

# Pre-press Technology Evolution of the Late and its Effect on the Print Quality

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## **Abstract**

The train of disruptive developments in reproduction technologies, following the halftone photoengraving invention in the end of 19th century, was concentrated within the last forty years. The electronic reproduction of 50-80ies using at first the analogue and then the digital signals processing was later replaced by the computer-based pre-press systems. The latter, in their turn, have undergone during last decade the fast transformation from the closed (vendor proprietary) to the open ones of today. Enabling essential advantages compared to the previous one, coming to every next step was however characterized by certain compromises –in terms of either deterioration in picture quality, or some inconveniences in processing, etc. These compromises were somehow being overcome in the course of periods of development before entering the next phase, but some are still waiting to be solved. The qualitative leaps in the general approach to picture processing in pre-press have also happened within the period discussed. Insufficient facilities for proper control of the print parameters of 60-70ies were replaced by the lack of knowledge in terms of extent and direction of image transformation for providing the optimal quality, while the

control facilities have become practically unlimited. The creative and technical aspect of picture processing once separated from the use of electronic reproduction, nowadays are again mixed in desktop applications.

Considerations of the kind described are important to be taken into account for the pre-press technologies optimal use and development as well as for the training and education methods.

## **Biography**

Jury Kouznetsov obtained Engineer Diploma in Leningrad Electrotechnical Institute in 1964. In 1967-1982 he was a team leader in development of the electronic reproduction systems in Graphic Arts Laboratory at the Institute of Electrical Communication. There he got the Candidate of Sc. degree (1975) and status of a Senior Scientific Worker (1977). He holds over 20 patents, published a number of papers and two books in pre-press imaging. The last one is "Pre-press Picture Processing. Screening" (1998). He is now head of Graphic Arts Technology Department in the St.Petersburg Institute of the Moscow State University of Printing.