences, bridging theoretical discussions with praxis-oriented learning. Fourteen students attended the two-hour workshop

In an interdisciplinary class on academic writing, I struggled to persuade an MA student in Economics to reflect on their positionality. They resisted any discussion on the subject, maintaining that reflections on positionality are relevant for qualitative researchers rather than those working on economic modeling. My contentions that economic models must be grounded in society, space and place landed nowhere. Other economics students agreed with their classmate, defending their ability to think objectively. They paraphrased intuitively and discussions from their economics classrooms, where their teachers instructed them on the value of cultivating an economic intuition based on objective research.

The paradox of relying on economic intuition while speaking about objectivity and resisting reflective work on positionality was evident. The situation reconfirmed the limitations of mainstream economics training to nurture students' ability to meaningfully engage with alternative modes of thinking. Clearly, there is a need to design creative pedagogical structures to encourage students to stay open to ever-evolving questions and power dynamics between economics and real-world phenomena. Put differently, as a scholar and teacher, it was an

⁵ Schwittay, A.2023. Teaching critical hope with creative pedagogies of possibilities, *Pedagogy, Culture & Society*.

on a Tuesday evening in February 2023 at Ashoka University, including those from Economics, English, Environmental Studies, and Psychology. We began with a focus on personal narratives - I asked the students to share how they got interested in their area of concern, which included climate change, agriculture, employment, education, mental health, and animal welfare. Then, to trace the linkages between personal narratives and broad discourse, I prompted them to connect their personal stories with more general issues in India related to their areas of interest, shifting the tentative responses into a discussion. Students interested in climate justice or environmental issues started considering the inadequacy of environmental policies and the lack of local support. A participant interested in animal welfare added that bureaucratic controls and a lack of funding slow down action on the ground, recounting their experience of inoculating stray animals. A third student, promoted by the others, shared the need to integrate education with contemporary challenges, including mental health and environmental degradation. They pointed out that many education initiatives cannot address the diverse needs of students and society because they are narrow in scope.

At this juncture, I introduced a story of an entrepreneurial solution addressing sustainable development concerns. The purpose was to encourage the participants to probe the relevance of the economic preferences of entrepreneurial solutions given the complexities of the problems in discussion. The example asked them to consider the value of such solutions related to their interests. It further asked them to contemplate the limitations, contradictions, and their own positions, bearing in mind the relationship between entrepreneurship and ecological, cultural, and social variables such as gender, caste, and geography. In other words, the participants were asked to think critically about the dominant narratives of addressing the intractable problems of our time. Some began by asking questions from an investor's point of view in funding entrepreneurial solutions, and others brought in concerns about power and inclusivity. As one participant asked, do those who run enterprises care more about their profits, or do they care about people and nature?

A lull spread, which after a few minutes, I disrupted by drawing the focus back to storytelling. We discussed excerpts of articles published across media channels, such as the India Development Review (IDR) and Global Dev. We read the pieces together, with prompts asking the participants to think about what stood out for them. Some students identified the specificity of problems pointing out the need for further investigation, while others highlighted possible solutions and wondered about the narrative structures. In short, the final exercises aimed to scaffold thinking with practice by drawing on existing narratives, thereby supporting students to move away from the prediction models of mainstream solutions and understand the value of speculation when working with complex problems.

The workshop, while experimental and needing further refinement, was valuable for stimulating discussions on the embeddedness of the economy in society. As a co-curricular space, the workshop is a meaningful option to transcend the traditional boundaries of the academy defined by neoliberal expectations of learning outcomes and competencies. The interpretive framework of storytelling and narratives means students draw on critical and creative thinking fostered through a pluralist, real-world approach.

Understanding narratives in a workshop setting can enable collective efforts to expose the roots of our thinking. It asks students and teachers to become more open to questions, recognizing there are no clear answers in the classroom or the real world, inducing depth in teaching heterodox thought. That is, co-curricular, interdisciplinary spaces that draw on narratives tap into the aesthetic appeal of storytelling to enable a reformist approach of sitting with discomfort, thinking, and hopefully practicing pluralist thought beyond the classroom. Narratives and storytelling, the experience showed to be rich with heterodox potential. Aligning with such potential, I borrow the words of Ali Smith⁶ as a reminder to stay open to new questions and possibilities. As Smith says, "A story is never an answer. A story is always a question."

VRINDA CHOPRA

⁶ Smith, A. 2022. Companion Piece. Penguin Books

URGENCY AND STRATEGIES FOR TEACHING PLURALISTIC PERSPECTIVES IN FINANCE

During my past ten years of teaching finance and insurance at a major Canadian university, I have been surprised and dismayed by the enduring stronghold of neoclassical finance in the undergraduate curricula. The competition in the higher education market, the incentive of turning academic teaching and learning into vocational training, and the professionalization of academic fields, have forced programs to pursue accreditations by industry or industry-sponsored professional organizations. As a result, academics' ability to independently set curricula and learning objectives has been curtailed. Certain assumptions that are known to be problematic, such as market efficiency and rationality, have been perpetuated in undergraduate finance courses.

The perpetuation of such "myths" has many economic and social consequences, especially in an age of "revolving doors" where a great majority of financial regulators are directly drawn from the industry itself. Even in the wake of the Great Financial Crisis, there have been rounds of financial "innovations" by institutions and professionals who firmly believe that advanced math and improved computing power can prevent the next financial crisis. Those new products, often hybrid in nature, are highly computationally intensive in their pricing and valuation. But armed with new technologies such as GPGPU, grid and cloud computing, and neural networks that can cut down runtime significantly, the financial industry has been emboldened to push forward with their innovations.

"Variable" products in the insurance sector, for example, often induce moral hazards, and take on systemic risks that cannot be diversified away. But with technologically improved hedging programs, companies have renewed confidence in producing and promoting such products. What's concerning is the epistemological limitation on the part of the regulators and the general public to understand those complex products, and the resulting paradigm shift towards the industry's self-regulation.



Moreover, in our intensely financialized world, the consequences in the financial realm can quickly spill over into the greater cultural and societal realm. In conclusion to her history of substituting market arbitration for political regulation in the financial sector since the 1970s, Greta Krippner suggests that

this process has had analogous ramifications in areas far beyond finance. The depoliticization of carried financial regulation has with it a depoliticization of public policies in general, our changing ideas about the appropriate areas for political debate and action, and a diminishing ability for large groups of people to organize their social lives freely and democratically. It is the nature of this depoliticization to treat questions of value - be it political, social, or human - as though they were matters of "objective" facts, located outside the realm of ordinary human experiences, and thus best left in the hands of trained experts, armed with highquality data and sophisticated techniques.

Given all the pedagogical consequences, what should finance educators do?

At a higher level, a restructuring of finance-related educational programs is overdue. The curricula need to inculcate a far broader understanding of the industry than students are currently offered in the universities. What's required is for finance and insurance students to develop a more contextual understanding of the limits of mathematical models as a means of analysis, and the epistemological assumptions on which they depend. This will also necessitate a greater crossover between finance, social science, and humanities. When knowledge of the industry is confined only to those professionally involved in it, there are no outside voices to provide a wider or critical view. Many of these different points of view will be based on non-orthodox economic and financial theories, as well as moral history and the philosophy of finance. All of the above will require universities to regain academic freedom first, to break away from the market incentives of vocational training and excess professionalization, and the industry capture of higher education.

On a day-to-day basis, I have experimented with several pedagogical strategies to bring pluralistic perspectives into finance courses. At a minimum, whenever I am required to teach "financial myths," I make sure to provide countering theories and empirical evidence to balance out the viewpoints (for example, offering behavioral economics' take on the market efficiency hypothesis).

One strategy I often use is embedded ethics, which means to incorporate ethical discussions organically into technical teaching, and to use examples and case studies with a moral dimension to discuss technical content. For instance, in my financial math course, I use the case study of payday loans to introduce interest theory, and I introduce the topic of financial derivatives by discussing the impact of wheat call options during the global food crisis.

I like to apply the Socratic approach of two-way conversations to draw out complex debates on finance and society. In my fourth-year seminar, I always conduct a blue-sky student roundtable at the end of the term. After exposing students to various financial myths and their economic and social impact throughout the semester, I ask students to think about potential regulatory proposals to remedy those issues, and to envision the changes needed in academia and society to increase the feasibility of their normative proposals.

I have also been using storytelling and theater as pedagogy in various courses to reintroduce "noises" (i.e., human stories) to "signals" (i.e., statistical models). In addition, I include a creative artmaking component as an assignment in most courses. Arts have been an effective avenue for students to express ethical concerns surrounding technical topics, as well as to share their lived experiences which can counter the effect of orthodox theories.

Last but not least, the value of cross-disciplinary collaboration cannot be overstated. I am currently working with a philosophy professor to offer my students a more comprehensive overview of the different fairness frameworks to counter the financial industry's own definition of fairness (i.e., "actuarial fairness," which adopts a libertarian position in the classic debate over the nature of distributive justice). We will apply these fairness frameworks to several case studies from finance and insurance, including the Affordable Care Act and climate impact on property and casualty insurance.

VICKI ZHANG

THOUGHTS ON TEACHING FROM A PRACTITIONER

I have been lucky. I have been privileged to teach a short course at an economics department with a strong heterodox tradition and to co-teach a course with non-economists outside of an economics department. Both of those opportunities gave me a great deal of flexibility. Nevertheless, in the course of my applied economics work, I have had several encounters with mainstream economists, some very positive, some less so, and those have shaped my approach to teaching.

When presenting economic ideas from outside the mainstream, I find concepts from classical rhetoric to be useful anchors: *ethos*, or the claim that the speaker has to address the audience; *logos*, or appeal to reason; pathos, or appeal to emotions; and *kairos*, or timeliness of the message. Because rhetoric has gotten a bad reputation in some circles, I hasten to add that what I have in mind is *ethical* rhetorical practice, in which the rhetor seeks to persuade an audience that she respects, rather than to manipulate an audience that she wishes to control.

Starting at the end of the list of rhetorical concepts, I can easily dispense with kairos, as the call for papers already referenced "the new generation [of economists] emerging from Rethinking Economics." I do indeed believe that timeliness is on the side of the audience targeted by this magazine.

Regarding pathos, I avoid negative emotions like defensiveness, accusation, or indignation. Instead, I aim to convey either excitement or, to avoid prejudicing the discussion, neutrality.

Logos is the main focus of my pedagogy, and it takes multiple forms. I find it helpful to start with two views

of economics. The first is captured in a definition from the website of the American Economics Association⁷ "It's the study of scarcity, the study of how people use resources and respond to incentives, or the study of decision-making." The second is exemplified by CORE8 "Economics is the study of how people interact with each other and with their natural surroundings in producing their livelihoods, and how this changes over time." The first I label "The Market" and the second I label "The Economy," each with capital letters. I then contrast the implications for the topic at hand of adopting one or another view. For from the Market viewpoint, example, sustainability challenge is about externalities. From the Economy viewpoint, sustainability is about structural transformation.



 $^{^{7}}$ See <u>https://www.aeaweb.org/resources/students/what-is-economics.</u>

⁸ See https://www.core-econ.org/the-economy/book/text/01.html#111-economics-and-the-economy.

Next, I try to clearly present the welfare theorems and their implications. My most recent attempt is shown in Table 1. The "common interpretations" usually earn me a few laughs, as students recognize that property is often insecure, information asymmetry is widespread, and the definition of rational behavior in the welfare theorems has almost nothing to do with how actual humans behave. I also point out that futures markets are rare, and consumers are not

First, take the time to mention important weaknesses in the analyses you present. All progressive research programs are incomplete, and acknowledging gaps both increases legitimacy in the eyes of the audience and engages students' minds. Second, regardless of the scope of the class, allude to compatible traditions, at least when it can be enriching and not distracting. For example, Sraffian economics can spark new ideas for post-Keynesians,

TABLE 1: THE FUNDAMENTAL THEOREMS OF WELFARE ECONOMICS.

FIRST THEOREM	SECOND THEOREM
Formal: Every Walrasian equilibrium is Paretoefficient.	Formal: For any Pareto efficient outcome there is a corresponding Walrasian equilibrium.
Common interpretation: In complete voluntary markets (full spot and futures markets, no externalities), in which everyone has an initial allocation of goods to which they have secure and productive rights, every market participant seeks their own benefit (rationality) and cannot be	Common interpretation: If the conditions for the first theorem hold, then any Pareto-efficient distribution can be accomplished through a suitable initial allocation followed by market exchange.
coerced, and everyone has full information, market exchange will lead to a situation in which no one can be made better off without someone else being made worse off (Pareto efficiency).	Note: This justifies constructing markets.

neutral towards prices. After reading them out, I quote Amartya Sen that "the propertyless person may be forgiven for not regarding [Pareto efficiency] as a 'big deal." I go on to say that while the common interpretations presume some kind of equilibrating process, none is to be found in the formal statements of the theorems. The point of this is not (just) to critique the welfare theorems, but to justify taking an alternative approach.

So far, so critical. But the more inspiring and fun part of pursuing logos is to present a coherent introduction to non-mainstream economics. This is harder than it sounds, and for a good reason: it is an active field! Nevertheless, as the reader of this essay is doubtless aware, there is a large set of excellent textbooks. There are also numerous highly readable essays and clearly written technical papers.

For the sake of both the teacher's and students' sanity, it is necessary to remorselessly restrict the content in any given class. I have two recommendations on this point.

and vice versa, while stock-flow consistent models are comfortable companions to structuralist models in the tradition of Lance Taylor. If students are informed, then they may decide to explore on their own.

The final rhetorical component is ethos. Ethos answers the question, "Who are you to be telling us this?" and for non-mainstream economics it can also be an answer to, "By what right is this material being presented to us rather than the standard material?" This can pose quite a challenge for new teachers. Such "esteem indicators" as a solid publication record can certainly help, but should not be overemphasized. Of greater importance is evident mastery of the material, including knowledge beyond the planned class content. But the essential element is confidence in oneself, in the material, and in the ability of the class to learn. Convey that, and you will be most of the way there.

ERIC KEMP-BENEDICT

TEACHING GENDER ECONOMICS IN A TRADITIONALIST SOCIETY

The region of Jammu and Kashmir (J&K, henceforth) is one of the most distinct and rather an ironic context. It is an extremely located and well populated Himalayan region. Given its remote location, it is one of the few most scenic and aesthetically beautiful places found across the world. However, the region is typically located in an Indian context and as such the society of the region is fundamentally traditionalistic and practicing patriarchal to a good fair extend.

Eventually, the concept of education in the region is not advanced as that of the developed world.

Lately, the male literacy has increased but the female literacy is still struggling. Of late the trend is changing. Girls can be seen going to the primary schools. A good fraction of girls continues going to the secondary school and increasing number of ladies take admission in the colleges and the university education has increased considerably for the female

But the tertiary
Education is still a
challenge for the Indian
women given the fact
that the mean marriage
age is around 19 years
most of the women in
India or not able to

finish the college. Less number

of women are able to enter the university and even a lesson number is able to leave university with a qualified degree and gain a PhD is dream for most of the girls across the country.

However, facing a mount of my own challenges I was somehow able to complete my PhD. I didn't stop there. I ended up in a good institute, completed my post doctorate and finally landed in a regional university in Jammu and Kashmir and started teaching and preaching economics.

To the least of my knowledge, it turned out to be quite a rollercoaster ride. I started from teaching computer

and Statistics to the students of economics, and then I got to shift to the newly introduced course of Gender Economics.

My prior experience with Gender Economics was quite research oriented and empirical. I thought it would be used to educate the class and make the class more vibrant and responsive. I surely was excited; all excited.

With a very high excitement, I took the first class . I continued with the

second one and by the third one, I could see some apprehensions reflecting from the faces of the students. Keeping the décor Ram of class in practice, I decided to ask questions and kind of brainstorm the issue with them.

It turned out that the majority of the boys from the class believed that the subject was rather

folk.

hypothetical and it was practically unrealistic and impossible and on top of everything didn't make any sense at all. Confirming and cross-checking the same from the girls no answer came, and their expressions were totally blank. I could disappear that given the practical realities and personal experiences. They actually brought the argument that whatever I was teaching everything in the class didn't actually make any sense and was actually hypothetical to all of them.

While my focus was on the critique of the universal bread model, the boys from the class pretty much contested in its support. They said the model was a practical reality, made sense and was based on the ground-level realities from around the world or at least from around the world that they are a part of and they live in. They kind of protested that there was no need to criticize the model and if at all the model was criticized, the criticism itself was again hypothetical and unreal. To the best of their knowledge and experience, because this treaty of the family was applicable in all the circumstances and that there was no reason to deny or reject this theory.

To keep the class going and to maintain the interest of the students, before deciding to bring in facts, realities and figures from around the world I assure them that we should keep going and explore together. I pretty much agreed to; or at least on the face of it: to the fact that truth is subjective and that our aim as a class was to find the actual truth and the truth that actually brings forth our realities. To this, we all mutually agreed.

And this is the second part of the journey began. I started studying by showing them certain documentaries. The documentaries were all created by large and trustable producing houses. And since it concerns the ordinary average poor people from around the world, they could actually start relating to it.

The time to give the assignments was major and the opportunity could be better. I encouraged everybody to do some practical level fact-finding and start by finding the source of employment of the women of their own households. This was followed by playing the Johnny Depp court case and its proceedings over the projector for the next week.

Steadily, I kept on exploring and introducing other theories from the subject and kept on backing the same by fact, figures and real case contexts to validate the same.

Seeing the transformation coming in slowly and steadily, I decided to convert half of the assignments into class presentations. The boys from the class were at least trying to speak and put their points forward, but the girls to begin with were mute and silent. I announced in the class that the girls would be given a second chance to speak and then add a chance to improve their marks from the presentation.

In the second round of presentations with girls started to speak slowly and steadily. Initially, they barely made any sense, but I was happy with the fact that they were mustering the courage to speak and to let the class know that they actually had a voice.

I remember in the beginning of the class, I casually asked the girls, if at all, they were going to ask the parents for their share in the family inheritance! There was a unanimous answer from the side. And it was a clear "No."

I asked the same question at the end of the course and majority of the girls were confident enough to convert their No into a loud "Yes."

For me as a teacher of Economics and a preacher of the theories forwarded by weight of Gender Economics. I think the positive outcome of my class comes in the form of this conversion of no to yes.

I am very much sure that it would take many more years in the current context and in Jammu and Kashmir and India to alter the thinking and thought process of the boys and to actually make them believe that the theories and practical reality!

But I believe that the change has already been initiated with the girls believing in the theory, and the girls believing in the fact that the family inheritance equally belongs to them and that it's not shameful or illegal to claim their share. So, I am ending this epigraph on a successful note of change, and hope for better and more change!

MEHAK MAJEED

ACHIEVING CHANGE IN ECONOMICS

TEACHING: STRATEGIES BEYOND

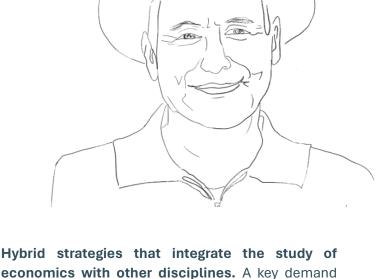
ECONOMICS DEPARTMENTS

The way economics is taught has an enormous influence on society. Accordingly, there have been serious efforts going back at least as far as the 1960s to reform what is a deeply problematic economics curriculum. These have all been worthy efforts; and gains of one sort of another have been made. Because the groups pushing for curricular reform are increasingly well organized and connected, we should not discount the possibility of achieving some great leap forward in the not-too-distant future. However, the fact remains that progress on reforming the curriculum in departments of economics has been modest thus far. We should therefore be open to considering whether we could be pursuing change in different ways.

My own PhD research, followed by much subsequent research and personal teaching practice, has led me to conclude that we would benefit from greater diversification in our strategies to achieve curricular change. Yes, we should continue to place pressure on economics departments to make the standard curriculum more pluralist and relevant to understanding the real world. However, there are at least four other strategies that could complement this strategy, creating synergies and momentum:

- hybrid strategies that integrate the study of economics with other disciplines
- teaching political economy in other social science departments
- trying to form new departments in which political economy can be taught
- teaching political economy outside the school and university system.

Let's briefly look at each of these strategic pathways.



economics with other disciplines. A key demand for people seeking curricular reform has been greater plurality. One dimension of this is greater interdisciplinarity. The quickest and easiest way to promote interdisciplinarity is to structurally integrate the study of economics with other subjects. A degree in politics, philosophy, and economics (PPE) makes this possible. Why so? Philosophy is about open yet rigorous thinking. Politics is about the study of power in all its forms. If students are literate in such disciplines - particularly subfields such as the history and philosophy of science, ethics, and political philosophy - they can often quickly identify and understand what is wrong with the contemporary economics curriculum and why alternative perspectives should be sought. So, pushing for PPE degrees in as many universities as possible is a viable strategy to consider. Indeed, many universities, including their economics departments in these universities, are open to establishing PPE degrees, seeing this as a means of attracting good students. Accordingly, pushing for a PPE degree is probably one of the easiest, most durable, and potentially transformative things you might be able to do to affect how economics is understood across society, particularly among future decision makers and opinion shapers. Of course, simply establishing a PPE degree does not guarantee substantial reform:

much depends in practice on whether the specific design of each degree program can enable students to find the links between the disciplines. However, in principle, a degree like this can be a driver for change. It could also be pursued *simultaneously* with other strategies for change.

Teaching political economy in other social science departments. The first port of call for students and staff seeking a reformed economics curriculum is usually to speak with the head of the economics department. In response to requests for reform, the head of department can be expected, typically, to proffer one or more of the following arguments:

- There is nobody in the department with knowledge to teach non-standard subjects.
- The department's priority in any recruitment effort is to employ staff capable of publishing research articles in highly ranked orthodox economic journals. Such recruits are unlikely to be able to teach the courses you are seeking.
- Upper year subjects require that certain core concepts be taught in the earlier years' units of study. This leaves no room for alternative and pluralist curricular content in any core subject.

If you don't accept arguments - and there is no good reason why you should - you may decide to continue to agitate in various ways for change. There are many ways to do this. You may be successful, but it is possible that this particular strategy may not deliver what you want, or at least not within the time frame you want.

One response to such intransigence is to go and talk to staff in another department such as politics, sociology, management or even geography. These departments might be able to offer the sort of subject you are after, presented as 'political economy' rather than economics. Political economy is the original name for economics (at its pre-neoclassical stage) and is less likely than the term 'heterodox economics' to trigger the proprietorial instincts of the economics professors. You may also find that there is already somebody in these other departments who is willing and able to offer the sort of subject you are after. If you are successful with a single subject, this can lay the groundwork for a political economy major, and then perhaps eventually an entire course program.

Trying to form new departments in which political economy can be taught. Establishing an entirely

new department on campus may sound like an initially daunting idea, but it is an idea with clear proof of concept – see the <u>Department of Political Economy at the University of Sydney</u>. That said, you would probably need to establish a stream or major of political economy subjects as a precursor.

A separate department of political economy has its own institutional independence and is thus less vulnerable to whims of often intolerant and uncomprehending orthodox economists. If this pathway to change were to become more widespread, political economy could conceivably come to be regarded as a distinct discipline with its own journal rankings, etc. Indeed, this is seemingly the most effective way to fix the ongoing prejudice against non-mainstream economic research. Closely related areas such as anthropology and sociology already exist as separate disciplines: similarly, so could economics and political economy.

Teaching political economy outside the school and university system. The option of moving outside the university system might sound even bolder. However, it too has proof of concept. For example, in 2019, I established an independent School of Political Economy, based in Australia but with globally accessible online components, offering tertiary level education in economics. Universities are often not genuinely orientated to teaching, having become unduly focused on securing income, prestige, and competitive rankings. Furthermore, many students currently in universities are less interested in actually learning than just getting a degree or qualification of some sort. Outside this type of environment, it is reasonably easy to provide a better-quality learning experience, with higher teacher to student ratios and a generally more engaged and able student cohort. And all for the fraction of the cost.

If you want to look at any of these strategies in more detail, you can consult the resources listed below. Much can be learned from looking at case studies of how others have succeeded or failed and then adapting those lessons to your own specific circumstances, agenda and judgments concerning the what, where and how of curricular reform.

TIM THORPTON



DECOLONIZING THE TEACHING OF THE HISTORY OF ECONOMIC THOUGHT

Responding to the calls of the Rethinking Economics movement to integrate the History of Economic Thought (HET) into undergraduate economics teaching, a single term module of HET has been core to the second-year of undergraduate economics programs at the University of Greenwich since 2014. When the authors took over leadership of the module, it was organized in two parts: six sessions ordered chronologically according to the main schools of thought and four sessions on 'applied' HET topics.

An issue which was immediately evident was the dominance of what we have called WEM-HET. The subdiscipline has historically been dominated by White, European, Male (WEM) scholars, and their research on WEM economists since Adam Smith. This has begun to change a little in recent years, but the seminal texts of the sub-discipline, both the original contributors and the HET analyses thereupon, remain decidedly WEM.

With our first chance to revise the curriculum we focused our efforts on de-colonization, making two significant changes. First, we condensed the sessions on European HET so that we could add an initial session on International HET. Of course, this risks 'ghettoizing' non-European HET. In recognition of this risk, we are trying, where possible, to introduce non-European perspectives both on traditional WEM-HET and on the applied topics. We use the international HET session to highlight the important non-European contributions which both pre-date and run contemporaneously with the major developments in European HET. Second, we reorganized and expanded the applied section of the module. We now have a session on race and class, and another on sex and gender. This has involved an investment in learning on our part on both international HET and on the HET of non-traditional topics.

Underpinning this re-organization has been an ongoing attempt to de-colonize the learning resources of the module. We are using a new edited collection, *Re-charting HET*, which takes an entirely applied approach, reflects a pluralist analysis, and, wherein authorship is more demographically diverse (if still European dominated). In addition to the core textbook, we have attempted to diversify the supplementary readings in terms of race, class, sex/gender, though there is still room for improvement on this front.

A further reform which we introduced to the learning resources was to include a 'classic text': each week we ask the students to read a renowned piece of writing in economics (often an excerpt), a 'synthetic' piece assessing the subject (a chapter from Recharting or other HET textbooks), and 'supplementary' reading which introduces more depth to the topic, often a journal article or book chapter. Where possible, we have attempted to include diversity in our choice of 'classic' text; for example, students are asked to read a selection from W.E.B Dubois' The Gift of Black Folk¹⁰ in the week on the HET and race. Of course, the inclusion of 'classic' texts in the section on European HET risks reinforcing WEM dominance, however, it is our belief that it is preferable for our students to encounter the original material, and be guided in the works' historical context and author's values and beliefs, rather than purely accepting the interpretation of such works through the eyes of a (likely WEM) HET scholar. This has allowed us, for example, to have challenging discussions about Alfred Marshall's sexism, classism and racism or John Maynard Keynes' support for eugenics.

We have also tried to diversify learning resource medium by including links to podcasts, videos and films that cover, either directly or indirectly, the authors and topics that we are discussing. While such resources often replicate the WEM dominance of the traditional HET textbook, there are also spaces where a diversity of voices on new issues to HET can be heard.

Finally, the implications of decolonization for assessment also deserve consideration. When we took over module leadership, it was assessed through two pieces of summative assessment, a shorter and a longer essay. We have moved to a single longer summative essay, supported by the submission of a formative draft. This has also allowed us to introduce student co-creation, wherein students are allowed to construct their own essay question, getting approval and feedback on their proposed topic at the formative stage. Over recent years, the number of students choosing to research non-traditional topics and/or bring non-WEM perspectives into their writing has steadily increased.

JEFF POWELL YULIYA YURCHENKO

⁹ Deane, K. and Van Waeyenberge, E. 2020.eds. *Re-Charting the History of Economic Thought*. Macmillan International Higher Education.

¹⁰ Du Bois, W.E.B. 1924.*The Gift of Black Folk: The Negroes in the Making of America*. Boston: The Stratford Co.,

IS IT SIMPLE? IS IT COMPLICATED? NO, IT'S COMPLEXITY ECONOMICS!

Economic complexity is an interdisciplinary approach to explaining and analyzing socioeconomic mechanisms. Complex systems are characterized by heterogeneous agents with bounded rationality whose evolving behavior leads to emergent patterns that are irreducible to the micro behavior. Such complex systems can be pandemics¹¹, ecosystems¹², or artificial societies¹³. Those artificial societies have reproduced a battery of stylized facts of real-world economic systems and can thus be considered a valuable alternative to more orthodox modeling approaches. While models of complexity economics generate fascinating insight into real-life economic actions, they remain neglected in many parts of economics. Economic complexity lacks a JEL code; many papers get published in fields of physics, biology, and computer science instead of traditional economic journals¹⁴ which makes it hard for

complexity economists to engage in a fruitful dialogue with other branches of the field. Yet, the interdisciplinary nature of complexity economics allows economics to further branch out into other fields, learning and adapting new methods and strengthening its standing as a social science.

Teaching material based on a young, rapidly developing field is always challenging. This is all the more true for teaching complexity economics, which has to fend off criticisms from orthodox and heterodox views due to its fundamentally different methodological approach. It has to be established first as a valid scientific paradigm outside of the classroom before any actual transfer into the classroom is possible. The difficulty communicating the approach within the field is mirrored by the difficulty in fitting the approach into existing camps of economics.

The orthodox framework is used for a constrained optimization framework of economics based on rational expectations and external shocks. This contrasts the seemingly ad hoc approach of complexity theory with rules of thumb, habits, and radically simplified descriptions of human interaction¹⁵. By contrast, heterodox scholars typically criticize the excessive reliance on formal mathematical tools in complexity economics.

¹¹ Mellacher, P. 2020. "COVID-town: an integrated economic-epidemiological agent-based model." *Graz Schumpeter Center Discussion Paper* No. 23.

¹² Savin, I. et al. 2022. "Agent-Based Modeling to Integrate Elements from Different Disciplines for Ambitious Climate Policy." *WIREs Climate Change*, no. n/a: e811.

¹³ Miller, J., and Page, S. 2007. *Complex Adaptive Systems: An Introduction to Computational Models of Social Life*. Princeton, N.J: Princeton University Press.

¹⁴ Farmer, D. et al. 2005. "Is Economics the Next Physical Science?"
Physics Today 58 (9): 37–42.; Shaikh, A. 2020. "The Econ in Econophysics." European Physical Journal - Special Topics 229 (9): 1675–84.; and, Fort, H. 2022. "Economics as Physics, Economics as Biology."
Forecasting with Maximum Entropy: The Interface between Physics, Biology, Economics and Information Theory, November.

¹⁵ Parsons, B. et al. 2010. "Using Complexity Science Concepts When Designing System Interventions and Evaluations," 6.

Complexity economics can closely resemble mainstream approaches, rightfully criticized for their 'mathiness'¹⁶. Adding to this issue are students' (self-)perceptions of mathematical incompetence that are heavily gendered¹⁷. Math-heavy teaching might thus reinforce pre-existing gender norms and go against the academic ideal of science as a cooperative truth-seeking endeavor.

In our experience, teaching courses on complexity economics must acknowledge and discuss these criticisms from the beginning. The approach towards this criticism fundamentally depends on which type of department and curriculum the class is situated in. Students in heterodox programs do not need to be convinced of the merits of methodological pluralism. They are already exposed to various qualitative descriptions of socioeconomic mechanisms. Lectures can draw from these qualitative ideas and show how they are formalized using the tools of complexity economics¹⁸. These include the notion of "turbulent equalization" in the form of a negative feedback mechanism regulating profit rates from classical political economy¹⁹, Marxian class

structure that almost universally materializes in empirical income distributions²⁰, or stochastic growth processes that capture the main theoretical predictions of dependency theory²¹. The verbal descriptions of underlying assumptions can easily be formalized in the classroom environment to enforce transparency and precision. Flow diagrams, intuitive computer code, and simple equations²² have been helpful but not the center of class content and pedagogic success. Students working hands-on in small groups on the computer code often relieve anxieties regarding those formal methods. Using user-friendly languages like NetLogo, designed explicitly for agent-based modeling, provides an early sense of achievement.

In orthodox departments, the point of departure is radically different. Curricula are typically relatively narrow and often focused on technical results in the constrained optimization paradigm. An instructor can focus more on formalized assumptions as students will be familiar with programming and are equipped with a more robust mathematical skill set. At the same time, students need more pedagogical support



¹⁶ Romer, P. 2015. "Mathiness in the theory of economic growth". *American Economic Review*, 105(5), 89-93.

33

¹⁷ Goetz, et al. 2013. "Do girls really experience more anxiety in mathematics?". *Psychological Science*, 24(10), 2079-2087.

¹⁸ Elsner, et al. 2015. The Microeconomics of Complex Economies: Evolutionary, Institutional, Neoclassical, and Complexity Perspectives. Amsterdam; Boston: Academic Press, and Arthur, B. 2023. "Economics in nouns and verbs". Journal of Economic Behavior & Organization, 205, 638-647.

¹⁹ Shaikh, A. 2016. *Capitalism: Competition, conflict, crises*. Oxford University Press.

²⁰ Schneider, M. 2015. "Revisiting the Thermal and Superthermal Two-Class Distribution of Incomes." *The European Physical Journal* B 88 (1): 5; and Silva, C., and Yakovenko, V. 2005. "Temporal Evolution of the 'Thermal' and 'Superthermal' Income Classes in the USA during 1983–2001." *Europhysics Letters (EPL)* 69 (2): 304–10.

²¹ Weber, J. and Schulz, J. 2022. "Growing Differently: A Structural Classification for European NUTS-3 Regions." University of Utah Department of Economics Working Paper Series, 1.

²² Case, N. n.d. "LOOPY!"

to understand the intuition for the relevance of feedback mechanisms, interaction, and heterogeneity as the central tenets of economic activity. Even current-generation New Keynesian models, including DSGE models of the HANK class, do not feature strong interaction between agents except through the price mechanism. Using toy models helps build intuition for larger and more complex models. Intuitive models are the Schelling segregation model²³, where localized interaction leads to global emergent segregation, or Conway's famous Game of Life²⁴.

It is essential to separate an emerging field like complexity economics from other methods and outline what it is not. Exploring Economics has done a great job of separating the different approaches to socioeconomic questions of our time. A significant challenge to teaching complexity economics is the extensive range of methods and ideas an instructor can focus on. All methods, may it be agent-based modeling²⁵, information theory²⁶, or artificial

societies²⁷, are well established in their research community and have produced excellent textbooks and introduction material. Due to the niche existence of complexity economics in economics, researchers are more open to giving guest lectures to fascinate a new generation of students for their work. The interdisciplinarity of complexity economics is a further advantage for aspiring instructors. Especially the work of the Santa Fe Institute²⁸ and its educational project of the Complexity Explorer are great starting points for future instructors to see well-designed classes on several aspects of complex socioeconomic systems.

JAN SCHULZ. JAN DAVID WEBER

²³ Schelling, T. 1971. "Dynamic Models of Segregation." *The Journal of Mathematical Sociology* 1 (2): 143–86.

²⁴ Gardner, M. 1970. "Mathematical Games." *Scientific American* 223 (4): 120–23.

²⁵ Wilensky, U., and Rand. W, 2015. *An Introduction to Agent-Based Modeling: Modeling Natural, Social, and Engineered Complex Systems with NetLogo. Illustrated edition.* Cambridge, Massachusetts: The MIT Press

²⁶ Golan, A. 2017. Foundations of Info-Metrics: Modeling and Inference with Imperfect Information. New York, NY: Oxford University Press.

²⁷ Epstein, J. and Axtell, R. 2050 Project, Brookings Institution, Santa Fe Institute, and World Resources Institute. 1997. Growing Artificial Societies Social Science from the Bottom Up. Washington, D.C.: Brookings Institution Press: MIT Press.

²⁸ Mitchell, M. 2011. Complexity: A Guided Tour. Illustrated edition. New York, NY: Oxford University Press.

POPULAR EDUCATION IS ESSENTIAL FOR ADVANCING HETERODOX ECONOMICS

People interested in advancing heterodox economics should incorporate popular education methods in the classroom, and especially outside of it. In my experience, social, environmental and economic justice activists, rank-and-file union members and ordinary people have all been much more receptive to critical ideas about the economy and economics than college students in the United States.

Popular education is closely associated with the work of Paulo Freire, the renowned Brazilian pedagogue famous for writing "Pedagogy of the Oppressed," one of the most highly-cited books in history. This methodology begins by tapping into people's day-to-day experiences and adopts a "problem-posing" approach to help individuals make sense of their lives and address their most pressing social questions. It aims to break down the traditional hierarchy between student and teacher, emphasizing that everyone has something to teach and to learn, standing in opposition to the "banking" model of education where knowledge is merely deposited into students' minds.

One example of implementing popular education in economics is the "Flavors of Socialism" workshop I developed in response to the 2016 Democratic Party primary between Bernie Sanders and Hillary Clinton, and the obvious confusion among many Americans around the term "socialism." I had spent time in Cuba and Venezuela, and that spring semester, had taken a graduate course in "Comparative Economic Systems" and therefore knew that many different socioeconomic systems have been implemented or

envisioned under the banner of "socialism." I wanted to help people who identified or were attracted to socialism to understand what it is that they were advocating for and against. Were they in favor of social democracy, or socialism like Sweden? Central planning or socialism like the Soviet Union? Market socialism, or socialism like the former Yugoslavia? Or some yet untried form of democratic planning?



In looking for a more intuitive way to summarize complex ideas about ownership, allocation, distribution, democracy and hierarchy, I decided to develop a role-playing game. Rather than assigning several dense books and preparing a long lecture comparing economic systems, I ask workshop participants to pretend that they are either workers or

managers at one of two medium-sized companies or members of the community where these businesses were located. By emphasizing one important axis, decision-making at the firm level, we can begin to understand the differences between these different kinds of socialism, and even why many people would vigorously object to one or another of these systems being labeled as such. One of the hypothetical companies is profitable and is aiming to boost its profits, while the other is losing money and looking to stem its losses. We give each of the two companies a set of options for achieving their goal. Instead of asking participants "who makes decisions in a firm in a capitalist society?" we start with "Who makes decisions where you work?"

We begin with a neoliberal capitalist scenario since that's the one American audience is most familiar with. To model a social democratic scenario, we remove some of the options from the hypothetical set due to greater labor, consumer, environmental regulations. We then ask the managers if the new regulations would affect the decisions they make. Once participants are more comfortable with the role-playing exercise, we introduce less familiar scenarios. Next, we discuss firm-level decision-making in the Soviet Union and how and why it was more restrictive. Then we model a market socialist scenario where the workers and managers at each company make decisions together and ask how giving workers decision-making power changes the outcomes for both companies. Finally, we simulate a democratic planning scenario by having all participants, workers, managers and neighbors all decide collectively what to do at both companies.

This "Flavors of Socialism" activity has become one of our most popular workshops we offer. Many participants revel in the theatricality of it, embracing their roles as ruthless managers or militant workers. They began to grasp some of the most important

questions in heterodox economics, "is the problem with capitalism the exploitative, alienating and destructive effects of market competition or do these issues arise due to concentrated ownership?" They are less bashful in asking questions like "How did one get an apartment in the Soviet Union?" or "What were the stores in Yugoslavia like?" With the onset of the pandemic, we adapted much of our curriculum for Zoom workshops, which allowed us to reach even and more diverse audiences. Those participants most passionate about radical social change gravitate towards democratic planning as their preferred form of socialism, while those that are less idealistic tend to prefer social democracy or market socialism.

This past fall semester, I taught an upper-level elective for undergraduates on comparative economic systems, titled "Capitalism Socialism." I began with the "Flavors of Socialism" activity, which provided students with a fun and interactive introduction to the themes that we would be covering in the class. At the end of the semester, I polled them on their preferred form of socialism and all of them chose social democracy or simply socialism and preferred neoliberal rejected capitalism. While introducing popular education methods did make for a better classroom experience, it reinforced the idea that the best place to explore critical ideas about economics was with people outside of the university.

In conclusion, popular education methods hold tremendous potential for advancing heterodox economics. By embracing popular education, we can engage with a wider range of participants beyond the confines of traditional academic settings, and thereby contribute towards building a more just, equitable and sustainable world.

FRANCISCO PÉREZ

economics4emancipation.het