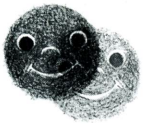
Variations in dot size and shape # 1

Dot gain/reduction	**Dot gain**		By *dot gain* we understand the enlargement of the halftone dot on the press sheet in relationship to the dot on the film. Such an enlargement (sometimes referred to as the spreading of dot fringes) results partly from the process used, the material and the press employed and can thus hardly be influenced by the craftsman, whilst the other part of dot gain can be manipulated by the pressman, particularly in inking.
	Filling in		*Filling in* is the reduction of non-printing areas in the shadows, until they disappear completely. Filling in may also result from slurring or doubling.
	Sharpening		*Sharpening* means a decrease in strength, when halftone dots become smaller than they are on the film. Craftsmen often understand by sharpening a reduction of the dot gain, although the halftone dot on the press sheet continues to be richer or fuller than on the film.
Dot deformation	**Circumferential slurring**		During *slurring*, the shape of a halftone dot is so changed – during printing – by relative motions between printing plate and rubber blanket and/or between rubber blanket and press sheet, that the halftone dot is deformed in that a circular dot may become oval.
	Lateral slurring		Slurring in the printing direction is called *circumferential slur*, a crosswise slurring motion is named lateral slur. If the two kinds of motions occur simultaneously, an oblique slur direction will result.
	Doubling		*Doubling* occurs in offset printing when a second halftone dot appears, in the form of a shadow, usually of smaller size, next to the printed regular dot. Doubling results from the ink on the dot being retransferred by the rubber blanket, out of register.
	Offsetting		*Offsetting* marks on the press sheet are deformations of halftone dots which, after impression, occur as a result of mechanical action. Sometimes the term is also used for the transfer of ink from freshly printed matter to another surface.