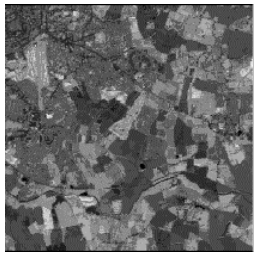
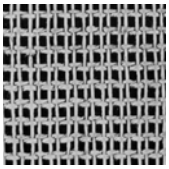


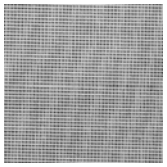
(a) remote-sensed image

(b) classification result

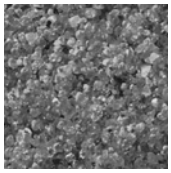
Example Texture Analysis



(a) french canvas detail D20

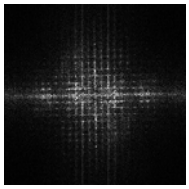


(b) french canvas D21

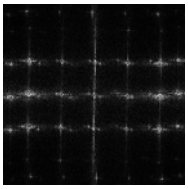


(c) beach sand D29

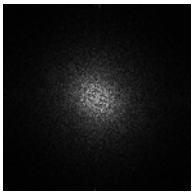
Three Brodatz Textures



(a) French canvas (detail)



(b) French canvas

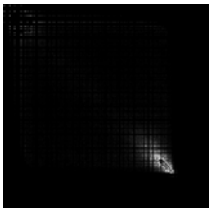


(c) beach sand

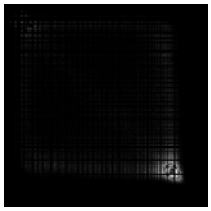
Fourier Transforms of 3 Brodatz Textures

entropy (FD20) = -253.	entropy(FD21) = -196.84	entropy(FD29) = -310.61
inertia(FD20) = 5.55·	inertia(FD21) = $6.86 \cdot 10^5$	inertia(FD29) = $6.38 \cdot 10^5$
energy(FD20) = 5.41	energy(FD21) = 7.49	energy(FD29) = 12.37
(a) french canvas (detail)	**(b)** french canvas	**(c)** beach sand

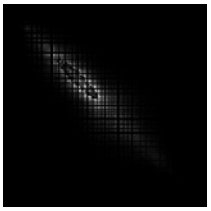
Measures of the Fourier Transforms



(a) french canvas (detail)



(b) french canvas



(c) beach sand

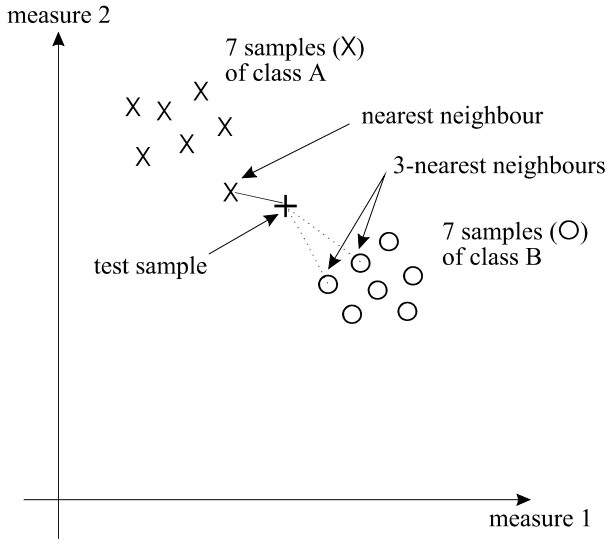
Co-Occurrence Matrices of 3 Brodatz Textures

entropy (CCD20)	entropy (CCD21)	entropy (CCD29)
inertia (CCD20) = 5.166 · 1	inertia (CCD21)	inertia (CCD29)
energy (CCD20) = $5.16 \cdot 10^8$	energy(CCD21)	energy(CCD29)
(a) french canvas (detail)	**(b)** french canvas	**(c)** beach sand

Measures of Co-Occurrence Matrices of the Three Brodatz Textures

$M(NOC1) = 52.$	$M(NOC1) = 178$	$M(NOC1) = 81$
$\bar{m}(NOC1) = 8.75$	$\bar{m}(NOC1) = 11.5$	$\bar{m}(NOC1) = 22.1$
$M(WI1) = 1.50$	$M(WI1) = 1.42$	$M(WI1) = 1.00$
$\bar{m}(WI1) = 0.40$	$\bar{m}(WI1) = 0.35$	$\bar{m}(WI1) = 0.37$
(a) french canvas (detail)	**(b)** french canvas	**(c)** beach sand

Four of the SGF Measures of 3 Brodatz Textures



Feature Space and Classification