**Parallel Session 14: Science in the daily press: a cultural question?**

# QUALITY CRITERIA FOR SCIENCE JOURNALISM: SARS AS A CASE STUDY TO EXAMINE SCIENTIFIC CONTENTS

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## Abstract

Context . Although several attempts to estimate the quality of news have been made, the concept remains ill-defined. To my knowledge, quality criteria for individual pieces of science coverage are still lacking. Here, a few criteria are proposed as an approximation to quality of contents in science journalism.

Purpose . To examine the science contents of the coverage of the SARS epidemic in daily newspapers.

Methodology . Six daily newspapers (*El Universal*, *La Jornada* and *Reforma*, from México; *Le Monde*, from France, *El País*, from Spain, and *The New York Times*, from the U.S.A.) were scanned for their coverage of the onset of the SARS epidemic. Points of information contributing to decision-making processes were recorded, as were the sources (or lack thereof) and argument forming implications.

Results . The quality criteria proposed herein allow the construction of sets of likely decisions by the readers regarding SARS, and of the necessary information points for each decision. On average, only about half of the time was an identifiable source properly quoted. Connections between information points to reproduce arguments were virtually absent in the Mexican coverage.

Conclusion . While they share many of the information points covered by newspapers in Europe and the USA, Mexican dailies limited their coverage to the very mention of this points, often without quoting authorised sources and generally failing to report the reasoning behind the information.

**Key words**: Science journalism, quality criteria, SARS.

## Text

### Introduction

While the opening of spaces for the communication of science in the news appears to follow a growing trend, news products may show a lack of scientific content. But this impression is subjective because the concept of “quality”

remains ill-defined in journalism. Reviews by Meyer & Kim (2003) and Thorson (2003) document attempts to estimate quality of news coverage, while Pertilla & Belt (2002) argue that quality is linked to revenue.

The issue of quality goes to the heart of the question of whether (and indeed how) science in the daily press is a cultural matter. Two clichés serve as springboards: i) science is culture; ii) knowledge is power. Thus, science journalism lies at the juncture of the intellectual and the pragmatic, and hence it is valid to ask the question: science journalism, what for? Indeed, Crúz Mena (2003) has argued that if one social purpose of journalism is to help inform the decision-making processes of readers, then one could estimate the quality of individual pieces of science journalism applying this criterion. For instance, Crúz Mena & Bonfil (2003) were able to construct sets of information points to feed reader's decisions regarding the SARS epidemic, the anthrax attacks and the transgenic contamination of corn in México.

Here I argue that to inform decision-making, science coverage ought to report not just on what may be perceived as facts, but also on the reasoning made by scientists to reach those facts.

Results and discussion

SARS was taken as a case study following the WHO's warning on March 12th. A table of likely decisions and corresponding information points has been reported elsewhere (Crúz Mena, 2003). Here we screened the same sample for arguments presented in the form of connections between information points until a logical conclusion is reached. A thorough presentation of results does not fit in this space, but the following example should illustrate the point:

On March 17th., on its first story on SARS, one Mexican newspaper published a photograph showing a Hong Kong patient and relatives, all wearing protective masks and gloves. The note says nothing about the possible source of infection or the ways it may be transmitted. In the days to come, the wearing of masks will be shown and mentioned several times, but always without discussing the rationale or the scientific basis for such practice.

Two days earlier, one of the foreign newspapers accompanied a very similar photograph with a logical sequence. It informed that WHO had observed that most cases occurred among hospital workers, and thus thought that the illness seemed to spread by respiratory droplets. *Then* the note informed of the shipment of masks and gloves.

Trivial though it may appear, the example shows, right from the start, a difference in coverage philosophy between those who feel satisfied with just printing isolated facts and quotations and those who seek to report on the rationale behind the findings themselves. This difference was to be further observed on subjects such as the causal agent, infection routes, clinical treatments and contention strategies, which are longer to discuss and won't fit in this space.

Conclusion

By failing to report on the reasoning behind scientific claims concerning SARS, the Mexican press left its readers no choice but to take the word of the sources solely on the basis of their status as "experts". The hypothesis that if exposed to accurate reports of the reasoning of these scientists the readers might have been in better position to make decisions concerning SARS seems worthy of further research. Moreover, the reasons which prevented the Mexican press from even attempting this sort of coverage are equally intriguing.

**References**


Cruz Mena, J. & Bonfil, M. (2003). Diagnóstico de contenidos del periodismo de ciencia en la prensa escrita. *XV Encuentro Nacional de Investigadores de la Comunicación*, Puebla, México.

Crúz Mena, J. (2003). Las universidades como fuentes de información científica en crisis sociales: La epidemia de SARS como caso de estudio. *II Reunión Iberoamericana de Comunicación Universitaria*. Veracruz, México. (http://www.uv.mx/oicu/ponencias/ponencia05.htm).

Meyer, P. & Kim, K (2003). Quantifying newspaper quality. *Association for Education in Journalism and Mass Communication*. Kansas City, USA. (http://www.unc.edu/~pmeyer/Quality_Project/quantifying_newspaper_quality.pdf)

Thorson, E. (2003, April) What 35 years of academic research tells us. Retrieved May 9, 2004, from http://www.poynter.org.