Personal drama or theory-building?

Georgescu-Roegen on Gossen

Paola Tubaro

University of Greenwich, London

12th Summer Institute for the History of Economic Thought,
26 June 2011
The English translation of Gossen’s book

- His introductory essay is a major piece of scholarship on an otherwise obscure early writer.
- The most eloquent appraisal Georgescu ever wrote of any economist.
Georgescu’s personal endeavor...

- Gossen was unjustly ignored by his contemporaries...
- ...just as Georgescu himself felt that his own contribution was insufficiently recognized.
- He hoped to receive the Nobel Prize, and believed he fully deserved it.
...and his scientific enterprise

- Yet it was not only self-identification with a forgotten older writer that motivated Georgescu:

- His original plan was to develop a new approach to utility, with support of hints he found in Gossen.
A superposition of motives

I show in what follows that:

- Completion of Gossen project took 18 years, and was highly convoluted;
- Focus changed progressively over time;
- Initially strong theoretical interests eventually faded away;
- Personal motive of self-identification with Gossen gradually gained prominence.
Why theoretical motives were superseded

- In earlier work, Georgescu had pointed to inconsistencies in neoclassical consumer theory.
- He had suggested a new direction and with Gossen, he aimed to explore it further.
- His attempt was on the whole unsuccessful as major analytical problems remained unsolved.

⇒ In fact his key concerns were independently addressed in another part of economics.
Outline

1. Introduction
   - Motivation
   - Outline

2. A dramatic story
   - The published work
   - A complex sequence of events
   - Evolving thought

3. A theoretical challenge
   - Georgescu’s consumer theory
   - Insight from Gossen?
   - The difficulties

4. Epilogue
   - A turn in economics, in parallel
   - Conclusions
The published work

- A joint enterprise of Georgescu-Roegen and his colleague Rudolph C. Blitz.
- Blitz translated, Georgescu wrote a lengthy introductory essay.
- The book was published in 1983 by MIT Press.
- It is an edited text, more easily readable than the original.
A promising start

- Project first discussed in 1965 (AEA conference).
- Publication contract with Augustus M. Kelley (April 1966).
- Vanderbilt and AEA funding (Spring 1966).
- Completion initially expected Fall 1967.
- Search for historical sources started 1966.
- First draft translation in Summer 1966.
Tensions arising

- Blitz needed to reassure AEA that he was still working (1970).
- Kelley received a draft translation in July 1971, without Georgescu’s essay.
- Hayek provided a key unpublished source (1972).
- Kelley sold his firm: Georgescu and Blitz renounced their contract (1976-77).
Resolution

- In 1981, MIT Press expressed an interest in publishing the book. (Possibly through decisive intermediation of Paul Samuelson).
- Essay still needed major modifications and editorial work.
- As a reviewer for MIT Press, Hayek expressed his admiration to Georgescu (1982).
Personal drama or theory-building?
- A dramatic story
- A complex sequence of events

The bearing of practical obstacles

- Linguistic barrier: Georgescu’s dependence on Blitz’s translation.
- Blitz found the translation a great, unexpected challenge.
- Loss of Kelley contract.
- Once retired, Georgescu had no secretarial assistance.
- Busy schedules, competing writing commitments…
Personal motives appear late

Published essay opens on “Are there minds that may think above their times?”

- Schumpeter teaches that some economists “think above their times”;
- Yet Merton’s sociology of knowledge predicts discovery when times are ripe for it;
- Therefore, it predicts “multiples” rather than “singletons”;
- But discovery is complex and what seems similar may in fact be much less so.
- Minds “above their times” likely to face incomprehension.

⇒ Was absent from all earlier drafts – added in 1982-3.
Similar destinies?

- Georgescu had always regretted neglect of Gossen.
- Yet focus was initially on the peculiar fate of one man.
- Switch to sociological reflection suggests a universal perspective.
- All “minds above their times” may be concerned – including Georgescu himself.
Admiration for Gossen’s economics strongest at start

Gossen had infamously claimed that:

*I believe I have accomplished for the explanation of the relations among humans what a Copernicus was able to accomplish for the explanation of the relations of the heavenly bodies.*
Admiration for Gossen’s economics strongest at start

Gossen had infamously claimed that:

*I believe I have accomplished for the explanation of the relations among humans what a Copernicus was able to accomplish for the explanation of the relations of the heavenly bodies.*

Georgescu’s early drafts:

*time, the claim is apt to offer the substance of a good joke, for copernici in any field do not proclaim themselves as such. Yet in this case the joke should turn against those who may have joked about Gossen’s claim. He is the Copernicus of economics. Like Copernicus, he was the*
Admiration for Gossen’s economics strongest at start

Gossen had infamously claimed that:

I believe I have accomplished for the explanation of the relations among humans what a Copernicus was able to accomplish for the explanation of the relations of the heavenly bodies.

Georgescu’s early drafts:

Published version (1983):

We have often smiled at Gossen and even ridiculed him, but, given the exceptional value of his contribution, the persiflage should turn against the ridiculers.
Interest in Gossen most vivid in early days
Interest in Gossen most vivid in early days

Articles

1954 *Quart. J. Econ.*

1968 *Southern Econ. J.* *IESS*

1973 *Dictionary*

1985 *RISEC*

1965 *Start*

1973 *Draft 1*

1976 *Draft 2*

1983 *Publication*

Book project
From integrability to cognitive limits

- Georgescu 1936: impossibility to recover indifference maps from consumer equilibrium, unless preferences are transitive.
- Transitivity requires consumers to make comparisons over large changes in quantities of goods.
- Unlikely: humans have a “psychological threshold” of perceptions.
Alternative theory of “directional choice”

- Georgescu’s idea: indifference surfaces depend on the consumer’s past experience.
- Allow consumer to be in disequilibrium position and move from there
- Movements in choice space are real movements in real time:
  - Conventional theory:
    “Choice is analogous to that of a bird which, after surveying from above a large piece of ground, dives directly at the most preferred spot.”
  - Theory of directional choice:
    “Choice is rather like that of a worm which, from any position, chooses some direction and then moves along it.”
Alternative theory of “directional choice”

- Georgescu’s idea: indifference surfaces depend on the consumer’s past experience.
- Allow consumer to be in disequilibrium position and move from there.
- Movements in choice space are real movements in real time:
  - Conventional theory:  
    "Choice is analogous to that of a bird which, after surveying from above a large piece of ground, dives directly at the most preferred spot."
  - Theory of directional choice:  
    "Choice is rather like that of a worm which, from any position, chooses some direction and then moves along it."
Lexicographic preferences

- Georgescu 1954: lexicographic preferences are plausible and represent irreducibility of needs:
  ⇒ Paths in consumption choices, from basic to higher needs.
  ⇒ Past choices affect current choices by determining starting point.

- Lexicographic preferences not amenable to traditional representations of utility.
  ⇒ Inadequacy of indifference notion.
Lexicographic preferences

- Georgescu 1954: lexicographic preferences are plausible and represent irreducibility of needs:
  ⇒ Paths in consumption choices, from basic to higher needs.
  ⇒ Past choices affect current choices by determining starting point.

- Lexicographic preferences not amenable to traditional representations of utility.
  ⇒ Inadequacy of indifference notion.
Georgescu’s view of consumer theory

- Need to better integrate time into economic analysis:

  There is little doubt that by far the greatest amount of work still to be done in utility theory concerns the time factor (1968).

- Dissatisfaction with ordinal approach:
  - Based on (flawed) indifference notion;
  - Therefore, not substantially superior to older cardinalist approach.
Georgescu’s view of consumer theory

- Need to better integrate time into economic analysis:

  *There is little doubt that by far the greatest amount of work still to be done in utility theory concerns the time factor (1968).*

- Dissatisfaction with ordinal approach:
  - Based on (flawed) indifference notion;
  - Therefore, not substantially superior to older cardinalist approach.
Limitations of Georgescu’s view

However:

- Evidence was from mere introspection.
- Unclear: what would be gained by using theory of directional choice, instead of conventional theory?
- Criticized abstract mathematics – but it remained his main analytical tool.
Gossen’s two “Laws”

- Gossen’s “First law”: a version of the decreasing marginal utility principle.
- Originally formulated in terms of time, not quantities of goods.
- It requires only measurability of time/goods, not utility.

- Gossen provided a simple, clever graphical solution to find optimum.
Gossen’s two “Laws”

- Gossen’s “First law”: a version of the decreasing marginal utility principle.
- Originally formulated in terms of time, not quantities of goods.
- It requires only measurability of time/goods, not utility.
- Gossen provided a simple, clever graphical solution to find optimum.
Gossen’s two “Laws” (cont.)

- A “Second law” of diminishing utility:

  *If a previous enjoyment is repeated after an interruption, the intensity-of-pleasure schedule shifts, depending on the individual’s previous experiences of enjoyment. The sooner the repetition, the larger the shift.*

- Georgescu was the first to draw attention to it and call it “Gossen’s Second law”.

- It implies that past experiences change today’s utility/preferences.

- It suggests that one might optimize time use over one’s lifespan.
Gossen’s two “Laws” (cont.)

A “Second law” of diminishing utility:

If a previous enjoyment is repeated after an interruption, the intensity-of-pleasure schedule shifts, depending on the individual’s previous experiences of enjoyment. The sooner the repetition, the larger the shift.

Georgescu was the first to draw attention to it and call it “Gossen’s Second law”.

It implies that past experiences change today’s utility/preferences.

It suggests that one might optimize time use over one’s lifespan.
Gossen’s two “Laws” (cont.)

- A “Second law” of diminishing utility:
  
  *If a previous enjoyment is repeated after an interruption, the intensity-of-pleasure schedule shifts, depending on the individual’s previous experiences of enjoyment. The sooner the repetition, the larger the shift.*

- Georgescu was the first to draw attention to it and call it “Gossen’s Second law”.

- It implies that past experiences change today’s utility/preferences.

- It suggests that one might optimize time use over one’s lifespan.
Gossen, time, and a new consumer theory?

- Gossen’s thought was consistent with Georgescu’s intuitions.

- Georgescu saw potential for Second Law to be developed:
  \( \Rightarrow \) Effort to solve problem of time use optimization.

- Gossen’s work supported claim that focus on time would be useful.

- Gossen’s approach, neither cardinal nor ordinal, could provide useful analytical tools:
  \( \Rightarrow \) Georgescu referred to Gossen’s graphical solution in a letter to Samuelson (1974), to criticize one point in a paper by the latter.
However…

- Georgescu reached no general solution to the problem of optimizing time use over one’s lifespan.
- The case for support of an alternative consumer theory remained weak.
- No new methods (still introspection with maths).
- Problems of earlier marginalist theories (e.g. measurability of commodities).
A new consumer theory, meanwhile emerging

- Kahnemann and Tversky 1979; Thaler 1980; and others brought behavioral economics to the fore.
- Principles of reference-dependence and adaptation account for what was Gossen’s Second Law.
- A general framework to account for path-dependency of choices.
- Empirical evidence rather than introspection.
- New tools and scientific methods (experiments).
- A whole new set of facts can be explained, with relevant policy implications.
Personal drama or theory-building?

Epilogue

A turn in economics, in parallel

Side-stepped by behavioral economics?

- Behavioral economics addresses some of the key issues that Georgescu had raised.
- Georgescu’s quest for a new theory of consumer choice was brought forward independently by others.
- He anticipated these new developments to an extent, but did not go far enough.
- He did not seem to be aware of behavioral economics.
- Some commentators see similarities between Georgescu and Kahnemann (Hands 2006; Zamagni 1999).
Merton vindicated?

- A mind that thought above his time —but did not find the right way to convey his message.
- Key points independently developed in behavioral economics —with stronger evidence, new analytical tools.
- Multiples rather than singletons? Merton’s sociology of science vindicated!
- Georgescu’s own contribution remained in the shadow.
- Much less appreciated and remembered today than his other work on energy and bioeconomics.
- In retrospect, this seems to support Georgescu’s bitter feelings...
Thank you!

Paola Tubaro, p.tubaro@gre.ac.uk