

Stewarding the Earth's Resources

An occasional bulletin for the church about waste

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Behavioural change and the social context of household waste management

Abstract

How can behaviour be changed so that greater quantities of household waste are recycled and composted? A recent conference for waste managers and recycling officers gives an insight into current research.

A study of households on a housing estate in south London shows that where family relations are broken, the natural flow of unwanted objects within an extended family is blocked and objects are more likely to appear as rubbish, and may potentially be dumped illegally as fly-tipping. The reliability of normal familial exchanges must be extended to waste collection.

A study of community waste projects shows the great number and variety of such projects. Community recycling schemes are a valuable forum for social learning as well as a means of increasing recycling rates, but it is difficult to measure their success.

Research shows four groupings in society that act in environmentally distinct ways. Each group requires a different message about personal environmental responsibility. There is a significant role for incentives among specific lifestyle groups.

Waste managers and recycling officers support penalties and incentives to encourage a greater level of household waste recycling but it is recognised that introduction requires political will, and that an incentive-based approach is preferable to one based on penalties.

Theological reflection encompasses: Romans 7:18-20; the appropriateness and effectiveness of penalties and incentives as Governmental tools to change human behaviour; and the role of local churches in community waste projects.

Introduction

Exploration of behavioural change and the social context of household waste management was the theme of a conference held by Project Integra, the Open University and the Resource Recovery Forum at Winchester Guildhall on Thursday 29th June 2006. The title of the conference was 'Can we change a rubbish habit?'

Project Integra is the co-ordinated waste collection and disposal scheme involving all Waste Planning, Collection and Disposal authorities in Hampshire, Portsmouth and Southampton. Project Integra is a recognised leader in the field of integrated waste management and planning. See www.integra.org.uk and see also **Stewarding the Earth's Resources no.7.**

The Resource Recovery Forum was established to research and promote the effective recovery of natural resources from waste, with due weight given to environmental, social and economic considerations. See www.resourcesnotwaste.org

The Open University is the United Kingdom's only university dedicated to distance learning. See www.open.ac.uk

This edition of **Stewarding the Earth's Resources** gives brief summaries of three of the papers presented at the conference.

The papers that are briefly summarised here are:

1. Fluid households and object flows: whose habit needs to be broken?
Catherine Alexander (Goldsmith's College)
2. Community-based behaviour change for waste prevention and recycling.
Jayne Cox (Brook Lyndhurst)
3. Understanding and promoting behaviour change using lifestyle groups.
Stuart Barr & Gareth Shaw (Exeter University)

The conference was attended by about 80 delegates: mainly local government officers in Waste Collection and Waste Disposal Authorities, but also present were delegates from professional consultancies, waste management contractors, the Environment Agency, community recycling groups, Defra (the Government Department for Environment, Food and Rural Affairs) and academic institutions.

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1. Whose habit needs to be broken?

Introduction

Catherine Alexander presented initial findings from a study of households on a dense, high and low-rise housing estate in south east London.

The main aim is to understand the flows of objects in, through and out of the household space: how, why and from where they enter; what happens inside the home; the reasons for which they leave that space and how they do so.

Kinship relations are the main conduit through which objects move and this necessitates understanding household dynamics. Objects that are no longer wanted will not necessarily be disposed of as rubbish, but will be moved on to another part of the extended family.

Two points are immediately clear:

1. The objects that people live with often resist dichotomies of 'clean' and 'dirty' or 'useful' and 'rubbish', whatever the cultural context.
2. There is tension between data collected or modelled on geographic areas (eg. a postcode area or the area of a local authority) and the way people live their lives. Families may be split across continents but they still act as redistributive units.

The research project that is being carried out by Goldsmith's College is part of a programme of work that is funded by the Engineering and Physical Sciences Research Council (www.epsrc.ac.uk). The focus of the research is to work on strategies for sustainable waste management in an urban context.

The research

The research involves long, open-ended interviews with people in their homes, walking around the neighbourhood with them, talking with other household members and joining in shopping expeditions. To date 140 of these interviews have taken place with 45 individuals. 23 of these people have kept detailed diaries of everything that comes into and leaves their home and how these have been disposed of.

The research showed a sharp distinction between long-term residents who had been there since the slum clearances of the 1960s and 1970s and whose children often lived nearby, and more recent incomers, often first generation migrants to Britain whose rate of movement was markedly higher than the approximate urban average of once every ten years.

Factors that affect the flow of objects

Three factors in particular are shown to affect the flow of objects: daily routines; calendrical cycles; and key transitional moments or ruptures in the development of families.

Christmas is a recognised event in the calendar that generates material that leaves the home as waste. Spring is equally celebrated by Turkic and many European groups with a comprehensive clearing out of the house and the purchase of new clothes.

The key transitional moments include the three events that are usually cited as the most traumatic: death of someone close; divorce; and moving house. These events are shown to have the effect of bringing to the fore objects that are neither useful nor waste, or to generate an influx of objects to a point of unmanageable excess.

Every house move usually generates an excess of objects and an anxiety about what to do with them. In the absence of effective information about Household Waste Recycling Sites (ie. 'Civic Amenity Sites') this anxiety can lead to fly tipping. Large amounts of objects will leave the domestic space when a marriage or relationship ends. The death of a spouse or parent will leave belongings of the deceased that must be reassigned. The arrival of children may lessen the willingness to keep glass, cans or organic waste for recycling, as these are now seen as dangerous or unclean.

Conclusion

Familial and familiar relations are the normal direction and means for objects to move along. Where family relations are broken this flow is blocked and objects are more likely to appear as rubbish. When normal channels of the movement of objects fail, there is confusion as to how these objects should be disposed of. Reliable rubbish collections are trusted, but this trust is easily broken if there is a failure in collection. The reliability and normality of familial exchanges must be extended to waste collection.

www.goldsmiths.ac.uk

2. Community-based behaviour change for waste prevention and recycling

Introduction

Jayne Cox presented emerging findings from two Defra-funded projects:

- Firstly, one examining and developing the evidence base on community waste projects;
- Secondly, the Small Changes, Big Difference project in Hampshire, aimed at engaging individuals in waste minimisation and prevention activities by targeting particular 'moments of change' in their lives.

Community waste projects

It is recognised that exhortation to greater waste recycling is not enough, and that entrenched behaviours must be unlocked. One way of achieving this is to encourage local communities to work together to increase recycling.

The results of some community-based schemes are impressive, but can these results be reproduced at a larger scale? And is the investment in community-based recycling worth it in financial terms?

The conclusion of research is that there is a lack of comparable data between schemes, and that there is a tension between the desire for local innovation and individuality and the desire of researchers to measure and evaluate. It is recognised that there would be value in assessing why some schemes fail. It is acknowledged that there is great value in the social capital that is created by community waste projects.

The Small Changes, Big Difference project:

- go to www.integra.org.uk
- click on Latest Press Releases
- click on 11 May 2006 Small Changes Really Can Make A Big Difference

For more on community waste projects go to www.defra.gov.uk/news/2005/050401a.htm

www.brooklyndhurst.co.uk

3. Understanding and promoting behaviour change using lifestyle groups

Introduction

Programmes such as 'Are you Doing Your Bit?' (1), promoted by Defra in 2002 to encourage waste recycling often make assumptions that need further critical investigation:

- Such programmes assume that messages focussed on environmental 'problems' (eg. waste, energy, water) will translate into behavioural responses made by individuals.
- No account is taken of the differences between different groups in society who exhibit varying levels of behavioural commitment.
- If the significance of different 'lifestyle groups' is accepted, then the variables that underlie such different levels of behavioural commitment must be appreciated and used to formulate policies for behavioural change.

Analysis of the literature on waste management and environmental behaviour shows three dominant sets of variables that influence behaviour and act as barriers or motivators for change:

1. **Social and environmental values.** For example, Dunlap and Van Liere (1978) (2), Dunlap et al (2000) (3) and Stern et al (1995) (4) have all argued that individuals with pro-environmental values (who hold bio-centric and eco-centric beliefs that nature has intrinsic value and that there are 'limits to growth') are more likely to be engaged in environmental action.
2. **Situational variables.** For example, Daneshvary et al (1998) (5) have highlighted the role of knowledge and experience in determining environmental action, emphasizing the role of behaviour-specific (concrete) information and the influence of previous activity in shaping behaviour.
3. **Psychological variables.** For example: the extent to which individuals feel morally compelled to help the environment (Hooper & Neilson, 1991) (6); the extent to which individuals derive satisfaction from their pro-environmental behaviour (De Young, 1996) (7); and the extent to which an individual perceives that that he/she has the ability to act, relating to issues such as the time to undertake the behaviour and the convenience of the action (Vining & Ebreo, 1990) (8)

Barr and Saw's current research involves re-examining existing data on environmental behaviours and attitudes relating to water saving, energy conservation, waste management and green consumption. New data were also collected in the form of eight focus groups.

Key findings

Four groups of individuals who act in four environmentally distinct ways are identified:

Committed Environmentalists

These are distinguished by high levels of green purchase behaviour, involvement in composting and high levels of commitment to habitual and recycling activities; they tend to be in older age groups, on moderate incomes and are more likely to hold university degrees. They are more likely to be willing to pay higher prices to buy environmentally-friendly goods; they are willing to sacrifice comfort to help the environment and they feel a strong moral obligation to make small actions to help the environment.

Mainstream Environmentalists

These are pro-environmental in a similar manner to Committed Environmentalists except that commitment to composting is low; they tend to be younger than Committed Environmentalists, on moderate incomes, and less likely to hold university degrees. The purchase behaviour of this group has a wide range of influences but the dominant factor governing positive pro-environmental behaviour is access to a garden. Older age groups in this group are more likely to make small behaviour changes to help the environment.

Occasional Environmentalists

These are less likely to purchase green products than the previous two groups, but they are relatively committed to both habitual actions and recycling around the home. They are more likely to have a degree than Mainstream Environmentalists. These are similar to Mainstream Environmentalists but there is a much stronger influence of moral obligation in predicting habitual behaviour.

Non-Environmentalists

These are only pro-environmental in a very small number of cases. Low levels of green purchasing, habitual and recycling behaviour were reported. They were the youngest group, on very low incomes and with lowest educational attainment. Those most likely to purchase environmentally-friendly products are those who are most aware of others' green purchasing behaviour and those who derive satisfaction from 'doing their bit'. Habitual activities are influenced by beliefs that individual behaviours would be effective. Recycling was influenced by variables such as trust in official information, environmental concern and being in an older age group. This group is typically male, low-income and politically apathetic.

Specific findings from focus groups are:

- Very few respondents were keen to adopt a radically different lifestyle, but were willing to make incremental adjustments to their lifestyle.
- There is an 'intention-behaviour gap' with people stating many barriers to action despite their stated willingness to act.
- People who ascribe greater responsibility to external agents as an influence that might change their behaviour tend to doubt whether changed actions that they might take will have any tangible impact.
- 'Big business' was a focus of discussion by many people, who see supermarkets as being 'less than sustainable', and yet few are willing to change away from using supermarkets because of time and cost factors. Food packaging is a major focus of criticism.
- Behaviour change is most likely to occur where there is easily seen and shared collective action, for example at the level of the local community.
- Cost is a very important determinant of behaviour, particularly among the Non-Environmentalists group. Environmental surcharges would be unpopular but incentives to act in a more environmentally responsible manner would be effective.

Some conclusions

1. Different groups require different messages to engender or reinforce levels of personal responsibility.
2. Policy makers need to work with supermarkets to promote more sustainable consumption practices.

3. Policy makers should consider how those who are committed to environmental action can be involved in raising awareness.
4. There is a significant role for incentives among specific lifestyle groups.

References

1. See www.doingyourbit.org.uk: it's not the Defra website but it picks up on the theme.
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5. Daneshvary, N., Daneshavry, R., Schwer, R. K. (1998) 'Solid waste recycling behaviour and support for curbside textile recycling', *Environment and Behavior*, 30 (2), pp.144-161.
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7. De Young, R. (1996) 'Some psychological aspects of reduced consumption behaviour: the role of intrinsic motivation and competence motivation', *Environment and Behavior*, 28 (3), pp358-409.
8. Vining, J., Ebreo, A. (1990) 'What makes a recycler? A comparison of recyclers and nonrecyclers', *Environment and Behavior*, 22 (1), pp55-73.

4. Further notes from the conference

In questions to the speakers and the discussion that followed a number of interesting points came out.

National consistency in household waste recycling practice?

It was suggested that with such a mobile population, and with waste management issues transcending local government boundaries, there should be national consistency in household waste recycling practice, extending, for example, to the colour of boxes issued by waste collection authorities for kerbside recycling and the days of the week on which recyclables and non-recyclables are collected. In response it was suggested that county-wide integrated waste collection and disposal schemes such as Project Integra offer the opportunity for such co-ordination at county level, but that it is unrealistic to expect any greater national co-ordination.

A new language?

It was suggested that a new language needs to be developed to take recycling further away from connotations of waste and closer to the language of resource recovery. In response it was suggested that the evidence of Barr and Shaw (3 above) suggests the need for different terminology for the groups with different behaviours.

Penalties and incentives

There was discussion of the scope for greater fiscal and financial penalties and incentives to encourage a greater level of household waste recycling. It has been proposed that householders should be charged for household waste collection by weight of waste collected or by the number of bags.

For more on this go to Chapters 5 and 6 in the Prime Minister's Strategy Unit's report at: www.strategy.gov.uk/downloads/su/waste/report/downloads/wastenot.pdf.

There was support for penalties and incentives but it was recognised that introduction requires political will and that an incentive-based approach is preferable to one based on penalties. The conference was reminded that some waste collection authorities are now collecting waste for disposal and waste for recycling on alternate weeks, in order to change behaviour by reducing waste disposal capacity.

Financial viability of initiatives to promote behaviour change

In response to a presentation about Project Integra that is not summarised here, a question was asked about the financial viability of Recycle For Hampshire, which is Project Integra's campaign across its area to promote behaviour change in households concerning domestic waste. (www.recycleforhampshire.org.uk) Some positive outcomes are identified from Recycle For Hampshire but measurement of value for money is not easy.

How can we engage a politically and socially disengaged group?

The question was asked: 'How can we engage a politically and socially disengaged group in society?', but others raised the danger of inappropriate labelling of a group in society: the issue must be approached in the context of social inequality as a whole. It was suggested that people may change behaviour over time. No longitudinal studies of behaviour in household waste recycling have been undertaken: these may show that there is change over time between the four groups identified by Barr and Shaw. Another speaker brought an insight from anthropology that human society may be characterised as a setting in which different social groups constantly challenge each other: to try to move people from one group into another may be self-defeating. Bigger questions are raised: 'What kind of society are we? How do social groups relate to each other?' In response to this, the virtues of community recycling schemes were put forward: these are a forum for social learning as well as increasing recycling rates.

5. Theological reflection

Three themes emerged from the conference:

1. The intrinsic positive value of community recycling and composting schemes.
2. Barr and Shaw's identification of four groupings, each with a different attitude to environmental issues.
3. Acknowledgment that penalties and incentives are significant tools in any attempt to change human behaviour.

A Christian approach to behaviour change could begin with St.Paul's anguished cry in Romans 7: 18-20:

'Though the will to do what is good is in me, the performance is not, with the result that instead of doing the good things I want to do, I carry out the sinful things I do not want'.

Barr and Shaw acknowledge this 'intention-behaviour gap'. For a Christian, the 'intention-behaviour gap' is ultimately more serious than domestic habits of waste recycling: it concerns the human encounter with God and the awareness of mortal frailty. The Christian finds healing and salvation in Jesus Christ, who by crucifixion and Resurrection has bridged the gulf between humankind and God. The 'intention-behaviour gap' remains, but the prayerful, confessing Christian finds that its consequences – guilt, fear, despair – are remedied in God's love made known to us in Christ. And at the heart of this experience there may be changed human behaviour.

But public policy cannot proceed on this basis. Change of heart and change of life in Christ cannot be prescribed or ruled for. Penalties and incentives may, indeed, be the appropriate and effective Governmental tools to change human behaviour to benefit the public good. Barr and Shaw have identified the different groupings that will react in varying ways to exhortation to change of life and change of heart. It is also recognised that each grouping will react differently to penalties and incentives. And St.Paul would be the first to tell us that the law alone cannot change human behaviour. There will be evasion and avoidance, and consequently the Prime Minister's Strategy Unit's Report, referred to above, discusses (in paras 6.8 – 6.10) the need for additional measures to tackle fly-tipping in the context of the introduction of penalties and incentives:

So what is the role for the church in changing human behaviour in household waste recycling? The community recycling and composting schemes that are the subject of Brook Lyndhurst's research bring us down to the level of operation of the local church. None of the schemes listed on the Defra webpage is explicitly a church-based group, but this does not mean that there is no church involvement in any of the groups. Organisations such as eco congregation (www.ecocongregation.org) encourage local churches to promote local

environmental projects. Brook Lyndhurst have not yet been able to quantify the success of local recycling and composting schemes, but they do acknowledge their worth as centres of social learning. Barr and Shaw conclude that behaviour change is most likely to occur where there is easily seen and shared collective action, and discussion at the conference suggested that a community scheme may bring together people from the different groups within society: we may conclude that a local church would be a good setting for such a scheme.

From personal experience as an incumbent of a parish church, representatives of Barr and Shaw's four groupings may, indeed, be found within the regular worshippers of one parish church and among parishioners who visit graves in its churchyard. Changed practice in churchyard management to end bonfires and intensive grass mowing and to promote composting and wildlife areas has provoked argument, as the differing attitudes identified by Barr and Shaw are magnified by behaviours associated with grief and anxiety. A suggestion within a parish church for a community recycling and composting scheme could as likely lead to division within the church as to an exemplar of best practice in waste management. Drawing from one of Brook Lyndhurst's conclusions, it is not clear from the ecocongregation website whether there has been evaluation of church-based community recycling schemes that fail.

And Barr and Shaw's four groupings are surely a reminder to the church that our message is heard in different ways by different people, and that we need to speak different languages if all are to hear the Good News of Jesus Christ, which is a call to change of life.

The Church of England's recent report **Sharing God's Planet** sets out the scale of humankind's responsibility for altering the planet over the last 100 years. It also provides Biblical and theological reflection and suggests a practical Christian response. But nowhere does it acknowledge that difficult environmental decisions are being made every day by waste management businesses, and by County, District and Borough Councils as they decide planning applications, and that everyone may have a role in influencing planning decisions. Some of the most contentious planning decisions are those that concern development proposals for waste management and disposal.

Stewarding the Earth's Resources is an occasional complementary bulletin for faith communities that sets out current issues in waste planning:

- It encourages Christians to take a responsible approach to new waste developments.
- It presents a balanced summary of current ethical, practical and spiritual issues in a non-technical way.

Previous editions of Stewarding the Earth's Resources may be obtained on request:

1.	July 2005	What's happening to waste, and what can Christians conclude from this?
2.	October 2005	Sustainable Development: noble vision or national self-interest?
3.	November 2005	Incineration of municipal solid waste: a contentious issue
4.	January 2006	Rubbish tips dumped in £8bn waste revolution: UK faces 'rude shock' over cost of refuse disposal. (Reproduced from The Guardian 05.01.06)
5.	February 2006	Current issues in waste management from the standpoint of a skip hire / waste recycling company
6.	Easter 2006	Can London kick its waste export habit?
7.	Ascension Day 2006	Restoring the goodness of creation: waste as 'materials' and 'resources'
8.	June 2006	The Town & Country Planning system: delivering essential new waste facilities. (Interview with Hilary Herbert [president of the Planning Officers Society] reproduced from Planning 23.06.06).

Stewarding the Earth's Resources is compiled by the Revd Jon Hale BA who is an ordained Church of England priest with a background in waste planning. It is distributed by email to: 23 waste management and planning professionals; 32 church organisations, and individuals via church organisations; 18 Church of England Diocesan Environment Advisors and similar; and 7 other recipients.

Waste Planning is the main professional journal in the field of waste planning. It is published by Mineral Planning, 2 The Greenways, Little Fencote, Northallerton DL7 0TS. There are other waste management journals.

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