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### Scene statistics: neural representation of real-world structure in rapid visual perception

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# SCENE STATISTICS

*Neural representation of real-world structure  
in rapid visual perception*

Iris Isabelle Anna Groen

*"This book tells the story of how we see. It is a story with only two characters, the physical world and the brain. The physical world is a cunning, deceitful character, full of lies, or worse, half-truths. It is not to be trusted at any time, nor at any cost. The brain is a flawed detective with a loaded die for a compass, working on lousy pay with fuzzy data, and a strict, sometimes literal, deadline. But over eons of evolutionary time, the brain has always had one crucial advantage: it knows that the physical world has to play by certain rules, rules that are ultimately derived from the laws of physics."*

James V. Stone, in *Vision and Brain: How we perceive the world*.

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# SCENE STATISTICS

*Neural representation of real-world structure  
in rapid visual perception*

## ACADEMISCH PROEFSCHRIFT

ter verkrijging van de graad van doctor  
aan de Universiteit van Amsterdam  
op gezag van de Rector Magnificus  
prof. dr. D.C. van den Boom  
ten overstaan van een door het college voor promoties  
ingestelde commissie,

in het openbaar te verdedigen in de Agnietenkapel  
op donderdag 4 september 2014, te 14:00 uur

door

Iris Isabelle Anna Groen

geboren te Amsterdam

Promotiecommissie

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