Redirecting Academic Economics to Embrace Scientific Integrity and Advance Useful Knowledge*

Steven Payson

45th Annual Conference of the East Coast Colleges Social Science Association, Herndon, VA, April 5-6, 2019

*This paper represents the author’s views only and does not represent the views of any organization to which he belongs. Email for correspondence: payson.steven@gmail.com.
HOW ECONOMICS PROFESSORS CAN STOP FAILING US

The Discipline at a Crossroads

STEVEN PAYSON

Paper Based, in Part, on:

Research Article
Steven Payson*

Cite This Economics Paper! It Is Time for the House of Cards to Fall Down

https://doi.org/10.1515/opene-2019-0001
Received August 14, 2018; accepted December 31, 2018

Figure 1. The Current State of Citation Counts and Publication Counts in the Academic Economics Profession: A House of Cards that Must Now Come Crashing Down.
“Literature-Only Economic Theory”

Recall that the monopolist’s optimal uniform price $\bar{p}$ satisfies $0 < \pi^H(\bar{p}) = -\pi^L(\bar{p})$ or

$$\bar{q}_H \left(1 - \frac{\bar{p} - c}{\bar{p}} \eta_H(\bar{p})\right) = \bar{q}_L \left(\frac{\bar{p} - c}{\bar{p}} \eta_L(\bar{p}) - 1\right),$$

with $\frac{\bar{p} - c}{\bar{p}} \eta_H(\bar{p}) < 1 < \frac{\bar{p} - c}{\bar{p}} \eta_L(\bar{p})$. Under discrimination, the firm raises $p_H$ until $\frac{\bar{p} - c}{\bar{p}} \eta_H = 1$ and lowers $p_L$ until $\frac{\bar{p} - c}{\bar{p}} \eta_L = 1$. Since $q + (p - c)q' \geq 0$ if $p \leq p^*(c)$, we have

$$d \left(\frac{\bar{p} - c}{\bar{p}} \eta\right) = \frac{-[q' + (p - c)q'']}{q} \leq \frac{-2q' + (p - c)q'}{q} \text{ if } p \leq p^*(c),$$

where $\frac{-2q' + (p - c)q''}{q} > 0$ from the concavity of $\pi(p)$. Therefore, $\frac{p_L - c}{p_L} \eta_L$ monotonically increases in $p_L$ for $p_L \in [p_L^*, \bar{p}]$; and while $\frac{p_H - c}{p_H} \eta_H$ also tends to increase in $p$ (since it must

- Dominates the published worked in most “top-ranked” economics journals.
- Highly Mathematical, Often Esoteric

Three Characteristics (or Criteria):

1. Relies heavily on very strong, and arbitrary, assumptions.
2. Ventures very deep into highly complex, mathematical constructs, incomprehensible to anyone who has not studied them.
3. Will never be used in textbooks or classroom lectures, nor put to any practical use, or offer a better understanding of the world.

Example from:
Yongmin Cheny and Marius Schwartz,
April 21, 2013.
http://tinyurl.com/yarv9uem
The Scientific Pursuit of Useful Knowledge Versus Competition in an Intellectual Game of Amusement: The Difference is Obvious!

- Committed to making the world a better place.
- Highly motivated by an honest effort to understand causality, even if it requires a deviation from initial perspectives and beliefs.
- Yeah, fortune and fame, for your efforts, would be nice too.

- Committed to winning over others, with all the prestige and pride that comes with it.
- Highly motivated by the intellectual challenge involved and the self-gratification it provides.
- Yeah, fortune and fame, for your efforts, would be nice too.
Development of Literature-Only Economic Theory is *OBVIOUSLY* the Scientific Pursuit of Useful Knowledge... and *NOT* An Intellectual Game of Amusement

The Difference is as obvious as the difference between the colors of the middle square on the top and the middle square facing us.

Source of Rubik’s cube picture: [https://serendip.brynmawr.edu/u/bb/contrastcolor/](https://serendip.brynmawr.edu/u/bb/contrastcolor/)
Intellectual
Game
Legitimate
Science
A Fantastic Illusion – or Deception – that Literature-Only Economic Theory Pulls Off on the Public

In reality we can know that the bottom square is brown, just like the top square – not orange. In the same way, we can know that the generation of literature-only economic theory is a game of intellectual amusement.

The only reason the bottom square looks orange, and the only reason why literature-only economic theory looks like legitimate science, is because they are surrounded by misleading indicators that distort the perspective.

How Economics Professors Can Stop Failing Us explains these misleading indicators.
Obsolescence of the “Lost-Keys-Under-the-Lamppost Joke”
Explanation of the Behavior of Drug-Addicts in Literature-Only Economic Theory

It is asserted that an agent behaves as if solving the ensuing optimal control problem from the point of view of base period $t$:

$$V(a_t, s_t, \theta) \overset{\text{def}}{=} \max_{c_1(\cdot), c_2(\cdot), e(\cdot)} \int_t^{+\infty} U(S(\tau), c_1(\tau), c_2(\tau)) \exp(-\rho[\tau - t]) \, d\tau$$

subject to

$$\int_t^{+\infty} [p_1 c_1(\tau) + p_2 c_2(\tau) + e(\tau)] \exp(-r[\tau - t]) \, d\tau = a_t + \int_t^{+\infty} w(S(\tau)) \exp(-r[\tau - t]) \, d\tau, \quad (1)$$

$$\dot{S}(\tau) = c_2(\tau) - \delta S(\tau) - h(e(\tau)), \quad S(\tau)|_{\tau=t} = s_t,$$

where $\theta \overset{\text{def}}{=} (p_1, p_2, \rho, r) \in \mathbb{R}_+^4$, $\rho$ (as opposed to $\sigma$) is the rate of time preference, $s_t \in \mathbb{R}_+$ is the given base period habit stock, and $V(\cdot)$ is the current value intertemporal indirect utility function, which by Theorem 14.7 of Caputo (2005), is independent of base period $t$. 
An Explanation of the Behavior of Drug-Addicts in *Neuroscience*

Figure. Neurocircuitry schematic illustrating the combination of neuroadaptations in the brain circuitry for the three stages of the addiction cycle that drive drug-seeking behavior in the addicted state. Note the activation of the ventral striatum/dorsal striatum in the binge intoxication stage. During the withdrawal—negative-affect stage, the dopamine systems are compromised and brain stress systems such as CRF are activated to reset further the salience of drugs and drug-related stimuli in the context of an aversive dysphoric state. During the preoccupation—anticipation stage, contextual cues via the hippocampus and stimuli cues via the basolateral amygdala converge with frontal cortex activity to drive drug seeking. Other components in the frontal cortex are compromised, producing deficits in executive function.
Important Clarification

- This is NOT, I repeat—NOT, a Criticism of Economic Theory Itself.

- Economic theory, like the Slutsky Equation, or the Heckscher-Ohlin Model, or the Lancaster-Lipsey Theory of the Second Best, etc., are exactly what makes economics, economics.

- The problem is not with abstraction – the problem is with RELEVANCE – with regard to understanding OR to real-world application.
But Does Anyone Else Agree with Any of This?

Joseph Stiglitz (Nobel Laureate 2001): “It is hard ... to understand how peculiar the predominant macroeconomic models were. Many assumed demand had to equal supply—and that meant ... no unemployment. (Right now a lot of people are just enjoying an extra dose of leisure ...)

Paul Krugman (Nobel Laureate 2008): “[T]he central cause of the profession’s failure was the desire for an ... intellectually elegant approach ... to show off ... mathematical prowess. ... [T]his romanticized ... vision ... led most ... to ignore all the things that can go wrong.”

Robert Solow (Nobel Laureate 1987): “I do not think that the currently popular DSGE [dynamic stochastic general equilibrium] models pass the smell test....The protagonists of this idea make a claim to respectability ... but I think that this claim is generally phony.”

Wassily Leontief (Nobel Laureate 1973): “[T]here is something scandalous in ... so many people refining the analysis of economic states which they give no reason to suppose will ever, or have ever, come about... It is an unsatisfactory and slightly dishonest state of affairs.”
Why Is It Allowed to Continue?

1. Misunderstanding over what makes certain forms of knowledge more valuable than other forms.

2. Darwinist survival of the individuals who are naïve admirers of the profession’s most prominent leaders.

3. The problem is not complex enough to generate interest among those who think that only complex ideas are worthy of their scholarly attention.
Fixing the Citation Problem by Classifying Citations into:

1. **Essential Citations** – forming the basis of the research.

2. **Relevant Citations** – making a substantive contribution to the research.

3. **Fodder Citations** – not accomplishing anything other than promoting the image of a thorough literature review, and paying homage to prominent economists and prominent journals that could be related only tangentially to the topic.