

## Curriculum Vitae - Rob van Lier



### Personal details

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Gender	Male
Marital Status	Married, 2 children
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### Education & Doctorate

Radboud University Nijmegen	Doctorate (23-01-1996) <i>Title of PhD thesis: Simplicity of visual shape: A structural information approach</i>
Radboud University Nijmegen	Cognitive Psychology (diploma, 1989)
College of Higher Education	Physics & Mathematics (diploma, 1983)

### Work Experience

Since 1-10-2007	Associate Professor, Radboud University Nijmegen, Donders Institute for Brain, Cognition and Behaviour
1-04-2005 to 1-10-2007	Assistant Professor, Radboud University Nijmegen, NICI
1-04-2000 to 1-04-2005	Research Fellow (Royal Academy of Arts and Sciences, KNAW; Radboud University Nijmegen, NICI)
1-04-1998 to 1-04-2000	Postdoctoral Researcher (NWO; Radboud University Nijmegen, NICI)
1-05-1996 to 1-04-1998	Junior Postdoctoral Fellow (University Leuven, Belgium)
1-11-1994 to 1-10-1995	Junior Researcher (Radboud University Nijmegen, NICI)
1-05-1990 to 1-11-1994	PhD-student (Radboud University Nijmegen, NICI)

## Short research description

My research concerns issues of visual perception and visual awareness. Together with my colleagues I have investigated both low-level mechanisms as well as influences of knowledge, attention, and intention on visual awareness, including perceived timing of events (e.g., for phenomena like binocular rivalry, perceptual filling-in, object tracking). In addition, I studied crossmodal processing, the role of interpretations in perception-action couplings, and the relation between visual imagery and motor imagery. I have used various research methods (e.g., psychophysics, brain imaging, eye tracking) and also considered specific populations (e.g., infants, autistic individuals, visually disabled).

## Grants

	<i>Year</i>	<i>funding (approx.)</i>
- Erasmus grant (2 month visit University Trieste, Italy)	1990	1k EUR
- University of Leipzig, short term visitor grants	1991/4	1.5k EUR
- Several NWO travel grants (Italy, UK, USA)	1992/3/4	2k EUR
- FWO Postdoc grant University of Leuven, Belgium	1996	25k EUR
- University Council Leuven Postdoc grant	1997	25k EUR
- NWO Persoonlijke Postdoc Subsidie ('PPS') - can be regarded as the precursor of the current VENI program	1998	91k EUR
- NWO "Materieel Krediet"	1998	11.5k EUR
- KNAW Research Fellow - can be regarded as the precursor of the current VIDJ program	2000	137k EUR
- KNAW Research Fellow - grant extension following positive evaluation after 3 years	2003	137k EUR
- NWO "open competitie" (main applicant), PhD student "Global effects in visual occlusion"	1999	130k EUR
- RU (main applicant), PhD student "Effects of spatial positioning in object perception"	1999	130k EUR
- RU/NICI (main applicant), PhD student "Contextual and development aspects of visual completion"	2004	170k EUR
- NWO "open competitie" (main applicant), PhD student "Features versus structure in perceptual dominance"	2004	170k EUR
- RU/NICI (co-applicant), PhD student "Apprehending the effects of alignment and orientation illusions on human action"	2004	170k EUR
- RU/DCC (co-applicant), PhD student "The body scheme: Where motor imagery and visual imagery meet"	2008	190k EUR
- RU/DCC (main applicant), PhD student "The edges of filling-in"	2009	190k EUR
- NWO ZonMW / Inzicht (co-applicant) "Optimaliseren van echolocatie in oriëntatie en mobiliteit: een evidence-based trainingsprogramma voor mensen met een visuele beperking"	2012	158,5k EUR
- External grants assigned to young scientist to join my research group:		
-Thailand Science Council - 4 year PhD grant to C. Chotsrisuparat	2012	75k EUR
-Chinese Scholarship Council - a 4 year PhD grant to X. Yun	2012	60k EUR
-KNAW - 1 year assistantship to Bronagh McCoy	2012	8,6k EUR
- RU/DCC postdoc application project Vision, Art & the Brain	2013	50k EUR
- RU/DCC (main-applicant), PhD student "Appreciation of sensory input: Examining the link between familiarity and Preferences"	2013	200k EUR

- RU/DCC (applicant) postdoc application project “Common neural mechanisms of visual perception in autism and synaesthesia” by Tessa van Leeuwen	2014	100k EUR
- RU/DCC (main-applicant), PhD student “Anticipatory Interactions: Modulating Attention in Perception-Action Couplings”	2014	200k EUR
- RU/DCC (small material investment)	2014	0,5k EUR
- RU/DCC student assistant	2015	2,0k EUR

## Publications

- Over 50 publications in international refereed journals (see ‘publication list’, below)
- Invited book chapters (From Fragments to Objects Eds. Shipley, Kellman; Oxford compendium of Visual Illusions Eds. Shapiro, Todorovic; Oxford Handbook of Perceptual Organization Ed. Wagemans) and editorials (special issues Acta Psychologica).
- Exposure in National and International news papers and popular media (see ‘popular media and public outreach activities’, below)

## Presentations

- Regular Conference participations (see ‘presentation list’, below)
- Invited lectures at various universities; Berkeley (USA), Leipzig, (Germany), Trieste (Italy), Leuven (Belgium), Utrecht, Amsterdam (Netherlands), Lausanne (Switzerland), München (Germany).
- Invited summerschool lecturer Sofia, Bulgaria (5 lectures) on the topic of Color and Form (2004).
- Invited lectures at international symposia (e.g., TEAP Mannheim 2012, ECVP Alghero 2012, AVA Manchester, 2013; ECVP Belgrade, 2014; Tokyo 2015).
- Invited public presentations (see ‘popular media and public outreach activities’, below)

## PHD supervision

### *Finished:*

- Arno Koning , defense 2004  
Title PhD thesis: “Visual object dominance”  
(First applicant, supervisor, co-promotor)
- Tessa de Wit (NWO), defense 2004  
Title PhD thesis: “Disoccluding completions”  
(First applicant, supervisor, co-promotor)
- Janneke Lommertzen, defense 2009  
Title PhD thesis: “Visuomotor coupling at different levels of complexity”  
(Co-applicant, co-supervisor, co-promotor)
- Mark Vergeer (NWO), defense 2010  
Title PhD thesis: “Visibility and appearance in perceptual phenomena: Effects of color and Form”  
(First applicant, supervisor, co-promotor)
- Sven Vrins, defense 2011  
Title PhD thesis: “Shaping object boundaries: contextual effects in infants and adults”  
(First applicant, supervisor, co-promotor)
- Arjan ter Horst, defense 2013  
Title PhD thesis: “Modulating motor imagery: Contextual, Spatial, and kinaesthetic influences”  
(Co-applicant, co-supervisor, co-promotor)

### *Running:*

- Simon Jan Hazenberg  
Title project: "The edges of Filling-in"  
(First-applicant, supervisor, co-promotor)
- Chayada Chotsrisupurat  
Title project: "Perception of causality"  
(supervisor, co-promotor)
- Yun Xuyan  
Title project: "Neural correlates of visual illusions"  
(supervisor, co-promotor)
- Yagmur Güclütürk  
Title project: "Appreciation of sensory input: Examining the link between familiarity and preferences"  
(supervisor, co-promotor)
- Andrea Loing-Frielink  
Title project: "Anticipatory Interactions: Modulating Attention in Perception-Action Couplings"  
(supervisor, co-promotor)

### PhD committees

- 6 x co-promotor RU Nijmegen (dr. A. Koning, dr. T. de Wit, dr. J. Lommertzen, dr. M. Vergeer, dr. S. Vriens, dr. A. ter Horst )
- 1 x member PhD manuscript committee RU Nijmegen (dr. G. van der Vloed)
- 5 x member PhD committee RU Nijmegen (dr. P. Snoeren, dr. J. Hulleman, dr. A. Csatho, dr B. Huurneman, dr. A. Platonov)
- 1 x member PhD manuscript committee University Utrecht ( dr. T. Borra)
- 1 x member PhD manuscript committee Technical University Eindhoven (Architecture; dr. Q Chen)
- 1 x member PhD committee Sofia, New Bulgarian University (dr. A. Murzak)
- 1 x member PhD committee University Leuven (M. Sassi)
- 6 x member intermittent PhD committee University Leuven (drs. B. Willems, drs. S. Tibau, drs. J. Dewinter, drs. P. Claessen, drs. K. Vancleef, drs. M. Sassi)

### Editorial and review activities

- **Action Editor** journals *Perception* and *i-Perception* (as from 2013)
- Member *Editorial Board Acta Psychologica* (since 2006), co-editor two special issues.
- Member "referentencollege" NWO (2004-2006)
- Referee for NWO programs (Open Competitie, VENI, VIDI, TALENT, MOZAÏEK)
- Committee member NWO Open Competitie (2004; 2007)
- Committee member NWO VIDI (2010)
- Committee member NWO Toptalent (2011)
- Committee member NWO VENI (2013)
- Committee member NCI PhD proposals (2006/7)
- Committee member internal Associate Professor (UvD) appointment (2013, 2014)
- Referee foreign various research projects *FWO* (Belgium), *HFSP* (Human Frontier Science Program), *MRC* (British Medical Research Council)
- Ad hoc reviewer for various journals:  
*Acta Psychologica*; *Attention, Perception & Psychophysics* ;  
*British Journal of Psychology*; *Current Biology*; *Cognition*  
*Journal of Experimental Psychology: Human Perception & Performance*;  
*Journal of Experimental Psychology: General*;  
*Journal of Vision*; *Nederlands Tijdschrift voor de Psychologie*

Perception; Philosophical Psychology; Psychonomic Bulletin & Review  
PLOS one; Psychological Research; Vision Research; Visual Cognition

### Conference/meeting organization

- Co-organiser, session chair NWO workshop Netherlands-Taiwan (2000)
- Co-organiser, session chair NWO summerschool “The Heart and the Mind” (2005)
- Organiser, chair Symposium “Color & Form” (Nijmegen, 2007)
- Host/organiser lectures at NICI/DCC
- Member of the international judge of the “Best visual illusion contest 2009”
- Member of Scientific Committees: ECVF 2012 (Algero, Italy), VSAC 2012 (Algero, Italy), AVA 2013 (Leuven, Belgium); ECVF 2014 (Belgrado, Serbia), VSAC 2014 (Belgrado, Serbia)
- Organiser & Chair Symposium on “Amodal Completion” at the ECVF 2014 (Belgrado, Serbia)

### Management

#### Research

- Managing my research group (‘Perception and Awareness’), initiating and supervising PhD trajectories, writing grant proposals, organising labmeetings, international collaborations, etc. (see various entries in this CV).
- Acting Division Head NICI Perception Division (2004-2008) (defining mission statements and research lines, preparation scientific year reports, preparation of internal and external evaluations, organizing and chair division meetings etc.)
- Member advisory board NICI (2004-2008).

#### Education (Psychology, RU Nijmegen)

- Coördinator Bachelor program “Domain Brain” (Domein Brein) (april 2007-present) (“Domain Brain” comprises the combination of the “old” programs Cognitive psychology, Biological psychology and Neuro- and Revalidation psychology)
- Coördinator Bachelor program Psychology (B2) (april 2007-present)
- Member educational committee Research Masters Cognitive Neuroscience (2007-present)
- Member selection committee Research Masters Cognitive Neuroscience (Perception Action Control) with regular selection interviews (2007-present)
- Advising member educational committee Artificial Intelligence (2013-present)
- Chair internal evaluation committee Bachelor courses (2009/10)
- Member Task Force “Educational renewal” (onderwijsvernieuwing) (april 2007-sept 2009)
- Member Taskforce new 1-year master educational program Psychology (2009)
- Chair “lecturers meetings Domain Brain (docentenoverleg Domein Brein)” (2007/8)

### Teaching

- I had a pivotal role in the educational renewal of the Psychology curriculum at the Radboud University Nijmegen. Key change was the implementation of a broader Bachelor curriculum; specialized tracks were clustered in three domains (domains “Brain”, “Behaviour”, and “Person”). I was actively involved in committees that discussed and implemented the renewal, and I am now the coordinator of the cluster “Brain” (comprising the previous tracks Cognitive Psychology, Biological Psychology, Neuro- and Revalidation); see also under ‘Management’.
- I obtained the “Extended teaching qualification” (UKO, 2010) of the Faculty of Social Sciences, RU Nijmegen.
- I obtained a teaching qualification for Physics and Mathematics.
- Teaching and developing various courses (including tutorials, selfstudy excercises, exams) for Bachelor/Masters Psychology/ Cogn. Neuroscience (see list below).
- Chairing the official Bachelor Psychology diploma ceremony, domain Brain (4 times a year).

## Course activities

### *First year Bachelor Psychology*

- 'Cognitive psychology 1' (approx. 450 students)  
Lecturer (2001 to 2007)
- 'Cognitive psychology 2' (approx. 20 students)  
Supervision practical work (2001 to 2007)
- 'Psychology in Action' (approx. 450 students)  
Guest lecture. (2007- present)

### *Second year Bachelor Psychology*

- 'Perception & Attention' (approx. 50 students)  
Lecturer, course coördinator (2000 to 2007)
- 'Perception, Action, Development' (approx. 80 students)  
Lecturer (2008 - present)

### *Third year Bachelor Psychology*

- 'Psychology of Perception' (approx. 35 students)  
Lecturer, course coördinator (2003-2009)
- 'Attention, Sleep, Consciousness' (approx. 100 students)  
Lecturer, coördinator (2003-2009)
- 'Consciousness and Perception' (approx. 80 students)  
Lecturer, course coördinator (2010 - present)
- Supervision of Research Practicals and Bachelor theses (2010 - present)
- Supervision of various honours internships (e.g. D. ten Braak, L. van Lieshout, G. Gerritsen, C. Wölk).

### *Master Cognitive Psychology (old style)*

- Supervision of various internships and master theses (until 2010)

### *Research Master Cognitive Neuroscience*

- 'Trends in Cognitive Neuroscience' (approx. 25 students)  
Lecturer (2005 - 2007), module 'perception, development & autism'
- 'States of Consciousness' (approx. 25 students)  
Guest Lecturer (2008)
- 'Perception' (approx. 30 students)  
Lecturer (2010 - present)
- Supervision Research Internships (e.g., J. Atsma, A. Loing, M. Leenders)

### *Extra*

- Yearly introductory lectures for high school students (VWO; approx. 120 students)
- Honours trajectory Psychology (meant for a small selection of excellent students)  
Lecturing / supervising projects on "Perception & Art", "Consciousness" and "Attention" (as from 2009)
- Guest lectures Perception and Attention for Bachelor students Biology (2009-2011) and Pedagogy (2012 – 2013)

## Prizes

- My PhD thesis was **awarded with an honorary prize** by the Nederlandse Vereniging voor Psychonomie (1997; best thesis award, second position, out of 22 PhD theses, awarded with an invited lecture at the conference of the NVP).
- My research at the University of Leuven (Belgium), in collaboration with prof. J. Wagemans, was awarded with the **Excellent Young Researcher Prize** (2000), a prize (6K Euro) of the universities of the "Network of Euregional Universities" (NEU), in Germany (Münster, Dortmund, Osnabrück), Netherlands (Twente, Nijmegen) and Belgium (Leuven).

- I won the *'Best illusion of the Year'* award (2008), a prize of the *Neural Correlate Society*, awarded during the conference of the *Vision Science Society* (Van Lier & Vergeer, 'Filling-in the afterimage after the image'). In 2014 we received the *second prize* for the illusion "Flexible Colors" (Vergeer, Van Lier, Anstis). Two other visual illusions were nominated for the prize ("Catching Patches" Van Lier & Vergeer, 2006, and "The more-or-less morphing face illusion", Van Lier & Koning 2011), and in 2005 yet another illusion was nominated for the best 'static illusion' (the illusion was exposed in the science museum of La Coruna, Spain).

### Popular Media & Public outreach activities

- National newspaper 'Trouw' (contribution on Brain science, 2006)
- Psychologie Magazine (2006)
- Radio Interview NOS "Met het oog op morgen" (on induced 'out of body' experiences, 2007)
- Exposure of my research in TED talk of prof. D. Dennett (the illusion of consciousness, 2007)
- Interview 'Quest Magazine' (on visual illusions, 2008)
- VPRO Noorderlicht (Dutch TV on our afterimage illusion, 2009)
- Exposure at the Radboud University Media Website
- Participated as expert in National Science Quiz (VPRO, Dutch TV, 2009)
- Participated in radio show Teleac Hoe?Zo! (Dutch national radio, 2010)
- Interview in 'Audi Magazine' (on color vision, 2010)
- 'Frankfurter Allgemeine Zeitung' (participation in article on visual illusions, 2011)
- 'New Scientist' and 'Focus' highlighting our morphing-face illusion (2011)
- Exposure in 'Scientific American Mind' (2009, 2012, 2014):
- Exposure on winning illusion, e.g.: 'De Kijk' (2014); Radboud University news site (2014); University Leuven news site (2014) N1 Gelderland (local television, item on illusions, 2014)
- Various Media contributions on the The Dress color phenomenon (27 Feb 2015):  
NRC Next (national newspaper); Volkskrant (national newspaper); De Morgen (national news paper Belgium); Radio 1 (evening show, national radio); Radio 2 (afternoon show, national radio)  
TV NOS journaal (eight o'clock news, national); TV NOS op 3 (late news); TV Hart van Nederland (popular magazine); Hart van Nederland (website)
- Contribution Donders Wonders blog: "Niets is wat het lijkt" (Sept 2015)

#### *Invited (Semi-)public lectures (topics: visual illusions, visual awareness, consciousness):*

- Student association d' Artagnan, Tilburg (2009)
- Cafe Cognitive, Amsterdam (2009)
- Science cafe, Nijmegen (2009)
- Symposium "Playing with the Mind", Nijmegen (2010)
- Workshop 'Maquette Tweede Kamer', Amsterdam (2010)
- Talk at the 'Gelderse Kunst Biennale' (a biannual art meeting), Nijmegen (2010).
- Talk at a symposium in view of the 65th anniversary of the foundation 'Kleurenvisie' ('Color vision'), Utrecht (2011)
- Talk at a meeting of the 'Netwerk Beeldende Kunstenaars Gelderland' (provincial artist network, Nijmegen, 2011)
- Workshop at the 'Instituut Lichtontwerpen', Amsterdam (2012)
- Public popular lecture, Kaiserslautern, Germany (2012)
- Symposium "Zeker Wetenschap!", Nijmegen (2013)
- Symposium "Bronbekers in Beeld", Arnhem (2013), Art & Vision.
- Symposium "Verstoorde visuele perceptie", Bartiméus, Zeist (2013)
- Talk at a LIONS meeting, Venray (2014)
- Talk at "Studium Generale, Wageningen" Wageningen (2014)
- Talk at "Studium Generale, Eindhoven" Eindhoven (2015)
- Talk at Boerhave museum Leiden: Jeugduniversiteit ("Youth University"; 2015)
- Lecture on Perception & Art (Radboud University 2015)
- Talk at symposium "De tast belicht" organised by Visio, Huizen (2015)
- Chaired Workshop "Geluid & Vorm" at the symposium "De tast belicht", Huizen (2015)

- Researchers Night. Talk on “the dress illusion” LUX Nijmegen (2015)
- Symposium “Menswaarde”. Talk at the anniversary of foundation GIPS (Gehandicapten Informatie Project Scholen) at the “Gouvernement Maastricht” (Provinciehuis Maastricht; Nov 2015)
- Inscience festival. Talk on illusions and magic “Je ogen bedrogen” LUX Nijmegen (Nov 2015)
- Inscience festival. Public Demo on Multimodal perception of Art. Nijmegen (Nov 2015)

## Publication list

- Van der Helm, P., **Van Lier, R.**, & Leeuwenberg E. (1992). Serial Pattern Complexity: Irregularity and hierarchy. Perception, *21*, 517-544.
- Van Lier, R.**, Van der Helm, P., & Leeuwenberg, E. (1994). Integrating global and local aspects of visual occlusion. Perception, *23*, 883-903.
- Leeuwenberg, E., Van der Helm, P., & **Van Lier, R.** (1994). From Geons to Structure: A note on object representation. Perception, *23*, 505-515.
- Van Lier, R.**, Van der Helm, P., & Leeuwenberg, E. (1995). Competing global and local completions in visual occlusion. Journal of Experimental Psychology: Human Perception and Performance, *21*, 571-583.
- Van Lier, R.**, Leeuwenberg, E., & Van der Helm, P. (1995). Multiple completions primed by occlusion patterns. Perception, *24*, 727-740.
- Van Lier, R.** (1996) Simplicity of visual shape: A structural information approach, PhD-Thesis, University of Nijmegen (ISBN 90-9009021-5).
- Van Lier, R.**, Leeuwenberg E., & Van der Helm P. (1997). In support of hierarchy in object representations. Psychological Research, *60*, 134-143.
- Van Lier, R.**, & Wagemans J. (1997). Perceptual grouping measured by color assimilation: Regularity versus Proximity. Acta Psychologica, (Special issue: ‘Higher-level cortical processing of color’) *97*, 37-70.
- Van Lier, R.**, & Wagemans, J. (1998). Effects of physical connectivity on the representational unity of multi-part configurations. Cognition, *69*, B1-B9.
- Van Lier, R.** (1999). Investigating global effects in visual occlusion: From a partly occluded square to the back of a tree trunk. Acta Psychologica (Special issue: ‘Object perception and memory’) *102*, 203-220.
- Van Lier, R.**, & Wagemans, J. (1999). From images to objects: Global and local completions of self-occluded parts. Journal of Experimental Psychology: Human Perception and Performance, *25*, 1721-1741.
- Van Lier, R.** (2000) Separate features versus one principle: A comment on Shimaya (1997). Journal of Experimental Psychology: Human Perception and Performance, *26*, 412-417.
- Van Lier, R.** (2001). Visuo-cognitive disambiguation of occluded shapes (commentary). Behavioral and Brain Sciences, *24*, 1135-1136.
- Van Lier, R.** (2001). Simplicity, Regularity, and Perceptual interpretations: A Structural Information Approach. In T. Shipley & P. Kellman (eds.), From Fragments to Objects: Segmentation in Vision. New York: Elsevier, 331-352.
- Van Lier, R.** (2002). A double neon colour illusion. Perception, *31*, 31-38.
- De Wit, T., & **Van Lier, R.** (2002). Global visual completion of quasi-regular shapes. Perception, *31*, 969-984.



- Koning, A., & **Van Lier, R.** (2003). Object-based connectedness facilitates matching. Perception & Psychophysics, *65*, 1094-1102.
- Van der Helm, P., **Van Lier, R.**, & Wagemans J. (2003). On Visual Gestalt formation [special issue]. Acta Psychologica, *114*, 211-213. (Editorial )
- Van Lier, R.** (2003). Differential effects of object orientation on imaginary object/viewer transformations. Psychonomic Bulletin & Review, *10*, 455-461.
- Van Lier, R.**, & De Weert, Ch. (2003). Intra- and Interocular activations during dichoptic suppression. Vision Research, *43*, 1111-1116.
- Koning, A., & **Van Lier, R.** (2004). Mental rotation depends on the number of objects rather than on the number of image fragments. Acta Psychologica, *117*, 65-77.
- De Wit, T., Mol, K., & **Van Lier, R.** (2005). Investigating Metrical and Structural Aspects of Visual Completion: Priming versus Searching. Visual Cognition, *12*, 409-429.
- De Wit, T., De Weert, Ch., & **Van Lier, R.** (2005). Luminance edges are not necessary for visual completion. Perception & Psychophysics, *67*, 1280-1288.
- Koning, A., & **Van Lier, R.** (2005). From interpretation to segmentation. Psychonomic Bulletin & Review, *12*, 917-924.
- Leeuwenberg, E., & **Van Lier, R.** (2005). Symmetry cues for matching objects. Spatial Vision, *18*, 1-23.
- Koning, A., & **Van Lier, R.** (2006). No symmetry advantage when object matching involves accidental viewpoints. Psychological Research, *70*, 52-58.
- Van Lier, R.**, & Csatho, A. (2006). Dancing shapes: a comparison between luminance induced distortions. Perception, *35*, 775-798.
- Van Lier, R.**, de Wit, T., & Koning, A. (2006). Con-fusing contours & pieces of Glass. Acta Psychologica, *123*, 41-54.
- Wagemans, J., **Van Lier, R.**, & Scholl, B. (2006). Introduction to Michotte's heritage in perception and cognition research. Acta Psychologica, *123*, 1-19.
- De Wit, T.C.J., Bauer, M., Oostenveld, R., Fries, P., **Van Lier, R.** (2006). Cortical responses to contextual influences in amodal completion. Neuroimage, *32*, 1815-1825.
- Koning, A., & **Van Lier, R.** (2007) 3D processing in the Poggendorff illusion. Acta Psychologica, *126*, 46-58.
- Vergeer, M.L.T., & **Van Lier, R.** (2007). Grouping effects in flash-induced perceptual fading. Perception, *36*, 1036-1042.
- De Wit, T.C.J., Schlooz, W., Hulstijn, W., & **Van Lier, R.** (2007). Visual Completion and Complexity of Visual Shape in Children with Pervasive Developmental Disorder. European Child & Adolescent Psychology, *16*, 168-177.
- Koning, A., De Weert, Ch., & **Van Lier, R.** (2008). At first glance, transparency enhances assimilation. Perception, *37*, 1434 -1442.
- De Wit, T.C.J., Vrins, S., Dejonckheere, P., & **Van Lier, R.** (2008). Form perception of partly occluded shapes in 4-month-old infants. Infancy, *13*, 660-674.

- Lommertzen, J., Van Zuijlen, A., Meulenbroek, R., & **Van Lier, R.**, (2009). Differential effects of the rod-and-frame-illusion on the timing of forearm rotations. Motor Control, *13*, 54-68.
- Vrins, S., De Wit, T.C.J., & **Van Lier, R.** (2009). Bricks, Butter, and Slices of Cucumber: Investigating semantic influences in amodal completion. Perception, *38*, 17-29.
- Lommertzen, J., **Van Lier, R.**, & Meulenbroek, R. (2009). Grasping partly occluded objects: effects of global stimulus information on Action. Perception, *38*, 200-214.
- Van Lier, R.**, Vergeer, M., & Anstis, S. (2009). Filling-in afterimage colors between the lines. Current Biology, *19*(8), R323-R324.
- Vergeer, M., & **Van Lier, R.** (2010). Feature-based activation and suppression during binocular rivalry. Vision Research, *50*, 743-749.
- Ter Horst, A., **Van Lier, R.**, & Steenbergen, B. (2010). Mental rotation task of hands: differential influence number of rotational axes. Experimental Brain Research, *203*, 347-354.
- Vergeer, M., & **Van Lier, R.** (2010). Capturing lightness between contours. Perception *39*(12), 1565 – 1578.
- Vrins, S., Hunnius, S., & **Van Lier, R.** (2011). Volume completions in 4.5- Month old infants. Acta Psychologica, *138*, 92-99.
- Ter Horst, A., **Van Lier, R.**, & Steenbergen, B. (2011). Spatial dependency of action simulation. Experimental Brain Research, *212*, 635-644.
- Vergeer, M., & **Van Lier, R.** (2011). The effect of figural manipulations on brightness differences in the Benary Cross. Perception, *40*, 392-408.
- Ter Horst, A., Jongasma, M., Janssen, L., & **Van Lier, R.**, & Steenbergen, B. (2012). Different mental rotation strategies reflected in the rotation related negativity. Psychophysiology, *49*, 566-573.
- Ter Horst, A., Cole, J., **Van Lier, R.**, & Steenbergen, B. (2012). The effect of Chronic Deafferentation on Mental Imagery: A case study. PLoS ONE *7*(8): e42742. DOI:10.1371/journal.pone0042742.
- Anstis, S., Vergeer, M., & **Van Lier, R.** (2012). Looking at two paintings at once: Luminance edges can gate colors. I-Perception, *3*, 515-518..
- Anstis, S., Vergeer, M., & **Van Lier, R.** (2012). Luminance contours can gate afterimage colors and 'real' colors. Journal of Vision, *12*(10):2,1-13, www.journalofvision.org/content/12/10/2, doi:10.1167/12.10.2.
- Atsma, J., Koning, A., & **Van Lier, R.** (2012). Multiple Object Tracking: Anticipatory Attention doesn't "Bounce". Journal of Vision. *12*(13):1, 1-11, www.journalofvision.org/content/12/13/1, doi:10.1167/12.13.1.
- Ter Horst, A., **van Lier, R.**, & Steenbergen, B. (2013). Mental Rotation Strategies Reflected in Event Related (De)Synchronization of Alpha and Mu Power. Psychophysiology, *50*: 858-863. doi: 10.1111/psyp.12076
- Lommertzen, J., Koning, A., **Van Lier, R.**, & Meulenbroek, R. (2013). Perceptuomotor Rules as Prediction Tools in (Joint) Action: the Case of Orientation Perception. New Ideas in Psychology, *31*, 313-321.
- Hazenbergh, S.J., & **van Lier, R.** (2013). Afterimage watercolours: an exploration of contour-based afterimage filling-in. Frontiers in Psychology: Perception Science, *4*:707. doi: 10.3389/fpsyg.2013.00707
- Hazenbergh, S.J., Jongasma, M., Koning, A., & **van Lier, R.** (2014). Differential familiarity effects in amodal completion: Support from behavioral and electrophysiological measurements. Journal of Experimental Psychology: Human Perception & Performance, *40*, 669-684

**Van Lier, R., & Koning, A.** (2014). The more-or-less morphing face illusion: A case of fixation-dependent modulation. *Perception*, 43, 947 – 949

Ekkel, M., **Van Lier, R.**, & Steenbergen (2014). 70 jaar onderzoek naar echolokalisatie: welke lessen zijn er te leren voor de praktijk? *Neuropraxis*, 18(5), 162-172.

Vergeer, M, Anstis, S., **Van Lier, R.** (2015). Flexible color perception depending on the shape and positioning of achromatic contours. *Frontiers in Psychology: Perception Science*, 6, 620. doi: 10.3389/fpsyg.2015.00620

**Van Lier, R.** & Gerbino, W. (2015). Perceptual completions. In J. Wagemans (ed.), *Oxford Handbook of Perceptual Organization*. Oxford, U.K.: Oxford University Press.

Yun, X., Hazenberg, S., Jacobs R., Qiu, J. & **van Lier R.** (2015). The neural signature of the Fraser illusion: an explorative EEG study on Fraser-like displays. *Frontiers in Human Neuroscience* 9:374. doi: 10.3389/fnhum.2015.00374

**Van Lier, R.** (In Press). Filling-in between contours. In A. Shapiro, & D. Todorovic, (eds.), *Compendium of Visual Illusions*. Oxford, U.K.: Oxford University Press.

Hazenberg, S., & van Lier (In Press). Disentangling effects of structure and knowledge in perceiving partly occluded shapes: An ERP study. *Vision Research*.

### Presentation list (selection)

Van Lier, R., Leeuwenberg, E., & Van der Helm, P. (1992). The perceptual complexity of pattern interpretations: Information + Coincidence + Virtuality. European Conference on Visual Perception, Pisa, Italy.

Van Lier, R., Van der Helm, P., & Leeuwenberg, E. (1993). Global and local completions in visual occlusion. European Conference on Visual Perception, Edinburgh, United Kingdom.

Van Lier, R., Van der Helm, P., & Leeuwenberg, E. (1994). Multiple completions in visual occlusion. Annual meeting of the Association for Research in Vision and Ophthalmology. Sarasota, Florida (USA).

Van Lier, R. (1994). Recent developments within the Structural Information Theory. University of California, Berkeley, California (USA).

Van Lier, R. (1994). Perceived completions are not alone. Symposium on perception and cognition. Trieste, Italy.

Van Lier, R. (1994). Neueste Forschungsergebnisse und -vorschläge der Strukturellen Informationstheorie. Leipzig, Germany. (*Invited talk*)

Van Lier, R. (1994). Global and local aspects of visual occlusion. Workshop on the Structural Information Theory. Leipzig, Germany. (*Invited talk*)

Van Lier, R. (1995). Global and local aspects in visual completion. Leuven, Belgium. (*Invited talk*)

Van Lier, R., Leeuwenberg, E., Van der Helm, P. (1995) In support of structural hierarchy in visual shape. Symposium on phenomena and architectures of cognitive dynamics, Leipzig, Germany. (*Invited talk*)

Van Lier, R., & Wagemans J. (1996). Regularity, proximity and color assimilation. Workshop on Short-term storage and processing in human cognition: Dynamic characteristics and neural mechanisms. Leipzig, Germany.

Van Lier, R., & Wagemans J. (1997). 'Perception' of non-visible object parts: A mental rotation study. Annual Meeting of the Belgian Psychological Society. Brussels, Belgium.

- Van Lier, R., & Wagemans J. (1997). Regularity versus proximity: Color assimilation effects. Annual meeting of the Association for Research in Vision and Ophthalmology (ARVO). Fort Lauderdale, Florida, USA.
- Van Lier, R., & Wagemans J. (1997). Global and local completions of self-occluded object parts. Pre-Psychonomics workshop on object perception and memory (OPAM). Philadelphia, USA.
- Van Lier, R. (1997). Global and Local object completions. Bi-annual conference of the Netherlands Psychonomic Society. Egmond aan Zee, The Netherlands.
- Van Lier, R. (1997). Simplicity of visual shape: A structural information approach. Bi-annual conference of the Netherlands Psychonomic Society. Egmond aan Zee, The Netherlands. (, 'Award Lecture', bi-annual PhD thesis competition; *Invited talk*).
- Van Lier, R. (1998). Completion of self-occluded object parts. Symposium 'Visual Perception of Structure'. Amsterdam, The Netherlands (*Invited talk*).
- Van Lier, R., & Wagemans J. (1998). Physical connectedness versus representational unity. Cognitive Science meeting. Nijmegen, The Netherlands.
- Van Lier, R. (1999). Investigations at the edge of amodal completion. European Conference on Visual Perception, Trieste, Italy.
- Van Lier, R. (2000). On the role of structural aspects in object perception. Joint NWO/NSC-Taiwan workshop on cognitive science. Arnhem, The Netherlands. (*Invited talk*)
- Van Lier, R. (2000). Effects of object-based transformations on imagined object views. European Conference on Visual Perception. Groningen, the Netherlands.
- Van Lier, R. (2000). Toward an Integration of viewpoint dependent and viewpoint independent aspects in object perception. Workshop on Perceptual grouping and 3-D object Perception: Psychophysics and Bayesian modelling. University of Leuven, Belgium (*Invited talk*).
- Van Lier, R. (2000). Visual Perception: A Border-Crossing Enterprise. Nijmegen, The Netherlands (Award Lecture, yearly gathering of the NEU-Universities: Nijmegen, Twente, Leuven, Osnabrück, Münster, Dortmund; *Invited talk*)
- Van Lier, R. (2001). A double neon colour illusion. Egmond aan Zee, The Netherlands. (Biennial conference of the Dutch Psychonomic Society).
- Van Lier, R. (2002). 2D image regularity versus 3D object regularity: effects of symmetry and repetition in folded bands. European Conference on Visual Perception. Glasgow, UK.
- Van Lier, R., Csatho, A., & Puts, M (2003). Comparing distortions induced by luminance gradients. European Conference on Visual Perception. Paris, France.
- Van Lier, R., & Csatho, A. (2003). Dancing Shapes. Trieste Symposium on Perception and Cognition. Trieste, Italy.
- Van Lier, R. (2004). Colour and Form. Lecture series in collaboration with Ch. de Weert at the new Bulgarian University (Summerschool Cognitive Science), Bulgaria, Sofia. (*Invited talk*).
- Van Lier, R. (2004). Interpretations of visual patterns. Utrecht. The Netherlands (*Invited talk*).
- Van Lier, R., Wit, T., & Koning, A. (2004). Effects of (mis-)alignment of physical and illusory contours. European Conference on Visual Perception. Budapest, Hungary.

- Van Lier, R. (2005). From images to interpretation. CWI, Amsterdam. The Netherlands (*Invited talk*).
- Van Lier, R., Wit, T., & Koning, A. (2005). (Con-)fusing contours. European Conference on Visual Perception. La Coruna, Spain
- Van Lier, R. (2005). Filling in "les compléments amodaux". Michotte symposium, Leuven, Belgium (*Invited talk*).
- Van Lier, R., & Vergeer, M. (2006). Catching patches. Best illusion of the year competition. Sarasota, Florida, (USA).
- Van Lier, R., & Vergeer, M. (2006). Catching patches: Filling-in between edges. European Conference on Visual Perception. St. Petersburg, Russia.
- Van Lier, R. (2006). Illusions & Interpretations. Day of Perception, TNO, Soesterberg. The Netherlands. (*plenary talk*).
- Van Lier, R., & Vergeer, M. (2007). Filling in the afterimage after the image. European Conference on Visual Perception. Arezzo, Italy.
- Van Lier, R., & Vergeer, M. (2008). Filling in the afterimage after the image. Best illusion of the year competition. Naples, Florida, (USA).
- Van Lier, R., Vergeer, M., & Anstis (2008). Mixing in the afterimage colors. European Conference on Visual Perception. Utrecht, The Netherlands.
- Van Lier, R. (2009). Morphing morphing faces. European Conference on Visual Perception. Regensburg, Germany.
- Van Lier, R. (2010). Edges of Filling-in. Symposium on Perception and Cognition. Trieste, Italy.
- Van Lier, R. (2010). Filling in the gaps. Nijmegen-Köln meeting on retinal diseases (*Invited talk*).
- Van Lier, R. (2011). Illusory vision: modal versus amodal. Day of Perception. Eindhoven, The Netherlands. (*plenary talk*).
- Van Lier, R. (2011). Illusory vision. University of Leuven. Leuven, Belgium (*Invited talk*).
- Van Lier, R., & Koning, A. (2011). The more-or-less morphing face illusion. Best illusion of the year competition. Naples, Florida, (USA).
- Van Lier, R. & Hazenberg, S.J. (2011) . Afterimage watercolors. European Conference on Visual Perception. Toulouse, France.
- Van Lier, R. (2012). Illusory Vision. Utrecht University, Utrecht the Netherlands (*Invited talk*).
- Van Lier, R. (2012). Filling-in Vision. Symposium "Experimental methods in perceptual Organization" at TEAP. Mannheim, Germany (*Invited talk*).
- Van Lier (2012). Visual illusions. Symposium "Wahrnehmung - a public outreach event". Kaiserslautern, Germany (*Invited talk*).
- Van Lier, R., & Koning, A. (2012). The dynamics of fading and afterimages in contemporary art. Visual Science of Art Conference, Alghero, Italy.
- Van Lier, R. (2012). Gestalt influences in modal and amodal completion. European Conference on Visual Perception. Alghero, Italy.

Van Lier, R. (2013). Perception and Awareness. Conference of the Dutch Ophthalmology PhD-Students. Nijmegen (“DOPS lecture 2013”, *Invited*).

Van Lier, R. (2013). Illusory Vision: Filling in of colors and forms. Yearly conference of the Applied Vision Association (AVA). Manchester, UK (*Keynote lecture, Invited*).

Van Lier, R. (2013). Filling in Vision. Lecture at EPFL, Lausanne, Switzerland (*Invited talk*).

Van Lier, R. (2013). Filling in Illusions. Lecture at Workshop Illusions & Delusions, The Barn, Lingelrode Germany (*Invited talk*).

Van Lier, R., Uglu, U., & Koning (2013). Appreciation of afterimages in contemporary art: an eye movement study. European Conference on Visual Perception. Bremen, Germany.

Van Lier, R. (2014). Filling-in Visual appearances. Lecture at the Ludwig Maximilians University Munich (*Invited talk*).

Van Lier, R. (2014). Amodal completion: A conceptual playground between perception and cognition. European Conference on Visual Perception, Belgrade, Serbia

Van Lier, R., & Koning, A. (2014). The influence of auditory tonality on the judged beauty of paintings. Visual Science of Art Conference, Belgrade, Serbia

Van Lier, R. (2015). Filling in illusory appearances. Tokyo symposium on optical illusion 2015. Tokyo, Japan. (*Invited talk*)

#### **Published/refereed conference abstracts (as from 2005)**

- De Weert, Ch.M.M., Koning, A., & Van Lier, R. (2005). Context effects in assimilation and contrast. *Perception*, 34S, 100B
- De Wit, T.C.J., Schlooz, W. A. J. M., Hulstijn, W., & van Lier, R. (2005). Visual completion in children with pervasive developmental disorder: Effects of shape complexity. *Journal of Vision*, 5(8), 296a
- De Wit, T., Bauer, M., Oostenveld, R., Fries, P., & Van Lier, R. (2005) Contextual influences in amodal completion: Evidence from magnetic brain responses. *Perception*, 34S, 165.
- Koning, A. & Van Lier, R. (2005) In search for segmentation. *Journal of Vision*, 5(8), 957a.
- Lommertzen, J, Meulenbroek, R., Van Lier, R., & Bekkering, H. (2005). Constant effects of the rod-and-frame illusion on delayed perceptuomotor tasks. *Perception*, 34S, 244.
- Van Lier, R., De Wit, T.C.J., & Koning, A (2005) (Con-)fusing contours. *Perception*, 34S, 166A.
- Vergeer, M., & Van Lier, R. (2005). Flash-induced fading: Dependence on colour and shape similarity. *Perception*, 34S, 210
- De Wit, T.C.J., Vrins, S., Dejonckheere, P., & Van Lier, R. (2006). Form perception of partly occluded shapes in infants. *Perception*, 35S, 92.
- Lommertzen, J., Meulenbroek, R., & Van Lier, R. (2006). Grasping completions: Towards a new paradigm. *Perception*, 35S, 150.
- VanLier, R., & Vergeer, M. (2006). Catching Patches: Filling-in between edges. *Perception*, 35S, 47.
- Vergeer, M.L.T., Von Schmid, J.C.M., & Van Lier, R. (2006). Change Blindness: Effects of changing the location of change. *Perception*, 35S, 162.
- Vrins, S., De Wit, T.C.J., & Van Lier, R. (2006). Amodal completion of natural objects: Effects of material properties. *Perception*, 35S, 107.
- De Wit, T.C.J., Van Lier, R., Swinkels, S., & Buitelaar, J. (2007). Visual Scanning in children with autistic spectrum disorder: The role of symmetry. *Perception*, 36S, 139.
- Van Lier, R., & Vergeer, M.L.T. (2007). Filling in the afterimage after the image. *Perception*, 36S, 200-201.
- Vrins, S., Van Lier, R., & De Wit, T.C.J. (2007). Do eye-movements anticipate the most likely outcome of conditional events? *Perception*, 36S, 32.
- Vergeer, M.L.T., & Van Lier, R. (2007). Breaking down the Benary Cross. *Perception*, 36S, 83.
- Vergeer, M.L.T., & Van Lier, R. (2007). Similarity in orientation triggers the unseen to be seen during dichoptic suppression. *Journal of Vision* 7(9): 804, 804a.
- Anstis, S., Vergeer, M., & Van Lier, R. (2008). Color averaging linked to contours, textures and orientation. *Journal of Vision*, 8(6):1102, 1102a.
- Vergeer, M., Anstis, S., & Van Lier, R. (2008). Spatial averaging of afterimages between contours. *Journal of Vision*, 8(6):589, 589a.
- Van Lier, R., Vergeer, M., & Anstis, S. (2008). Mixing in the afterimage colors. *Perception*, 37S, 84.
- Vergeer, M.L.T., & Van Lier, R. (2008). Feature-selective inhibition during binocular rivalry. *Perception*, 37S, 142-143.
- Van Lier R. (2009). Morphing morphing faces. *Perception*, 38S, 80

- Atsma, J., Koning, A., & Van Lier, R. (2011). Tracking bouncing balls: Default linear motion extrapolation. *Perception*, 40S, 90.
- Hazenberg, S.J., Jongsma, M., Koning, A., & Van Lier, R. (2011). Differential effects of learning in amodal completion. *Perception*, 40S, 125.
- Ter Horst, A.C., Van Lier, R., & Steenbergen, B. (2011). Action simulation in peripersonal space. *Perception* 40S, 225.
- Van Lier R., & Hazenberg, S.J. (2011). Afterimage watercolours. *Perception*, 40S, 200.
- Vrins, S., Koning, A., Atsma, J., & Van Lier, R. (2011). Moving in the same direction: Allocation of attention to occluded targets. *Perception*, 40S, 108.
- Van Lier, R. (2012) Gestalt influences in modal and amodal filling-in *Perception* 41S, 2.
- Loing, A., van Lier, R., Koning, A., & De Lange, F. (2012). Neural activity in category-selective regions is modulated by both subjective and physical disappearance. *Perception* 41S, 132.
- Hazenberg, S., Jongsma, M., Koning, A., & Van Lier, R. (2012). Effects of learning in amodal completion: an EEG study. *Perception* 41S, 216.
- Van Lier, R., & Koning, A., (2012) The dynamics of fading and afterimages in contemporary art. *VSAC*.
- Koning, A., & Van Lier, R., (2012). Listening to paintings. *VSAC*.
- Chotsrisuparat C., Koning A., & van Lier R, (2013), Saccades cause compression of time perception in the tunnel effect. *Perception* 42 ECVF Abstract Supplement, 181
- Hazenberg S., & Van Lier R., (2013), Extending the watercolour illusion: differential effects of real colours versus afterimage colours. *Perception* 42 ECVF Abstract Supplement, 110
- Koning A, & Van Lier R, (2013), Effects of music on visual art: an eye movement study. *Perception* 42 ECVF Abstract Supplement, 103.
- Leenders M P, Koning A, & Van Lier R, (2013), Active control enhances anticipatory motion extrapolation during multiple object tracking. *Perception* 42 ECVF Abstract Supplement, 50
- McCoy B, van Lier R, (2013), "Teasing apart the effects of synesthetic congruency on temporal order judgements" *Perception* 42 ECVF Abstract Supplement, 1
- van Lier, R., Guclu U., & Koning A. (2013), Appreciation of afterimages in contemporary art: an eye movement study. *Perception* 42 ECVF Abstract Supplement, 104
- Yun X, Hazenberg S, van Lier R, Qiu J, (2013), Neural correlates of local and global characteristics in the Fraser illusion. *Perception* 42 ECVF Abstract Supplement, 97
- Van Lier, R., & Ekroll, V. (2014). Amodal completion: Michotte's legacy and new directions fifty years after 'Les compléments amodaux' *Perception*, 43, S113
- Van Lier, R. (2014). Amodal completion: A conceptual playground between perception and cognition *Perception*, 43, S114
- Chotsrisuparat, C., Koning, A., & Van Lier, R. (2014). Auditory rhythms influence perceived time durations of a tunnelling object *Perception*, 43, S149
- Güçlütürk, Y., Jacobs, R., & Van Lier, R. (2014). Perceptual complexity and liking of fractal-like statistical geometric patterns *Perception*, 43, S158
- Koning, A., Leenders, M., Wolk, C., & Van Lier, R. (2014). Interactive object tracking modulates attentional distribution *Perception*, 43, S29
- Hazenberg, S., & Van Lier, R. (2014). Disentangling the influence of prior knowledge and perceptual processes on amodal completion using electrophysiological measurements. *Perception*, 43, S47
- Yun, X., Hazenberg, S., Jacobs, R, Qiu, J., & Van Lier, R. (2014). Disentangling effects of percepts and stimuli in Fraser-like displays: an explorative EEG *Perception*, 43, S82
- Jacobs, R., Y Güçlütürk, Y., & Van Lier, R. (2014). Devaluation of distractors limited to evaluations after incorrect target localization *Perception*, 43, S82