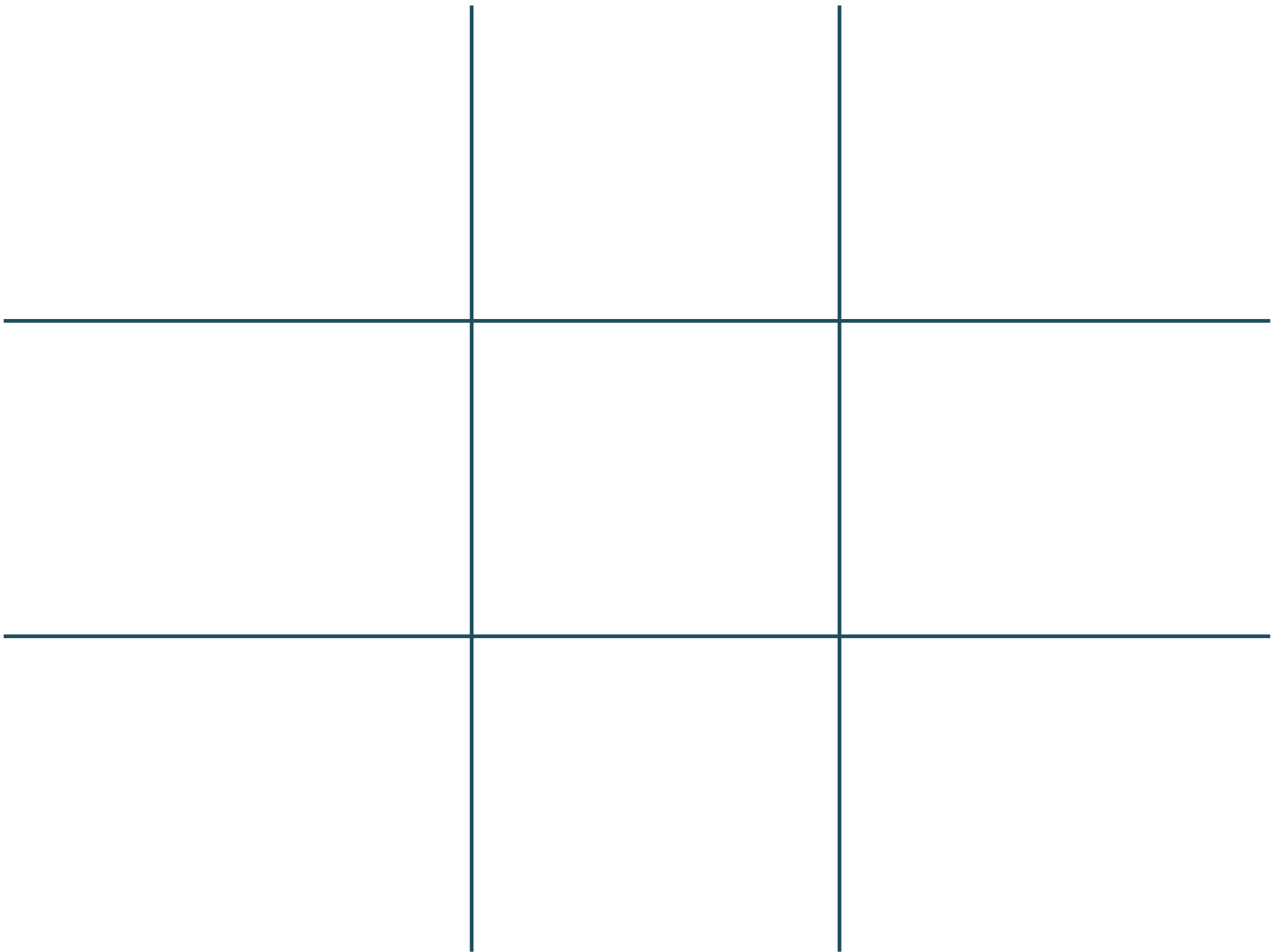
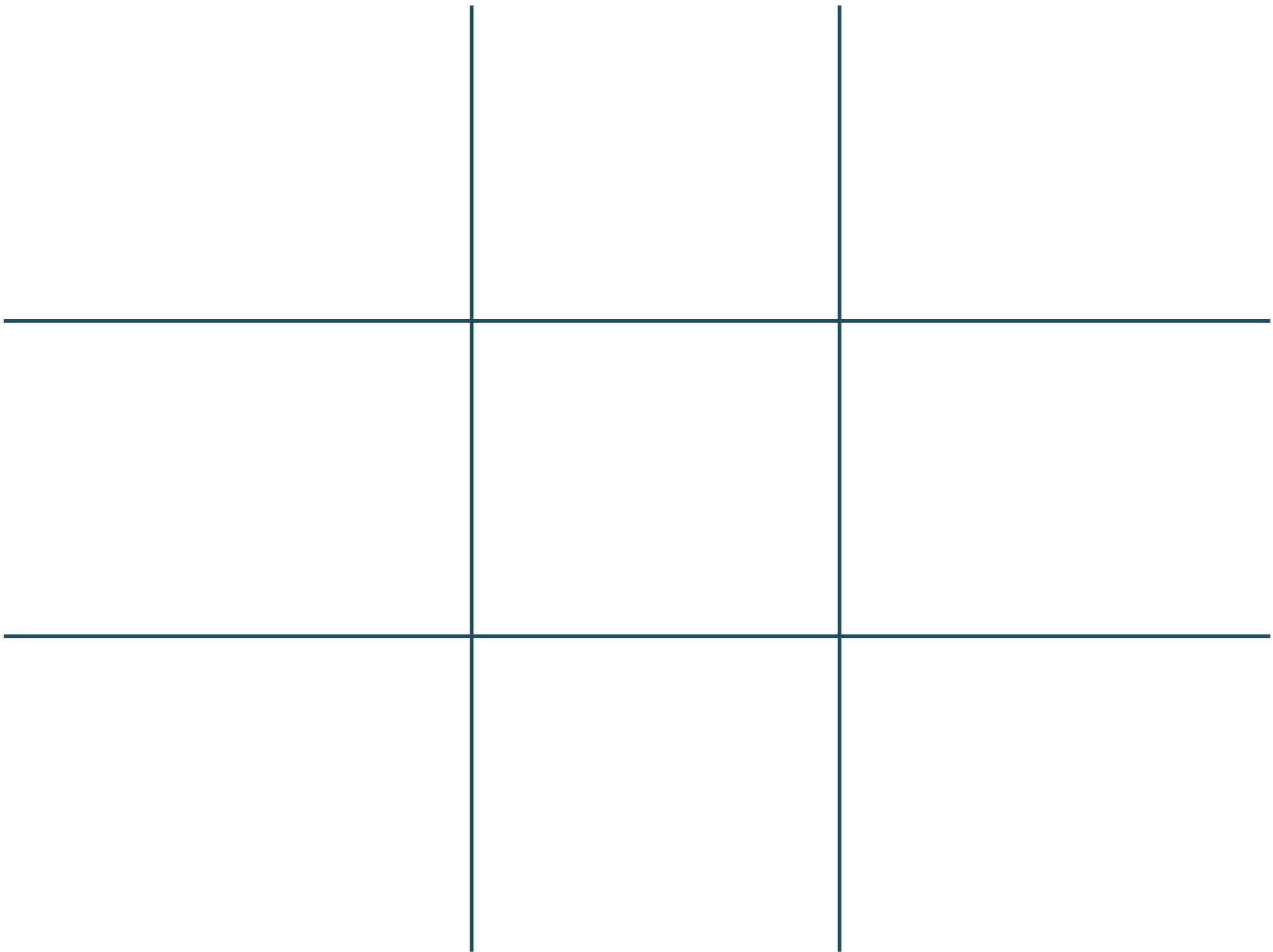
WINKLER AND SMITH





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	Gold Positive	Gold Negative
Test Positive	*A+1*	B
Test Negative	C	D

$$p'_+ = \frac{A + C + 1}{A + B + C + D + 1}$$

$$s'_+ = \frac{A + 1}{A + C + 1}$$

$$t'_+ = t$$

	Gold Positive	Gold Negative
Test Positive	*A*	B+1
Test Negative	C	D

$$p'_- = \frac{A + C}{A + B + C + D + 1}$$

$$s'_- = s$$

$$t'_+ = \frac{D}{B + D + 1}$$

$$\Pr(D \mid +) = f(p'_+, s'_+, t'_+) \Pr(D \mid +, p, s, t) + f(p'_-, s'_-, t'_-) \Pr(\neg D \mid +, p, s, t)$$

$$\Pr(D \mid +, p, s, t) = \frac{ps}{ps + (1 - p)(1 - t)}$$

$$\Pr(\neg D \mid +, p, s, t) = 1 - \Pr(D \mid +, p, s, t)$$

$$f(p, s, t) = f_j(p)\, f_j(s)\, f_j(t)$$

LOGICAL FLAW