Economics, behavioural economics & nudge.
Everything old is new again
Theory of Moral Sentiments (Smith, 1759)

Economic psychology (eg. Mitchell, 1910)

Bounded rationality (Simon, 1955)
Merit wants (Musgrave, 1957)
Demerit goods or ‘bads’ (Musgrave, 1959)

Extra-welfarism (eg. Sen, 1977)

Individualistic merit goods (Brennan & Lomasky, 1983)

Nudge (Thaler & Sunstein, 2008)
“Smith (1759) argued that behaviour was determined by the struggle between ... the ‘passions’ and the ‘impartial spectator’. The passions included drives such as hunger and sex, emotions such as fear and anger.

Smith viewed behaviour as under the direct control of the passions, but believed that people could override passion-driven behaviour by viewing their own behaviour from the perspective of an outsider” (Ashraf et al, 2005 p131).
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THE RATIONALITY OF ECONOMIC ACTIVITY. I

Few economists have regarded the study of psychology as a necessary part of the equipment for their work. Certain psychological notions, it is true, have always figured among the assumptions of the science; for serious discussion of any phase of human activity involves some concept of human nature. But during the formulative stage of economic theory all such concepts lay hidden among the tacit preconceptions upon which inquiry proceeded uncritically. When economists did become definitely conscious of what they had been assuming concerning human nature, it might have been expected that they would apply to psychologists to gain a knowledge of the mind and its modes of operation. On the contrary, they adopted the practice of formulating for themselves "a few principles of human nature," proven by past experience to be serviceable for the ends of economic inquiry. Rather disingenuously, they spoke of these principles as "borrowed from psychology," and for proofs referred their readers to the latter subject at large.

On their side, psychologists have shown a similar lack of interest in what economists were doing. They have had their own technical interests, their own new methods to apply, their own new viewpoints to develop. Until the recent rise of functional psychology their problems and theories have had little in common with the problems and theories of men engaged in studying phases of social activity. Their work offered little incentive
The timeline of key developments in economic theory:

- **1800**: *Theory of Moral Sentiments* (Smith, 1759)
- **1900**: Economic psychology (e.g. Mitchell, 1910)
- **1940**
- **1960**: Bounded rationality (Simon, 1955)
  - Merit wants (Musgrave, 1957)
  - Demerit goods or ‘bads’ (Musgrave, 1959)
- **1980**: Extra-welfarism (e.g. Sen, 1977)
  - Individualistic merit goods (Brennan & Lomasky, 1983)
- **2000**: Nudge (Thaler & Sunstein, 2008)
Bounded rationality & satisficing

“...if all alternatives are not be examined, some criterion must be used to determine that an adequate solution has been found. The Scottish word ‘satisficing’ has been revived to denote decision making that sets an aspiration level, searches (only) until an alternative is found that is satisfactory, and selects that alternative” (Simon, 1972).
1800

*Theory of Moral Sentiments* (Smith, 1759)

1900

Economic psychology (eg. Mitchell, 1910)

1940

**Bounded rationality** (Simon, 1955)

1960

- *Merit wants* (Musgrave, 1957)
- *Demerit goods or ‘bads’* (Musgrave, 1959)

1980

- Extra-welfarism (eg. Sen, 1977)

1990

- *Individualistic merit goods* (Brennan & Lomasky, 1983)

2000

*Nudge* (Thaler & Sunstein, 2008)
(de)Merit goods

“...the concept of merit wants is put forward to epitomize a further range of cases where individual preferences expressed in a market setting may nevertheless require correction. ...distinction between social wants ‘where corrective policy is required in order to secure an allocation that is in line with consumer preferences’ and merit wants ‘where the reason for budgetary action is to correct individual choices’ (Musgrave, 1959 p. 9)” (Head, 1991 p. 229).
Individual welfare ≠ individual preference

**Head (1991):** divergence between choice and welfare might arise due to ignorance and uncertainty, problems of impulsiveness and weakness of will, or due to “myopia or a failure to recognize the multi-period character and future implications of certain choices” (p. 237).

**Ng (1983):** “revealed preferences might differ from true welfare due to ignorance and imperfect foresight, rigid adherence to some habit or principle inconsistent with welfare maximisation, or due to paralysing fear or overwhelming temptation” (p10).

*Consumers might make errors when they weigh the costs and benefits of some consumption bundles.*
Consumer sovereignty

“...individuals are themselves the best – some might say ‘the only’ – judges of what contributes most to their utility and how much that contribution is” (Brouwer et al, 2008 p327).

“Every buyer determines to some degree the direction of industry. The market is a democracy where every penny gives a right of vote.”” (Persky, 1993 p185 citing Fetter, 1903).
Consumer sovereignty & WARP

**Weak Axiom of Revealed Preference (WARP):** If A, B feasible and A chosen, then at any prices and income where A, B are feasible, the consumer will choose A over B.

**WARP says two things:**
1. People choose what they prefer and so should never willingly choose a (divisible) consumption bundle that includes a ‘bad’.
2. Preferences are consistent. Therefore, a single observed choice reveals a stable preference.
Normative authority of WTP?

“….amongst the decisions to be taken is one about whose values are to be used to underpin utility and other preference- or value-based estimates of benefit and costs…

…in extra-welfarist economics any number of stakeholders might be regarded as appropriate sources of different values for different entities and how they ought to be traded off against one another and compared interpersonally…

…under extra-welfarism, policy makers become one important potential source of values” (Brouwer et al, 2008)
**Timeline of Social Economics**

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- **2000**: Nudge (Thaler & Sunstein, 2008)
<table>
<thead>
<tr>
<th>Source of valuation of relevant outcomes</th>
<th>As a rule the affected individual</th>
<th>Might be the affected individual, but could also be an expert or a representative sample of the general public or an authoritative decision-maker</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant outcomes</td>
<td>Only individual utility, normally taken to represent preference orderings. Social welfare is a function of individual well-being.</td>
<td>May include individual utility as well as extra measures and indicators of well-being. In health policy, common outcomes will include health or health gain and the distribution of health or health gain, but may include other measures like patient satisfaction or caregiver burden. The selection of relevant outcomes is an important element in extra-welfarist evaluation and is context dependent and seems not for economists to decide (rather for decision-makers with authority). Some outcome measures may be based on preference measurement, when this is deemed a useful way to measure characteristics of interest.</td>
</tr>
<tr>
<td>Weighting of relevant outcomes</td>
<td>Sometimes permitted in a social welfare function, where the weights normally pertain to the distribution of individual utilities. Unclear whether such weights still classify as utility information.</td>
<td>Allowed and often considered important as means of incorporating equity and other considerations. Weights may be based upon a variety of ethical considerations including wealth, need and desert and can relate to the variety of relevant outcomes considered important (e.g. capabilities).</td>
</tr>
<tr>
<td>Interpersonal comparability of relevant outcomes</td>
<td>Although some theoretical approaches allow it (e.g. in a social welfare function), especially in applied work, normally considered impossible in the relevant evaluative space, i.e. individual utilities</td>
<td>Explicitly allowed in the relevant outcomes, though normally not in terms of individual utility, but rather in terms of capabilities and characteristics like health, handicap, ability to cope, schooling, ability to exercise discretion</td>
</tr>
</tbody>
</table>
Govt Intervention?

“It is one thing to argue that individuals are not perfect judges of their own interests, and another entirely to argue that they are not the best judges.

...even if in certain cases there exists some person who better knows what is good for the individual than he does himself, there is an additional step in arguing that a ‘superior’ choice will emerge from political processes” (Brennan & Lomasky, 1983 p. 184).
Table 1
Summary of four main and related differences between the welfarist and extra-welfarist approaches

<table>
<thead>
<tr>
<th></th>
<th>Under welfarist economics</th>
<th>Under extra-welfarism</th>
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Nudge (Thaler & Sunstein, 2008)
Traction & progress

[Graph showing trends over time with labels: Merit Goods, Nudge, Price elasticity]
Traction & progress

“Those against the use of the divergence between preference and welfare as a justification for illiberal policies argue:

▪ that the undesirable side-effects of such policies overbalance their benefits; or

▪ that the divergence is insignificant in practice” (Ng, 1983 p12).
What would you choose from the following options?

<table>
<thead>
<tr>
<th>Information</th>
<th>An oral conventional medicine available without prescription</th>
<th>An oral complementary medicine available without prescription</th>
</tr>
</thead>
<tbody>
<tr>
<td>This product was recommended by:</td>
<td>A pharmacist</td>
<td>Staff from the local pharmacy</td>
</tr>
<tr>
<td>The person who recommended it:</td>
<td>Didn’t mention or know anything about side-effects</td>
<td>Didn’t mention or know anything about side-effects</td>
</tr>
<tr>
<td>I know I can buy this product:</td>
<td>At a pharmacy</td>
<td>At a pharmacy</td>
</tr>
</tbody>
</table>

**Product labels:**

**RHEUMAZIDE**

Provides temporary effective relief of joint pain.

**Dosage:** Take 2 tablets in the morning with food.

**CAUTION:** This product may interact with certain medications, such as medicines for high blood pressure, heart problems or depression.

**Government Authority Rating:**

<table>
<thead>
<tr>
<th>Likely effective for joint pain</th>
</tr>
</thead>
<tbody>
<tr>
<td>May cause side-effects*</td>
</tr>
<tr>
<td>May interact with other medicines*</td>
</tr>
</tbody>
</table>

**CAM Flower Joint Relief Formula**

Provides temporary effective relief of joint pain.

**Dosage:** Take 2 tablets in the morning with food.

**CAUTION:** This product may interact with certain medications, such as medicines for high blood pressure, heart problems or depression.

**WARNING:** Do not use if pregnant or breastfeeding. If pain persists, see your doctor.

*For more information visit www.medicinescentre.gov.au or call 1900 123 123

**Government Authority Rating:**

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*For more information visit www.medicinescentre.gov.au or call 1900 123 123

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I would choose:

[ ] the conventional medicine

[ ] the complementary medicine

[ ] something else

$34.35 One month supply

$33.20 One month supply
### Just add information

**Table 1: Number of participants who attended to every attribute within a choice (N=32)**

<table>
<thead>
<tr>
<th>Question</th>
<th>Number of attributes presented</th>
<th>Health condition</th>
<th>Conventional choice # participants (%)</th>
<th>CAM choice # participants (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>joint</td>
<td>28 (88)</td>
<td>29 (91)</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
<td>insomnia</td>
<td>24 (75)</td>
<td>20 (63)</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>joint</td>
<td>26 (81)</td>
<td>24 (75)</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>insomnia</td>
<td>24 (75)</td>
<td>18 (56)</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>joint</td>
<td>13 (41)</td>
<td>14 (44)</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>insomnia</td>
<td>13 (41)</td>
<td>12 (38)</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>joint</td>
<td>13 (41)</td>
<td>12 (38)</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td>insomnia</td>
<td>15 (47)</td>
<td>14 (44)</td>
</tr>
</tbody>
</table>
What would you most likely choose from the下列 options?

Product labels:

I would choose

Resume later
Govt Intervention?

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Nudge (Thaler & Sunstein, 2008)
The Vast Majority Of Medicare Part D Beneficiaries Still Don’t Choose The Cheapest Plans That Meet Their Medication Needs

ABSTRACT When the Medicare Part D prescription drug benefit began in 2006, a primary concern for some policy makers was whether seniors would be able to make smart choices from among the dozens of competing plans. Using 2009 Part D data, we found that only 5.2 percent of beneficiaries chose the cheapest plan. Nationwide, beneficiaries on average spent $368 more annually than they would have spent had they purchased the cheapest plan available in their region, given their medication needs. More than a fifth of beneficiaries spent at least $500 a year more than they needed to. Beneficiaries often overprotected themselves by paying higher premiums for plan features that they did not need, such as generic drug coverage in the coverage gap. Our findings suggest that beneficiaries need more targeted assistance from the government to help them choose plans, such as customized communications about the most cost-effective plans that would cover their medication needs.
Pre-committing to a grocery list may help in the battle of the bulge

12 September 2013, 2.39pm AEST

Nicole Au
Senior Research Fellow, Centre for Health Economics at Monash University

Duncan Mortimer
Associate Professor, Centre for Health Economics at Monash University

Disclosure Statement

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Duncan Mortimer does not work for, consult to, own shares in or receive funding from any company or organisation that would benefit from this article, and has no relevant affiliations.

Meal plans and shopping lists are a simple solution to a growing problem. Shutterstock.com
References


Zhou & Zhang (2012). The vast majority of Medicare Part D Beneficiaries still don’t choose the cheapest plans that meet their medication needs. *Health Affairs*, 31: 2259-2265.