James Rothman
Director, JICNARS
London, UK

3.2   HANDLING CHANGE IN A CONTINUOUS SURVEY: JICNARS EXPERIENCE WITH THE EML AND GROUPED TITLES

INTRODUCTION

Running a continuous survey is like running any large organisation or state. Things go best if, for the most part, only minor incremental changes are made. But as time goes by the environment changes so much that minor changes are insufficient to keep the organisation adapted to its environment. At this point, if the organisation is to survive it must undergo a painful upheaval. Once the change is over continuity can be restored and if one is fortunate things will proceed as calmly as before.

In the same way those of us who run continuous surveys try to maintain continuity by keeping changes to a minimum but sooner or later we find out surveys are behind the times and a major change is required to restore the position.

Traumatic changes of this nature are rare but paradoxically they are essential if a continuous survey is to go on reflecting the real world over a long period. A very occasional well-implemented change is as important to the success of a continuous survey as the regular maintenance of the status quo.

THE NEED FOR CHANGE

The NRS has just undergone such a major change and I hope that a description of our experience in implementing it will assist other survey operators when their time of revolution comes about. Figure 1 shows the important changes that have taken place in the NRS from its inception up until 1984. It shows that for 28 years the basic format of the survey remained the same. The filter question was altered in 1968 but throughout the time we used single title masthead cards as stimulus and always asked the recency question in the semi-open form:

"When did you last ..."

coding the replies according to whether or not they were within the publication interval. This does not mean that the readership results reproduced went always undisturbed but contractor effect is not what I am here to talk about today.

As the years went by the economics of publishing changed and the range of magazines with sizeable circulations and readership increased. This meant that the NRS came under increasing pressure to include them and in addition JICNARS became increasingly concerned about the extent to which a publication's readership was affected by its position on the questionnaire. Even though biases due to this effect were reduced by employing 48 different rotations of the basic order, these variations cast doubts on the reliability of our procedure since there was no reason to suppose that an average taken across all these rotations would necessarily be equally fair to all publications. For example we now think that when two or more titles had similar names some people would claim both the first title they came to that looked 'right' and would claim the one that they had actually read when they came to that. This meant the gross readership of similar titles tended to be higher than it ought to be in comparison with ones which were more distinctive.

As a result the time came when JICNARS thought the benefits of continuity were outweighed by the pressures to change with the times. The time of upheaval had come.

Brian Allt and Pym Cornish have explained at previous conferences how the new technique was developed and the methodology which we finally adopted. I should, however, just like to remind

you of the scale of the change. (See last two lines of **Figure 1**).

As can be seen, just about every aspect of the survey had to be changed with the exception of the same design and the research contractor. For good measure JICNARS made one further change. They were rash enough to ask me to act at Technical Consultant in January 1984 at the start of the new survey and I became Director of JICNARS in the following August. Consequently, whilst I claim no credit for all the development work which was done on the survey I have been involved in monitoring the the change and in trying to make sure that the new survey bedded down smoothly.

FIGURE 1
Changes to the NRS

Year	Stimulus	Filter	Questions: Frequency	Recency	Other	Sample weight	Contractor
1956	Single ⌉	3 mnths	None	Indirect	None	16,000⌉	RSL
1957	title	"	"	"	"	16+	"
1958	Masth'd⌋	"	"	"	"	" ⌋	"
1959	"	"	"	"	"	"	"
1960	"	"	"	"	"	"	BMRB
1961	"	"	"	"	"	"	"
1962	"	"	"	"	"	"	"
1963	"	"	"	"	"	"	"
1964	"	"	"	"	"	"	"
1965	"	"	"	"	"	"	"
1966	"	"	Number ⌉	"	"	"	"
1967	"	"	27 pubs⌋	"	"	"	"
1968	"	Freq'ncy	Number ⌉	"	Reading ⌉	30,000 ⌉	RSL
1969	"	"	All pubs⌋	"	Intensity⌋	1,200 pts⌋	"
1970	"	"	"	"	"	15+	"
1971	"	"	"	"	None	"	"
1972	"	"	"	"	"	"	"
1973	"	"	"	"	"	"	"
1974	"	"	"	"	"	1,500 pts	BMRB
1975	"	"	"	"	"	+Adjust	"
1976	"	"	"	"	"	"	"
1977	"	"	"	"	Yesterday	1,512 pts	RSL
1978	"	"	"	"	"	"	"
1979	"	"	"	"	"	"	"
1980	"	"	"	"	"	Month w'ts	"
1981	"	"	"	"	"	28,500	"
1982	"	"	"	"	None	1,728 pts	"
1983	"	"	"	"	"	"	"
1984	Grouped⌉	Last⌉	Verbal	Direct/⌉	Yesterday	"	"
1985	cards ⌋	year⌋	"	indirect⌋	"	"	"

FIRST DECISIONS

Before I joined JICNARS, three important decisions had been made:

(1) That there would be no overlap between the new methodology and the old, ie we would not run the old survey in parallel with the new for a period.

(2) No results would be published unless they had been approved by an independent consultant appointed by the Press Research Council (a body which co-ordinates the interests of publishers in the National Readership Survey). John Bermingham was selected by the Press Research Council to perform this role of an 'Ombudsman'.

(3) There would be a complete break between the old and the new techniques. JICNARS was particularly concerned that people should not conclude that readership had risen or fallen between 1983 and 1984.

The first of these decisions, not to have an overlap, represents a departure from textbook theory. Probably the major reasons for making this decision were those of cost and the problems that an overlap would have caused for the field force. Interviewers and supervisors find it difficult enough to change from one interview method to another without having to try to operate both at the same time. However, jumping ahead, I am sure that if we had had an overlap some publishers who found the new survey results to be disadvantageous would have both attempted to postpone the switch to the new method and sought to persuade advertisers to continue to use results obtained under the original technique.

In most fields of research it is helpful if the same measurement is made in two or more different ways. Comparison between the results both improves understanding and provides an indication of the extent of measurement error. In media research confidence is best maintained, if, at any one time,

only one estimate of any given variable is generally available. This does not mean that more than one estimate may not be produced but where this happens there must be general and immutable agreement on how the results should be combined. For example, it is well known that rotation effects occurred under the old NRS but it was generally agreed that the correct readership estimate for any single publication was the average across the different rotations. A publisher who claimed that his readership should be calculated on the basis of the most favourable rotation would receive short shrift.

The decision to employ an Ombudsman helped both to secure general agreement to the change in the research methodology and to gain agreement both for the results to be published and for them to be generally accepted. Part of the reason for this is that John Bermingham is such a well respected figure in the media research world and that he was seen to discharge his task with diligence and authority.

The decision that publishers should not claim readership gains or losses by comparing EML results with those for earlier years, was obviously wise. Changes over time are hard enough to measure even when the same methodology is employed. I think this also helped to gain acceptance of the final results.

CARD EXPERIMENTS

An early decision, which in retrospect proved to have been particularly helpful, was to employ what I call on-line experimentation to test whether readership estimates were affected by the way in which titles were allocated to cards.

When the questionnaire was published a number of people complained about the allocation on which we had decided. In many cases cards virtually selected themselves, eg there were five

publications concerned with fishing and the decision to place them all on one card was uncontroversial. On the other hand some publication groups contained more titles than can be conveniently placed on a single card, for example there are 14 publications on the Survey concerned with cars and motoring; and other titles are unique.

I think part of the reason why we received complaints that a title did not 'belong' on a certain card was due to the mistaken belief that somehow or other JICNARS was implying that it would be more likely to compete for space on a media schedule with these titles rather than with other titles on different cards. Naturally this was not our view. Cards are simply aids to help respondents to distinguish between titles. They have no implications for media planning and our published reports do not present results for titles in card order.

Over and above this response however, there was the belief that a title would obtain lower readership estimates if it was on a card to which it did not belong. This might well have been true in an extreme case, eg if we had added to the five titles concerned with fishing a sixth concerned with some quite different topic, some people might have missed the extra title on the grounds that they were 'not interested in fishing'.

Furthermore, some publishers were anxious to appear on cards containing the programme publications on the grounds that these cards would be particularly likely to be selected in the first stage of the interview when respondents are asked to sort out the cards containing titles they have seen in the last year. As a result more people would be asked detailed questions about their readership of the titles on these cards so other smaller titles would in effect gain readership by riding on the coat tails of the programme publications.

In order to resolve such controversies

I was asked to design experiments in which a limited number of titles would be switched between cards to see if their readership would be affected. These experiments were different from the original EML experiment because they would be conducted on the survey while it was in operation.

When I came to examine the titles which could possibly be switched, it became apparent that most of them had readerships of 5% or less. Even if we supposed that card effects were powerful enough to affect readership estimates by 15%, we would not be able to detect a difference for an individual title unless we ran the experiment for a very long time.

I therefore decided in consultation with the Technical Sub-Committee of JICNARS, to test general hypotheses using several titles for each hypothesis rather than the effects on individual titles. The hypotheses we decided to test were:

(1) **Card selection effect** This is the effect referred to above that it would pay to be on a card with another publication that a lot of other people had read in the last year.

(2) **Within card duplication** that the duplication between two titles would vary according to whether they were on the same or different cards.

(3) **Categorisation errors** that where a publication could be placed on two or more cards but one of the cards appeared to be more 'suitable' its readership would be affected if it was placed on the other card.

(4) **Card length,** ie readership estimates for publications on long cards would be different from those of publications on short cards.

We therefore planned between Quarters One and Two to swap four pairs of titles between cards and to move two titles from one card to another. For each hypothesis we divided the cards or

titles affected into two groups in such a way that if the hypothesis was valid we would expect readership of the titles in the two groups to move in opposite directions after the change was made. (We had already checked wherever possible to make sure that the titles were unlikely to be affected by seasonal variations.) Our preliminary estimate of the sensitivity of the tests was that we would be able to reject the theory that there were card effects which affected readership by 15% or more, providing overall the results for the first group of titles in Quarter One plus those of the second group of titles in Quarter Two came within 10% of those for the first group of titles in Quarter Two plus the second group of titles in Quarter One. We also estimated that the probability of differences greater than this occurring by chance when there were no card effects ought to be less than 10%.

The following table showing the results for card length illustrates the methodology.

TABLE 1
Card length experiment results

Common titles on cards which between Quarters One and Two were:	Gross Q.1	AIR % Q.2	Total short/ long
Shortened (Group one)	16.02 (long)	16.57 (short)	35.36 (short)
Lengthened (Group two)	18.79 (short)	16.70 (long)	32.72 (long)
Effect of shortening card (35.36/32.72)			1.08

It will be seen from the above that card length did appear to have a slight effect. Careful analysis was required to determine whether or not this was statistically significant but when the appropriate tests were made we concluded that there was an effect.

Similarly analysis showed identical values for card categorisation so we concluded here that within the reasonable limits for allocating titles to cards which were maintained by JICNARS there was no evidence of a card categorisation effect.

On duplication, we concluded that duplication between pairs of titles on the same card tended to be about 8% higher than those of the same pairs if they were on different cards. It is worth noting that, in order to establish this, because the number of people that read both members of a pair of titles tends to be small, we had to look at the combined results for 58 pairs of titles.

Finally we had one surprise. Readership of publications tended to *fall* rather than increase if they were placed on a card containing the programme publications which had high 'read in the last year' figures. Fortunately we had been cautious and decided at the start of our experiment that we would apply two rather than one tailed significance tests so we concluded that the card selection effect which some publishers had thought offered a potential benefit was, in fact, a title dominance effect, ie the programme publications dominated their card and suppressed the readership of other publications.

CHECKING EML RESULTS

Because we did not know whether or not the readership figures finally obtained would prove to be publishable, it was decided that it was of the utmost importance to keep all figures confidential even from JICNARS Technical Sub-Committee. A very small working party under the Chairmanship of Brian Allt was therefore set up to monitor the figures which were of course also seen by John Bermingham in his capacity as Ombudsman.

To help us in this work, we examined past readership trends under the old NRS quarter by quarter and projected the figures forward to help us with our comparisons. In most cases seasonality and trends were small so that figures for the previous quarter or six months provided the best standard for comparison but in a few cases adjustments had to be made.

Criteria for checking the results were established. To some extent these followed the lines already employed in the EML experiment. (Allt, 1983)

The criteria we set can be summarised as follows:

(1) **Publication AIR** The readership of each individual publication should be sufficiently close to what would be expected bearing in mind our knowledge of the old NRS's deficiencies.

(2) **Sample profiles** We were concerned that the new method might be better or worse suited to some respondents and interviewing situations than the old one causing variations in the sample profile.

(3) **Gross AIR** We decided to check gross as well as individual publication AIRs both because these were more sensitive measures and because they would enable us to report results to JICNARS and PRC Committees without revealing data for individual publications.

(4) **Frequency distributions** We were concerned that people might be reluctant to claim that they had read more than a few publications on each card. We therefore resolved to examine the frequency distributions for the publications on a card in order to verify that these followed the sort of pattern one might expect.

(5) **Rotation effects** It will be recalled that one of the problems which exercised us under the old NRS was the high level of rotation effects. One of the criteria which we set ourselves

therefore was that rotation effects using the new method should be less severe than those under the old one.

(6) **Filter question and probability of reading** These questions had changed so we would expect the results to differ. Nonetheless we wanted to reassure ourselves that the new results seemed 'reasonable'.

(7) **Special interest questions** These had not been changed. On the other hand it sometimes happens that changes to preceding questions can affect the answers to later ones. Consequently we decided that the results for these also required checking.

(8) **New titles** Obviously here there was little that could be done but we did manage to verify that readers per copy levels were reasonable.

In addition it may be recalled that the original EML experiment gave abnormal results for Sunday supplements. This effect only appeared for the three supplements belonging to the *News of the World*, *Sunday Express* and *Mail on Sunday*. It was attributed to the fact that these supplements appeared on different cards from the parent newspapers coupled with the fact that in two of the three cases their names did not associate them with the parent paper.* We did not expect the problem to continue in the main survey since this time the supplements would appear on the same cards as the parent paper, but, as an additional precaution, respondents were shown at the end of the interview, a card with photographs of the different colour supplements on it and asked to say which, if any, they had 'read or looked at for at least two minutes in the past week'. (Respondents were of course told that we were not interested only in the particular issues shown on the card.)

---

* eg The supplement to the *News of the World* is called *Sunday*.

Naturally the EML Committee monitored results anxiously as they came in. We were encouraged to find at an early stage that the rotation effects were, as we had hoped, smaller than those which we used to find with the old NRS. Early results for individual publications and groups of publications were on the whole also encouraging although here there were problems about making comparisons not only because of sample variation but also because of lost issues. For example, Monday newspapers did not appear on the 1st January 1984.

A further factor complicating comparison was that the response rate was slightly down. We attributed this both to the fact that initially the interview was longer since interviewers were unfamiliar with the procedure and that where respondents did not invite the interviewer into their homes interviewers might be wary of administering the card sorting technique. In addition, during January, the weather was particularly severe.

Our check on sample profiles in the first quarter showed that the sample was now rather more 'up market', eg the ABC1 proportion was 41.3% in the first quarter of 1984, compared with 39.3% in 1983.* We tested the effect of reweighting the sample and found that the readership of a publication with a very marked social class profile might have been affected by about half a percentage point. We therefore resolved to monitor the situation to determine if reweighting was necessary. In the event, we found that this difference corrected itself in later quarters so the final distortions were too small to require reweighting although a note was inserted in the report.

---

* There was also an increase in the proportion of Es in the sample. This was due to better briefing of interviewers in methods for classifying the unemployed.

The first decision the Technical Sub-Committee had to make was whether or not interviewing should be continued beyond the first six months, ie were the results sufficiently encouraging or should we cut our losses and go back to using the old NRS as quickly as possible?

Our analysis of the situation was encouraging. Apart from the slight discrepancy in the sample profile referred to above, order effects in the first quarter for each publication type were negligible compared with the sizeable values found under the old NRS.

TABLE 2
Order effects

	Gross AIRs 'Early'/'Late'	
Publication type:	NRS Q.1 1983	EML Q.1 1984
Dailies	1.00	1.01
Sundays (including supplements)	.98	.98
Weeklies	1.15	1.00
Monthlies	1.32	1.02

Besides the early/late order effect, EML gives the opportunity of other types of order effect:

Card layout ie the position of the titles on the card

Position on a page Each page of the questionnaire is reversed. This proved to be important where similar titles were spread over two or more cards, eg for motoring publications. In these circumstances the card appearing first might obtain slightly higher readership.

Prompt order It will be recalled that under EML respondents were asked to say

which of the titles on the cards they
have selected as read in the last year
have been read 'yesterday' and which
have been read in the last seven days.
They are then asked for each remaining
title when they last read or looked at
a copy of it. These questions are
asked, about the titles claimed as
having been read in the last year, in
the order in which they are printed on
the questionnaire. This order could
also have an effect on readership.

In 1984 it was not possible with the
four rotations used to distinguish
effects from the last three factors
separately, but taken together they did
not appear to be serious. At the time
we had expected that the main effect
would be that of card layout. We only
found seven significant differences
between these two sets of factors and
of course with the number of
publications appearing in the survey,
this sort of number was entirely to be
expected at the 5% level. Moreover on
average when a publication was switched
from the top left or centre position on
a card to the bottom right position,
there was no effect on Average Issue
Readership although the 'read in the
last year' figure was about 3% higher.
Our conclusion was that, apart from the
situation where confusable titles
appeared on different cards, card
layout, page position and prompt order
did not affect the result signifi-
cantly.

Continuing our checks we found that
Average Issue Readerships for different
types of publication appeared, at a
gross level, to be similar. (Table 3)

We were particularly encouraged to find
that the overall level for common
titles had remained at the old NRS
level since some sceptics had suggested
that the longer list of publications
covered would necessarily mean a
reduction in readership of the common
titles.

Of course within the above list some
titles gained readership and some lost.
A particularly interesting group was

TABLE 3
Gross AIR comparisons (between common
titles)

Type of publication:	NRS Q.1 1983	Q.4 1983	EML Q.1 1984
Newspapers (including Sunday supplements and after adjusting for non-publication on 1st January 1984)	303	300	306
Women's magazines (per- centaged on women)	244	236	239
All other magazines	140	131	138

that of men's monthly 'skin'
magazines.* The EML experimental work
had suggested that readership of these
might have been underestimated under
the old NRS because some men were shy
of claiming readership for them; but
that this shyness would be overcome by
boldly presenting them all on one card.
This indeed proved to be the case.

Finally the check question on Sunday
supplements also produced encouraging
results. (Table 4)

These results were much better than
those found in the 1983 experiment when
the ratio for popular Sunday
supplements was only .77.

The special question on Sunday
supplements added at the end of the
interview also gave encouraging
results. All but between 2.4% and 6.7%
of respondents gave the same answer to
each of the two questions. Moreover
those who gave different answers were
evenly divided between those switching
from a negative claim to a positive one

* ie magazines such as Playboy, which
might be described as soft pornography
(Ed.)

TABLE 4
The ratio of supplement readership to
that of the parent Sunday

	NRS		EML
Sunday	Q.1	Q.4	Q.1
supplements of:	1983	1983	1984
Populars (News of the World Sunday Express, Mail on Sunday)	.94	.93	.92
Qualities (Sunday Times, Observer, Sunday Telegraph)	1.08	1.06	1.04
All six Sundays	.99	.97	.95

and those switching in the opposite
direction, so that the two different
questioning methods gave similar esti-
mates for Sunday supplement readership.

Faced with this evidence, the Technical
Sub-Committee recommended to the main
Committee that fieldwork for the Survey
should be continued.

PUBLICATION PLANS

We next started to consider how the
results should be published. We
appreciated that people would be
anxious to see as soon as possible how
individual publications fared under the
new technique. JICNARS' normal form is
to publish twice a year, each time
covering the preceding 12 months on a
moving average basis. In addition
bulletins are issued at quarterly
intervals. These also show 12-month
moving averages. Computer tapes are
also made available for each quarter so
that subscribers can carry out their
own analyses.

The decision that the new survey
represented a break in the series meant
that we could not make use of the 1983
data obtained under the old NRS to

produce the 12-month moving averages
which we had previously employed. On
the other hand, we appreciated that
people would be anxious to see a report
as soon as possible. We therefore
decided that whilst it would not be
prudent to release data for a single
quarter, a report should be prepared
covering six-months figures for the
January-June period. Whilst this was a
departure from JICNARS' previous
publication practice,* JICNARS does
permit use of six-month data by
individual publishers and many users
use six-monthly data for special
analyses.

I should like to say that I think that
users are too prone to base analyses on
only six months' data. The practice
appears to have originated when
computer time was more expensive and
there was a noticeable difference in
the cost of analysing 12 as opposed to
six months' data. Some users are under
the impression that readership patterns
change rapidly. My conclusion from
analysing past data to assist in
checking the results for EML is that,
with the exception of new publications,
it is rare for dramatic changes in
readership to take place over a six
month period, whilst results can easily
be distorted both by seasonality and
sampling error. A better way of using
the data is to analyse at least for a
year if not two years and, if
necessary, to apply seasonal and trend
corrections.

I would therefore hope that the fact
that JICNARS itself published one
report on six months' data will not be
taken as a precedent. From now on we
will be publishing reports based upon
12 months as we did under the old
regime.

* Following the change in the filter
question in 1968 a half-year report was
also published. The sample size for
the report was the same as in previous
annual reports since the sample size
had doubled.

In planning the six-monthly report we had to take into account the fact that the sample size was reduced. We considered whether or not we should amalgamate some bases but decided that since the smallest unweighted base used in the report would still be 165 this was adequate and it would be better if people did not have to contend with a fresh layout as well as new data.

We also had to consider which publications should be included. Our report starts with a number of summary tables showing readerships for all adults, men, women and housewives and where an ABC figure is available, circulation and readers per copy. After these summary tables the main tables analyse readership in various ways. We decided that since the bases would tend to be larger for these summary tables, we would show readerships in them for any publication with an AIR equivalent to 100 unweighted readers. Ignoring design factor 95% confidence limits for the smallest publication would be roughly $\pm$ 20%. All national titles covered by the survey were listed in these tables even if readership figures could not be shown, since it was felt that some media planners used these tables as a check list.

All the titles previously on the survey met the 100 unweighted readers standard and were shown throughout the report; but in the remaining tables, publications new to the survey were only included where their readerships were estimated to be 400,000 or more. Data for all publications whose readership was recorded in the summary tables were made available on the post-survey information tapes.*

Of course in the long run the extra titles meant that the size of the report had to be increased (anyone planning on extending their media list should remember that duplication tables increase according to the square of the number of titles), but we were fortunate that the extra titles could be squeezed into the six-monthly report

without increasing the number of tables.**

PRE-PUBLICATION CHECKS

The Working Party completed its analysis in August 1984 and a further Progress Report was prepared together with an interim summary of observations from John Bermingham which was finalised shortly afterwards. In the main our findings confirmed those in the earlier report but by now it had become apparent that we had been mistaken in believing that rotation effects under the old NRS necessarily balanced out.

In the UK there are a number of sets of titles all having similar names. The classic pair are *House & Garden* and *Homes & Gardens* but women's weeklies and motoring magazines both contain titles that can easily be confused. Under the old NRS rotation effects for these titles were even greater than those for non-confusable titles. This, of course, is not surprising. What we had not realised was that when the titles were presented in serial order, the person who had read the second title would tend to claim the first one and then, when the second one was

---

* When we came to produce the annual report the larger sample enabled us to modify these requirements slightly. The 100 unweighted reader standard was reduced to 90, not so much on statistical grounds but because a number of titles worked out at just below the 100 level and it seemed pedantic to exclude them. The 400,000 reader standard for new titles in the main survey was relaxed to 200,000 since the sample size was effectively doubled.

** In the 12-monthly report the extra titles could be accommodated since this report typically consists of two volumes. Previously one of these was thick and one thin but in the 1984 report both were thick.

reached recognise and claim that one as well. In other words people who had read one of a pair of comparable titles were more likely to claim both members of the pair than neither of them. Consequently when we came to analyse our results under EML we found that for these confusable titles the readership levels which we were getting were closer to those obtained under the old NRS when the title came second than when it came first.

John Bermingham's final report included a masterly analysis of rotation effects under the old NRS system. By the time these two reports had been prepared we felt that we had learnt not only a great deal about our new technique but also about the old one as well.

Both this and our own checks showed a number of instances where readerships differed from projections based on the 1983 survey. Most of these could be attributed to improvements in the research method such as the reduction in title confusion and the improvement in the readership figures for men's 'skin' magazines. In addition there were a few cases where we felt that the difference in the results might be due to misapplication of the technique.

The first example of this is the publications which had appeared on the same cards as the programme magazines. Here, not only were there discrepancies from the 1983 level but also we could show that changes in readership in the expected direction took place when a publication was added to or removed from the card.

Beside this there were two titles whose figures might have been affected by the way they looked on the typescript cards. These were a title known as 19 and another often referred to as Slimmer Magazine but whose full name is *Slimmer Silhouette* with the word Silhouette printed in very small letters on the side of the L in Slimmer. In the one case we thought it possible that the number had not been recognised as indicating the title of

the magazine whilst in the other case we felt it possible that some readers of the magazine might not have recognised its full title *Slimmer Silhouette*. We decided that it would be best to publish the results for all these magazines but to annotate them so that readers would be aware that they might have been affected and that appropriate corrective action was being taken.

PUBLICATION

Once agreement to publish had been obtained, we went through the normal publication procedure but on the day of publication held a Press Conference and issued a Press Release. The main purpose of this was to emphasise that the new figures should not be compared with those for 1983 in such a way as to suggest that readership of any individual publication had increased or decreased. We considered it most important that there should be complete understanding that the continuity of data had been broken by the new survey and took advertisements in the Trade Press both to announce publication of the new report and to emphasise this fact. At the Press Conference we also explained the nature of the new report and the fact that it covered 35 new titles in the summary tables and 20 new ones in the main tables.

Following the Press Conference, the Trade Press, which always finds a row more newsworthy than an achievement, ran a number of stories about publishers' complaints about their figures. On the whole I think that JICNARS came through this episode quite successfully. Agency reaction to the Survey continued to be good and the majority of publishers recognised that the Survey represented a substantial improvement in accuracy from the old one and that those cases where readership differed from former levels generally reflected the removal of inadequacies in the old technique rather than faults in the new one. From discussions with agencies my

impression is that those publishers who complained most loudly lost both respect and revenue as a result. Their complaints communicated the fact that estimated readerships for their publications were smaller than they had been in previous years more widely than did the JICNARS report.

From an agency as opposed to a publisher's standpoint, the differences in readership levels were not great enough to affect advertising performance. However no competent media buyer will miss the opportunity of obtaining a reduction in an advertising rate once it is presented to him. Even if the agency is convinced by the publisher that the figures are erroneous, clients if they read in the Trade Press a story that a publisher is complaining that his readership figures are lower will want to know why his agency is paying a higher cost per thousand.

WORKSHOP

Following publication of the report, we continued with our analyses of the card experiment results and as a result of these decided that since card length appeared to have more influence than card categorisation, we should make more efforts to standardise the length of the cards to five or six titles even though this meant that some of the cards appeared to be less homogeneous. We also decided to create a special card for the programme publications plus the *Listener, BBC Wild Life* and another title which is not intended to be reported.

By this stage, we had carried out analyses of some of the additional questions asked in the Survey. These included more detailed questions about magazines read 'yesterday'. We were also aware that quite apart from the Average Issue Readership estimates the change in the frequency of reading questions and in the initial filter had affected the cumulative reading estimates. In addition we thought that

there was insufficient awareness that different computer bureaux applied different models to our data and thus produced different schedule evaluations.

We therefore decided to hold a Workshop for JICNARS users to communicate these points, to explain our plans for 1985 in terms of the questionnaire, the revision to the list of publications to be covered in the Survey, and our thoughts about those parts of the questionnaire which are concerned with 'special interests' and 'other media'.

The Workshop was extremely well attended with 174 paying delegates and was I think seen as being highly successful. Thanks for this are due to the Chairmanship of Peter Todd and excellent papers from Pym Cornish and Erhard Meier, who demonstrated and explained the interviewing technique with such clarity that people already see it as an old friend rather than a brash newcomer; Brian Allt who described our knowledge to date of card effects and put over the point very forcefully that our philosophy would be to 'alter and improve and repair our house while living in it'; John Bermingham who described his role as an Ombudsman and explained how much more stable the new survey was in terms of rotation effects than the old one; Alan Smith who communicated the results from the 'yesterday reading' questions and explained how these could be used to study how different types of magazines are read; Hugh Holker who described the new publications list; Michael Ryan who covered the special interest questions, and Dick Dodson who performed a double role in covering both cumulative reading estimates and the 'other media' questions.

FURTHER WORK

Since that Workshop, we have continued with Brian Allt's precept to repair and improve our house while living in it. By now the repairs are less major, more perhaps in the nature of fine tuning or

minor adjustments. One of the problems we had to face was that of the size of the report. I have already indicated that the extra publications meant a considerable increase in the report size and in the hope of once again making the document more manageable we have commissioned a typographer who has suggested to us a new layout which will we hope enable more data to be presented in a given amount of space without any loss in clarity.

We have also undertaken tests to determine whether people are likely to give different answers to typescript cards than to cards which represented publications either by means of stylised front pages illustrating the mastheads or pictures of publications arranged in a fan to demonstrate that we are not interested in the one particular issue illustrated. These tests have been conducted by taking one group of publications and showing respondents a card in one of the forms described at the end of the interview and repeating the Average Issue Readership question.

The first such check was conducted amongst women about women's weeklies. The EML results for these magazines had been particularly controversial since their readership levels had proved to be rather lower than they had been in 1983. Part of this reduction in readership level could be attributed to the fact that they were covered on the longer cards. But this only removed a part of the deficiency so we wanted to confirm our belief that the remainder was due to the elimination of title confusion rather than to an inability on the part of respondents to recognise the typescript cards.

Erhard Meier describes this test in greater detail in the next paper but, briefly, I can say that the results showed that the use of typescript cards did not affect the results to any detectable extent. They showed that in 95% of cases respondents gave the same answers to the second question as they had done to the standard one. Moreover

in the small proportion of cases where Average Issue Readership of an extra title was claimed, this was usually (75% of cases) one which had previously been claimed as having been read in the last year. Furthermore there were few switches between pairs of titles; rather people claimed Average Issue Readership for one or both titles where they had not claimed either at the standard question or vice versa.

In addition where there were switches these tended to be in both directions. Changes such as these are often found when people are asked what is effectively the same question twice. The evidence obtained so far does not justify our changing to an alternative form of card which would make the standardised presentation of different titles extremely difficult if not impossible. Nonetheless, a number of publishers still think the mastheads must be better than typescript and we are continuing the tests.

Another topic which has exercised us has been the effect of Sunday reading. We do not interview on a Sunday. On Mondays we consistently treat Saturday as 'yesterday' for all publications except for Sunday newspapers. It was put to us that someone who read a magazine on a Sunday might not claim this as reading in the last seven days since they would be confused by being asked about the previous Saturday. Analysis of reading claims for the last seven days by day of week suggests that this is not the case but we are still left with two other problems related to this absence of Sunday interviews.

The first of these problems is the possibility that if a Saturday newspaper is read on a Sunday and not on a Saturday its readership would be missed. On the other hand, of course, if we did interview on Sundays we would have to be careful in the case of Monday interviews not to pick up replicated reading of the Saturday newspaper.

The other aspect is that since we now

code the whole of our extended recency scale, ie for each publication we provide on the tapes data on whether it was read yesterday, in the last seven days, in the last month, in the last three months, and in the last year, it is possible to derive for each publication an estimate of the average number of reading days per reader. This estimate could well provide an additional form of media currency but insofar as Sunday reading is omitted and differs from the Monday to Saturday average, estimates of reading days will be affected. We are therefore planning to continue work in this area.

CONCLUSIONS

In conclusion I would say that our experience in introducing EML has been that the new technique, with certain entirely explicable exceptions, produces results which are very similar to those obtained under the old method. The fact that the Recent Reading technique has proved to be robust to fairly drastic changes in its method of application must give one confidence that it does in fact measure something that approximates to Average Issue Readership.

I hope that this paper will show that it is possible to have a revolution when it is really necessary and end up with an organisation which is more soundly based than before.

In about six months time we would hope that the Survey will have settled down and the number of changes in the methodology that we have to introduce to meet changing circumstances or new knowledge, can be kept to a minimum so that people can become used to the method and the results that it produces. Nonetheless we will continue to monitor and, where necessary, modify in the hopes of postponing the next revolution for as long as possible.

REFERENCES

Allt, B (1983) 'The extended media list experiment'. JICNARS.

APPENDIX

The results of investigations into card effects

I have been asked by the Programme Committee to summarise my view of the different types of card effect we have investigated to date:

Card length

The AIR of a publication can be affected slightly by the number of other titles that share its card, ie a card whose length is above average may produce lower readership estimates than one whose length is below average. The average effect produced by the addition or deletion of a title was 6% of AIR but this figure was subject to a wide margin of sampling error.

Title dominance

The two programme magazines appear to dominate their card in such a way that they may adversely affect the readership estimates for certain other titles sharing the same card.

Card categorisation

Apart from this we have not found that a publication obtains a different AIR when it is switched to a card containing different types of publication. Needless to say we have not investigated the effect of placing a publication on a highly unsuitable card.

Within card duplication

Duplicated readership of a pair of titles may be slightly higher when they share the same card than when they are on different cards. The average effect, which is subject to a wide margin of error, was an increase in duplicated, at the expense of solus, readership of approximately 8%.

Within-page order

When confusable titles have to be split between different cards we generally arrange for all the cards to appear on the same page of the questionnaire. analysis of the page rotation shows that the titles on whichever card is presented first score a higher readership figure. The effect is, of course, balanced out by the rotations.

Card order

In addition to the above rotation the pages of the questionnaire themselves and the cards associated with them are also presented in a forward and reverse order. The first and last cards relate to daily and Sunday newspapers. Readership of these is not affected by the rotation but there may still be some effects on magazines. These are smaller than with the old NRS and are still balanced out by the rotations.

Card layout

The question of whether or not a title's position on the card affects its claimed readership is discussed in Erhard Meier's paper.