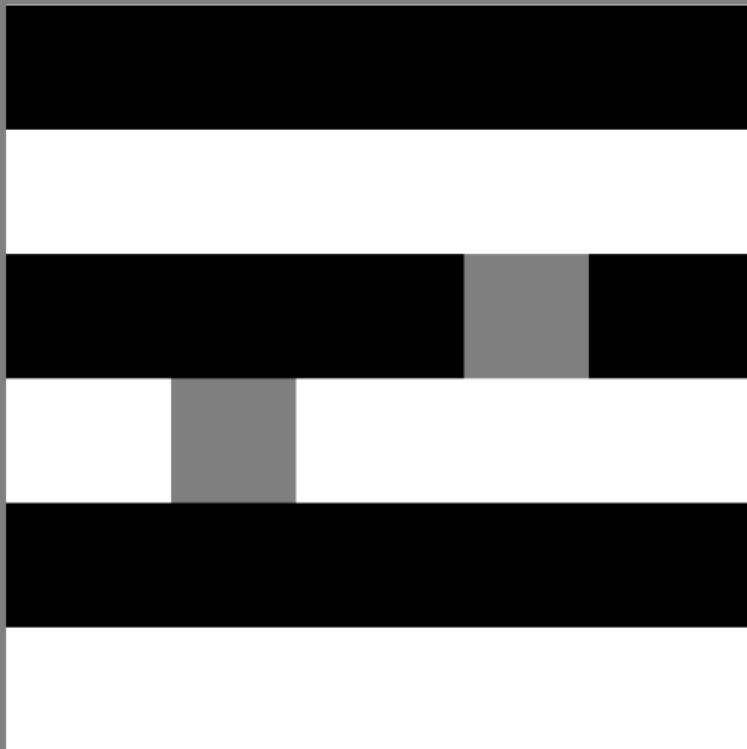


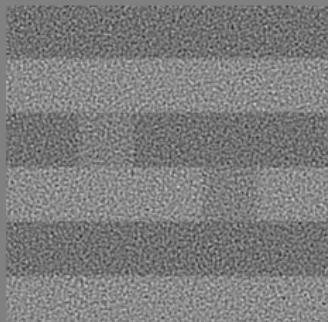
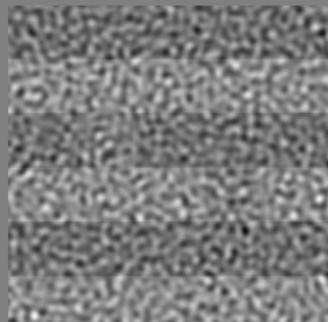
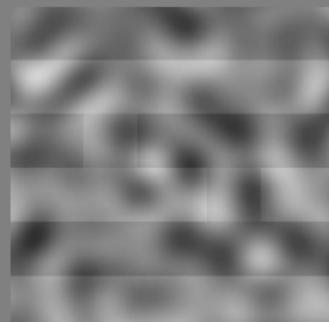
At which frequencies do noise masks cause a layer scission?

Hannah

# White's Illusion

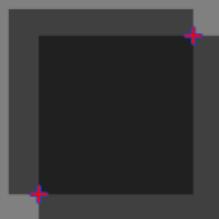
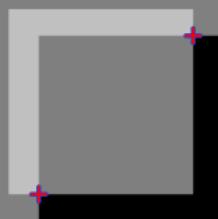
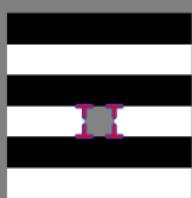


# Noise masking on White's illusion



from [Bet+15]

# Example of T and X-junctions



## Example of layer a scission in a natural scene



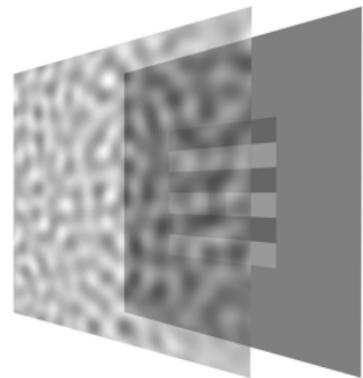
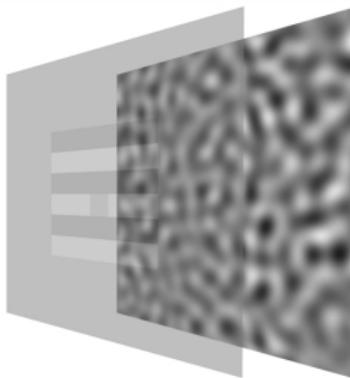
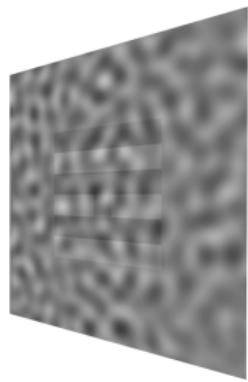
# Example of layer a scission in a natural scene



When does layer scission appear in masked White's Illusion?



# When does layer scission appear in masked White's Illusion?



## Second example: layer scission in edited natural scenes



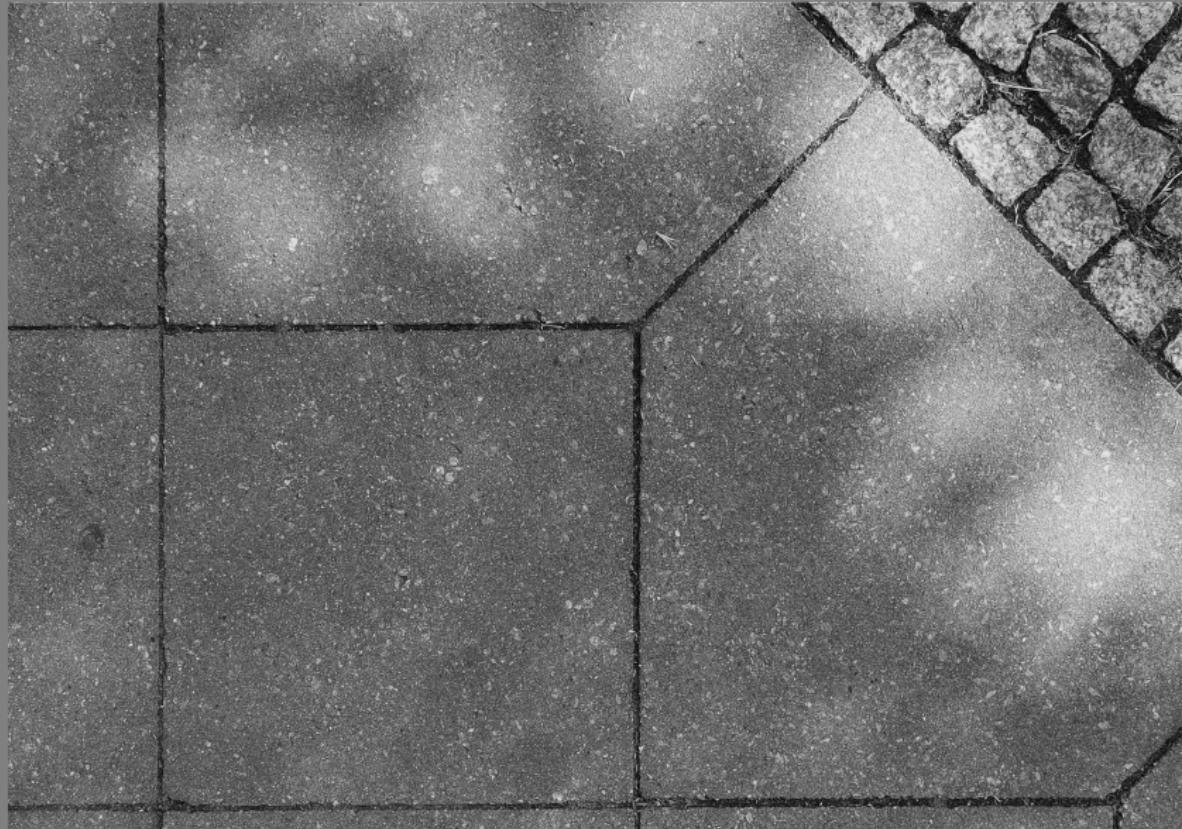
## Second example: layer scission in edited natural scenes



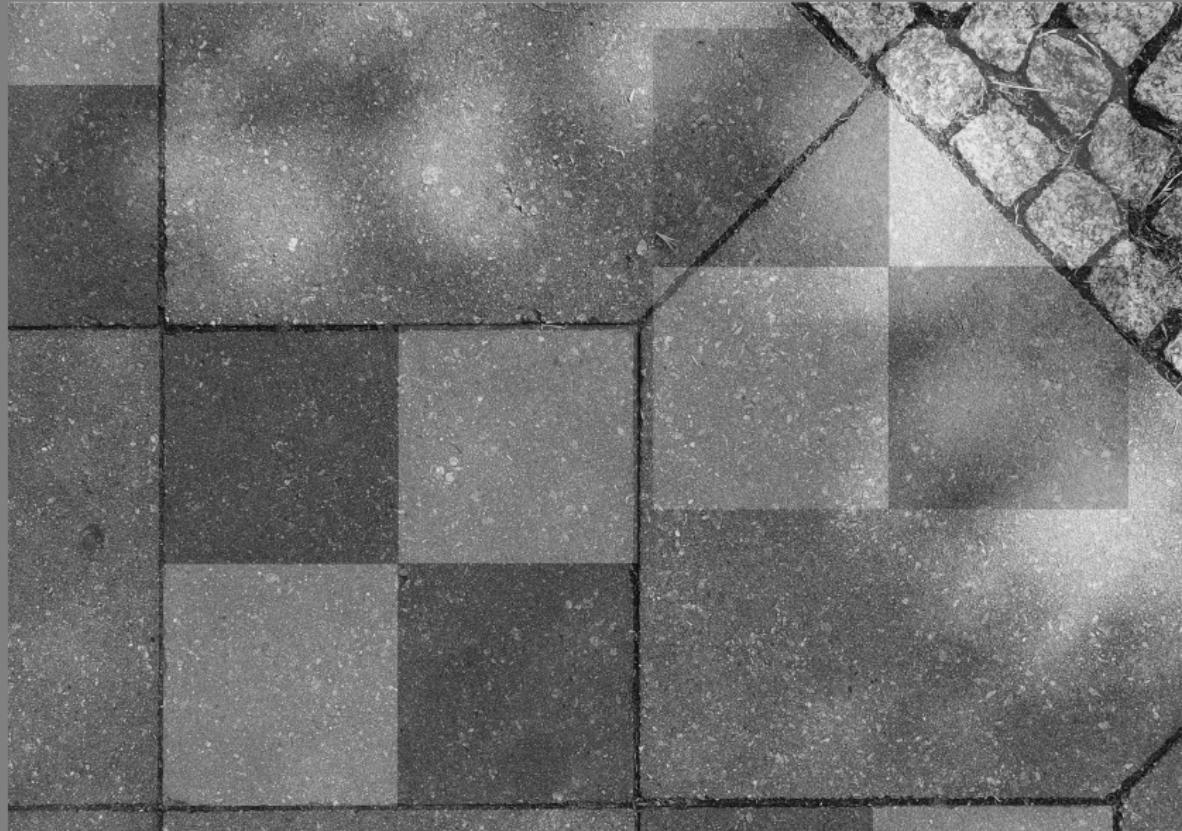
## Second example: layer scission in edited natural scenes



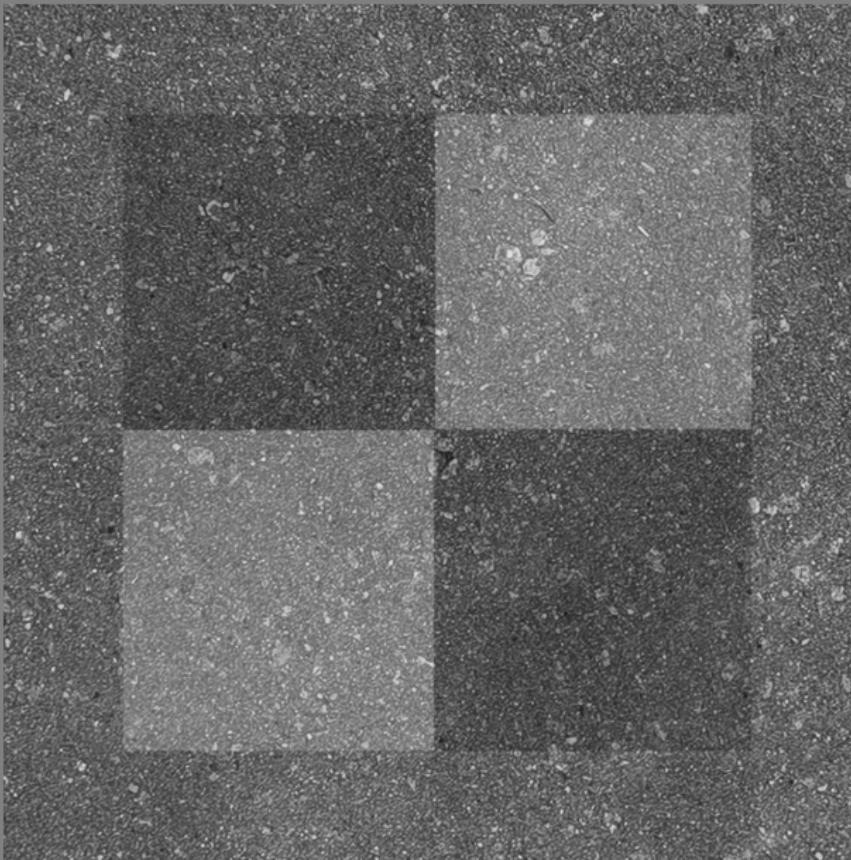
## Second example: layer scission in edited natural scenes



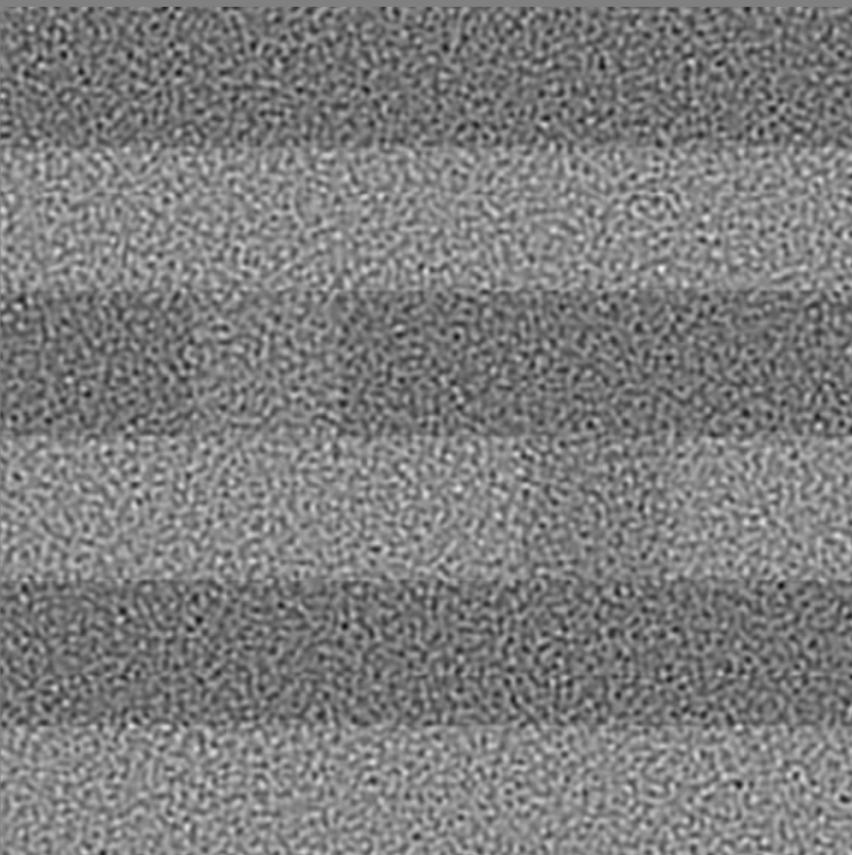
## Second example: layer scission in edited natural scenes



## Second example: layer scission in edited natural scenes



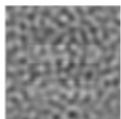
## White's illusion masked with noise



# Experimental design



# Experimental design



# Experimental design

Is there a layer scission ?

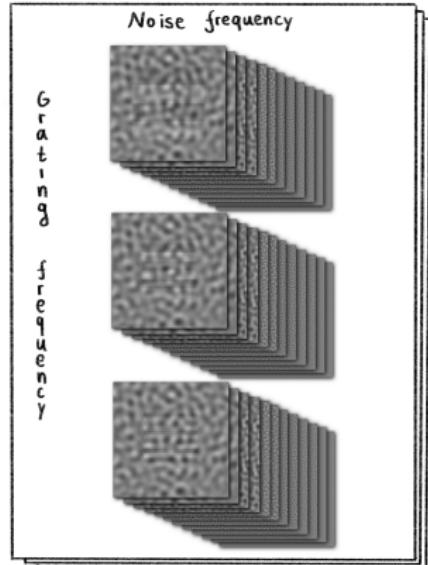
Is the left patch darker, lighter or same lightness as right patch ?



# Experimental design

Is there a layer scission ?

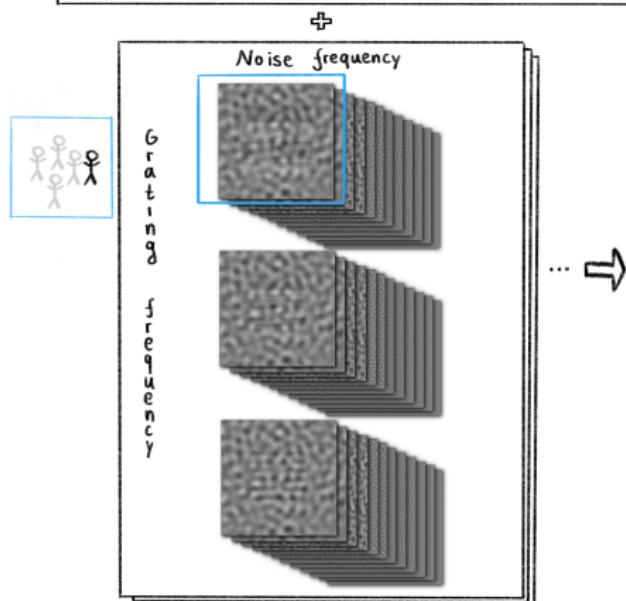
Is the left patch darker, lighter or same lightness as right patch ?



# Experimental design

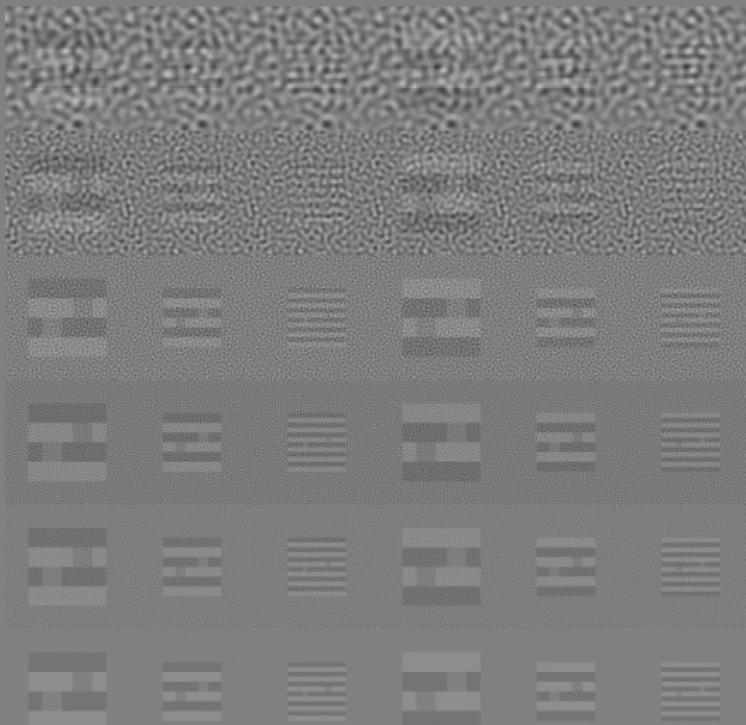
Is there a layer scission?

Is the left patch darker, lighter or same lightness as right patch?



Grating frequency	Noise frequency	avg. Layer scission	avg. Illusory lightness
0.20	0.58	0.33	0.32
0.20	1.00	0.92	0.33
⋮	⋮	⋮	⋮
0.20	9.00	0.11	0.12
0.40	0.58	0.92	0.31
⋮	⋮	⋮	⋮
0.40	9.00	0.12	0.11
0.80	0.58	0.33	0.32
⋮	⋮	⋮	⋮
0.80	9.00	0.11	0.13

# All stimuli



# References

- [Bet+15] Torsten Betz et al. "Noise masking of White's illusion exposes the weakness of current spatial filtering models of lightness perception". In: Journal of Vision 15.14 (Oct. 2015), p. 1. ISSN: 1534-7362. DOI: 10.1167/15.14.1. URL: <https://doi.org/10.1167/15.14.1> (visited on 03/25/2024).