

**UNITED NATIONS STATISTICAL COMMISSION and  
ECONOMIC COMMISSION FOR EUROPE**

**CONFERENCE OF EUROPEAN STATISTICIANS**

**Work Session on Dissemination of Statistical Commentary**  
(Geneva, Switzerland, 4-5 December 2003)

Topic (i): How to make a story out of statistics. Recruiting and training of storytellers, and the creation of a favourable culture

**HOW TO MAKE A STORY OUT OF STATISTICS: THE WILL AND THE SKILL**

**Invited Paper**

Submitted by Statistics Norway<sup>1</sup>

To put it simply: The question of getting analysis of statistics out to a broader audience is a question of having the **will** and the **skills** needed for:

**Analysis**  
**Popularization**  
**Dissemination**

My focus will mainly be on the first two aspects, as dissemination will be presented in depth later in the workshop. I will put quite a lot of focus on the cultures and traditions in a statistical agency, and the possibility of creating new cultures and traditions, or counter-cultures.

But first a short presentation of Statistics Norway (SN): Analytical work, popularization and dissemination. (Staff, organization, dissemination channels).

If we want to disseminate analytical stories, SN has a number of channels or media for dissemination to the disposition of their employees. We have two periodicals:

- "Samfunnsspeilet" (A mirror of the society), which I am editing. It is a periodical covering statistical analysis of topics concerning living conditions and life style: Demography, health, education, labour, crime etc. 6 issues per year. One issue (no. 4 each year) is devoted to "Social indicators", presenting a dozen articles on the "state of the nation" concerning all the important themes included in the concept of living conditions. This special edition also contains a huge collection of 215 indicators in tables covering the period 1980-200x. This periodical is also open to contributors from outside SN, provided their analyses are based on SN-data.

- "Økonomiske analyser" (Economic analysis). Including "Økonomisk utsyn" (Economic Outlook/Survey"). This is the flagship publication on economical analysis. The target group is defined as rather wide, and some of the articles will reach a wider audience through press conferences and media coverage. But quite a few of the articles will be tough reading for people who are not acquainted to economic jargon and the use of models and symbols. Once a year the publication will be focused on the general economic outlook (also published in English) and this will usually get a broad media coverage.

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- "Statistiske analyser" ("Statistical analysis"). A booklet with popularized analysis of statistics in most fields, but with a focus on social statistics and the surveys on living conditions. Not regularly published.

- "The Statistics Norway magazine" on web. These articles are more in-depth than the regular daily releases, and often given a more popular, almost laid-back style.

-The "Daily release" on web. Short stories, mostly "pure facts". Some of the releases do some storytelling by giving broader perspectives.

- "*This is Norway- What the figure say*" is a popular presentation of statistics about Norwegian society aimed at a wider audience.

- "Sosiale og Økonomiske Studier". ("Social and Economic Studies"). A rather "High brow" series of booklets with a more academical target group.

### **Analytical staff:**

SN is special in the sense that its professional, academic staff of economical analysts consists of close to 100 employees in a total of 910 people employed in SN. In addition we have a number of researchers in the fields of demography and living conditions. This relatively huge staff of economists is explained by some interesting historical incidents:

In 1950, the Ministry of Finance was in search for a new Director General for Statistics Norway. Economist Petter Jacob Bjerve was their favorite, and was the first one to be asked. He waited for some time before he gave his answer, and said yes only under the following conditions: I want to have a full research department in Statistics Norway. Three times the Minister of Finance had to ask him, and Bjerve acted in a stubborn and strategic way: We must have a research department, he insisted. And he got it, and was the DG of SN for 30 years.

In an interview given in 2001, Mr. Bjerve explains his insistence on a research department in this way: "Numbers alone don't tell us much. The numbers need analysis in order to make them tell, tell us something of interest concerning the society surrounding us. And the numbers must never be allowed to take the control over us."

This was the start of a powerful and skilled analytical milieu inside SN, with a strong emphasis on economics. To some extent it also gave a start to a tradition of dissemination, but a dissemination with some inherent problems I think. But time does not allow me to explore this hypothesis any further.

Analysis is also done by other staff at SN. Most of the producers of official statistics now have university degrees. Quite a few of them are eager at doing analysis and storytelling, the organizational problem is often that of finding the time.

Finding the time is also the problem for the people who more or less work full time disseminating analysis. Compared to Statistics Canada, which I know a lot about, we are definitely understaffed, but then who are not? But our editors, journalists, designers etc. are all into the same problem: We must present x issues per year of our periodicals, or a daily release at the web. How do we find time to develop our articles into really exciting storytelling, or to present more analytical storytelling on the web.

### **Analysis, the will:**

As seen in the case of Mr. Bjerve, the will to devote time and people to analysis and storytelling is dependent on a certain courage and stubbornness. I will define some important obstacles:

### **Cultural obstacle: The fear of interfering with politics.**

This is a topic that usually illustrates a strong conflict between statistical agencies. I have told people from agencies in Central and Southern Europe that Statistics Norway regularly will have an opinion on whether the interest rates or the unemployment rate will go up, down or remain stable. I have also told them that we publish articles on topics such as teenage sexual habits, pregnancy and abortion under the title "Sex? Yes, please. Children. No, thank you", or the question of crime rates among immigrants, and they usually just shake their heads.

I think perhaps quite a few of you will think these are examples of going too far in the direction of interfering with politics. And quite a few Norwegians meant that our DG went too far when he suggested that Norway should leave its old currency (Norwegian crowns) and use Euros instead, in order to avoid speculation against our small currency, and also get a lower and more stable interest rate. But staying away from politically "hot" topics and just publishing plain numbers/figures will also have its costs:

What happens if we don't publish any numbers or analysis? What will the public opinion think about crime rates among immigrants if we don't publish anything, or just a few numbers without many comments? We find an overrepresentation, yes, but we can also show that this is partly due to demography and living conditions.

Do we think we are completely neutral as long as we just present plain figures? Do plain figures really exist? I am afraid that such a standpoint will lead us into a naïve positivism. All figures need an interpretation and a story in order to be understood. Someone will tell the story connected to our figures, why shouldn't we do it, we who know the figures best.

### **Cultural obstacle: Numbers first - analysis second.**

Of course this is the obvious and natural way of doing it. But we very seldom have discussions where people ask: Do we need any more numbers before we are able to understand those figures that we already have released? I think this will represent a new and very unusual way of thinking to many statisticians and their superiors.

And I think it is a very useful way of thinking. It is often the analysis that tells you a) the quality (reliability and validity) of the data you are collecting and processing and b) which new data that would be most useful to collect and analyze.

## **Analysis, the skill:**

### **Recruiting people with academic skills**

To do good analysis requires some analytical training, I think, though I am often surprised by how well some of our trained non-academic staff perform in this field. So it is of course not surprising that the whole idea of storytelling and analysis turns up now that statistical agencies to a high degree will recruit most of their staff among professionals with University degrees.

### **But how do we keep them?**

And how to keep them for more than two years? Today the labour market is not too good for professionals in social science and IT-personnel, and that is the best labour market there is for Statistics Norway. But this situation will not last for ever, and we will be back to the late part of the 1990s when quite a few of our young and aspiring professionals left us after having visited us for two-three years. Which is exactly when we start to really make use of them.

Our young professional colleagues want to make a career, and just producing numbers and Daily releases is not enough. To me it is obvious that giving people the possibility to do analysis, and then storytelling, is the very best way to keep them. But this again requires a leadership and an organization that really takes this point into consideration. It is far too often so that the numbers come first, and that highly skilled professionals must use a lot of time on time-consuming and boring IT-jobs.

**And retrain them?**

I have argued for the need of an academic background. But after having employed such professionals there is often a need for de-academising their way of writing and presenting statistics. The Universities teach the students how to present themselves to the wrong target-group in the wrong language when compared to our needs. Another problem is that of specialization (I will come back to this topic later).

**Popularization, the will:**

So analysis must be the start of storytelling, but analysis is not enough. Analysis must be popularized in order to represent good storytelling. And again we run into a number of obstacles:

**Cultural enemy: Pedantic culture: "Shouldn't we add one more footnote?"**

There is a time and place for everything. There is always a lot to be explained in statistics: Perhaps a slight difference in the way we collect data between 1997 and 1998, a questionnaire might also be slightly changed. Some such changes have significant implications for our data, some have not. It is our task to try to single out what is important and what is of minor importance or has no effect. The place for such discussions is the dull reports in grey print, not our flagship or the daily releases on web. When we tell a story to a larger audience, we must be sure that we ourselves trust the story that we tell. If not, we should probably not tell it.

**Cultural enemy: Criticism. "I found three errors in your last article."**

It is a good thing for a statistical agency to have a culture for critique. Our colleagues should get the necessary critique when needed in order to refine or redefine their products. But we must remember

- a) to look for the positive elements first. It is very clever to find errors in the footnotes or in the middle of a huge table, but it is not clever to let these often minor problems overrule the fact that the article in question mostly was really good and of great importance
- b) to decide if the critique is important, or of almost no relevance
- c) to deliver the critique in a polite way.
- d) that the person to receive the negative comments might be an insecure subordinate with low self-esteem but a high potential in delivering nice articles in the future. Articles or text should be treated as people's babies: You don't point at them and make a joke out of their strange nose or large ears, even if they have so.

**Popularization, the skill:**

People are often recruited because of their statistical and academic skills, we take less interest in their presentational abilities. This points to the need of new, internal training, which again has an impact on the internal culture.

At SN we have made some attempts at building a favourable culture: Especially by focusing internal training of agents of the new culture. One example is: "The school of writing". We start with two days telling our colleagues about the "Joy of writing". We have an external person taking a group of our people for two days to a hotel outside Oslo, and make them write things they otherwise wouldn't think of doing.

This is just one example of one of the courses that will be presented to our employees as a result of a new and more systematic training in dissemination at SN. The training-system aims at assuring a better quality on our storytelling, analysis and releases, but also to make some of our talented so interested in storytelling that they make up the future "Talking Heads" of SN, or at least "Writing Heads".

### **Cultural obstacle: High degree of specialization.**

Like in so many other institutions in our academic world, employees in statistical agencies are also getting more and more specialized. A specialist in, let's say health statistics, is often recruited from University on the basis of his or hers interest for this topic already during their life as students. There is nothing wrong about that when our focus is on producing highly specialized statistics for a qualified audience. But on the other hand, such highly qualified personnel will thus get a very long professional experience in just dealing with other highly qualified persons in the same rather narrow field. This will often have an impact on the person's style of writing.

But it is also hard to present a good story if you only know your own tiny part of it. We must train people in broadening their view and analysis, and this is also the case with senior statisticians who often do not have the same high level of academic skills, but who instead have worked for some 20-30-40 years in a rather limited field of statistics.

### **Dissemination, the will.**

I will not go to much into this, leaving the topic to others. But one important obstacle must be mentioned:

#### **Cultural obstacle: The longing for anonymity.**

I have been working as a journalist in a professional staff of mostly young men aged 30-40. I have also been employed at the university of Oslo at an institute that is perceived as politically radical and controversial, and who has a number of well-known left-wingers on their payroll. The contrast to Statistics Norway when it comes to the range of personalities presented is striking. At the university one of my colleagues had to change her dentist in order not to have to overhear a long speech about the foolish ideas presented by the professors at her institute while sitting helpless with her mouth filled with those things that you get in your mouth at the dentist.

When you tell your dentist or someone at a party that you work in a statistical agency, you get the other feedback: Very solid, very boring and rather anonymous. Everybody knows our DG, Svein Longva. A few other faces are known. But more than 900 of our 915 colleagues remain in anonymity. We have a tradition of SN as presented by one head: The Director General. The rest of us should be anonymous statisticians, delivering our numbers.

I will end my presentation by pointing to some ways of building counter-cultures. Then I will present some important dilemmas in our business, and then end up by presenting how rewarding our business can be:

**Building counter-cultures**, can also be done by:

#### **-Rewarding the brave ones.**

One of our periodicals have set up a prize to the person presenting the best article. A good idea?

#### **-Setting new standards**

I have experienced that if the quality of articles and storytelling starts to improve, this might turn into a positive cycle. A new standard is set, and articles that fall way below this standard will not that easily be delivered.

#### **-Having a management that works as a good example**

This point can not be under-communicated, and I think I will leave it to the excellent presentation of the next speaker.

### **Important dilemmas**

### **Popularization vs. precision**

The problem is that you have to start tearing down cultures of criticism and pedantic attitudes, while maintaining high reliability. I have no other suggestion than to underline that such processes must take time. Statistical agencies have a lot to loose in terms of prestige and perceived reliability. But on the other hand: We have perhaps even more to gain in terms of accessibility, good dissemination and storytelling that enhances our visibility. And visibility is important. If we are not seen as important by our supporters, the money will be harder to get.

### **Quality assurance vs. timeliness**

The problem with Quality assurance is that it is something that you can not argue against. Everybody wants to have data and text with high reliability and validity, but often forget that valid data often will mean data with actuality. Unemployment figures delivered, disseminated and analyzed two years after are of little interest.

### **Journalists, editors or statisticians: Who should be in control?**

I am in the middle of such a discussion today. On the one hand I have a number of dissemination-professionals, myself included, clearly seeing the need for a popularization of "my" periodical. Better titles, ingresses getting more to the point, more triggering subtitles, shorter stories and so on. On the other hand I have some of my most regular and best writers, delivering a significant number of articles with high quality. These articles are often written "con amore", as something extra that they like to do, but really don't have to. Their time should perhaps be spent on something more rewarding academically, but they like the way this periodical gives them an attention that they will not get through the prestigious international periodicals.

They like to publish in "my" journal, but if we do just a little more of fancy rewriting on their articles we risk to loose them, and their colleagues, and a confidence built up over a long time-span.

### **Journalists or statisticians: Who should do the writing?**

The periodical also functions as an important incentive for many of our other professionals. Some are good at storytelling, other require quite a lot of rewriting before their products can be disseminated. And some articles should have been processed even further, but the lack of time and resources...

Why don't we have professional journalists to write the story from scratch? Or should we build a group of professionals with very high qualifications in writing and popularization? We don't. Why? The answers are at least two: First it is very expensive to have such a staff of people dedicated to writing only. And they will require a lot of assistance from the statisticians as well. But second, and most important: We want our professionals to write, based on arguments given above. If we don't have this incentive to offer them, many professionals, and often the best among them, will leave SN after a rather short period of time.

### **The reward in the end**

Employees who analyse their data and tell a story will:

Better understand their data, and therefore:

Take greater interest in their job

And thus remain there for longer

And show their colleagues that analysis is the road to a better work-situation and position

And, best of all: We will get a better and better flow of good analysis, good articles, good storytelling.