

**IDEN** INDUSTRIAL DESIGN  
EDUCATORS NETWORK



~ *issue 3*

**design research**

EDITED BY: BERTO PANDOLFO,  
MILES PARK & CHRISTIAN TIETZ



### **IDEN ISSUE #3**

[www.idenjournal.com](http://www.idenjournal.com)

Published by IDEN

© 2015 all rights reserved.

ISSN: 2200-6834

Editors: Berto Pandolfo  
Miles Park  
Christian Tietz

Designer: Briedy Mahar

Printer: Digitalpress,  
Sydney Australia

### **JOURNAL REVIEWERS**

Beck Davis

Bill Green

Blair Kuys

Cara Wrigley

Carlos Montana Hoyos

Christine Thong

Elivio Bonollo

Jennifer Loy

Jonathon Allen

Malte Wagenfeld

Oya Dimerbilek

Peter Schumacher

Selby Coxon

Shayne Beaver


Vasilije Kokotovitch

# editorial

Welcome to the third issue of IDEN: Design Research. Issue 3 continues a learning and developmental path to find its best fit for our contributing authors and readership. Each issue is reshaped to explore a chosen theme, new opportunities and possibilities. The theme for this issue is Design Research. It contains a new section of blind peer reviewed papers, examples of recently completed PhD research and recent student industrial design research. For each issue a graphic designer is commissioned to interpret the theme. Issue 3 was designed by Briedy Mahar, a trained industrial designer and highly experienced graphic designer. Briedy managed the process from initial concepts to print production, taking a product design approach in keeping with the philosophy that each print issue of IDEN is conceived as a product.

Much attention has been placed on how graphic design and production (paper stocks, inks and binding) interact to create an outcome much greater than the sum of individual parts.

Design research is carried out at various levels across a spectrum from commercial design practice to academic or philosophical enquiry. Practical solution oriented research is often part-and-parcel of daily commercial design practice, and then there is the academic research that can span from the applied to the abstract. This can involve intellectual academic endeavours that are more philosophical in nature or oriented towards investigating broader opportunities for design and its agency. But commercial and academic design practice remain united by a product development design process that is embedded, discussed or applied in various modes of design research enquiry.



In putting this issue together we note and share concerns about the quality of academic writing. Amongst many of us, design academics will quietly acknowledge that we don't relish the task of writing, reviewing and revising work for conferences and journals. We would much prefer doing design rather than reflecting upon its processes, outcomes and meaning. The rigidity of academic writing can lead, unintentionally, to a writing style and structure that is not our natural voice. Despite these observations, IDEN aims to offer industrial design educators in our region a platform to share their research. But, equally we seek to offer research that is accessible, engaging and relevant to the wider research and industrial design community.

In this issue we present three research articles. The first paper investigates women's experiences of studying industrial design at university. The second paper discusses work destinations of design graduands and how this can inform their design education. By 'closing the loop', design education can be tailored towards their eventual destinations. The editors' choice paper explores how the academic designer can articulate design research through two reflective case studies. We also feature an overview of three recently successfully completed design PhDs. Each offers us a snapshot of their approach and process to their chosen areas of research. To bookend this issue we present a small selection of recent industrial design graduate work, including the overall winner of the 2015 Hills Young Australian Design Award.

# about

## **INDUSTRIAL DESIGN EDUCATORS NETWORK [IDEN]**

IDEN has over the last several years evolved as an informal grouping of Industrial Design program heads from across Australia and New Zealand. It first formed as the Industrial Design National Network in 2005 at a meeting in Canberra hosted by Stephen Trathen. The Network discussed a range of shared concerns and initiatives around benchmarking curriculums, graduate standards and employer expectations. Its new name, IDEN, was formulated as an inclusive acronym for our NZ colleagues from across the ditch, and to include in the future the greater Asia Pacific region.

## **IDEN JOURNAL EDITORS**

Miles Park (UNSW)	<a href="mailto:milesp@unsw.edu.au">milesp@unsw.edu.au</a>
Berto Pandolfo (UTS)	<a href="mailto:berto.pandolfo@uts.edu.au">berto.pandolfo@uts.edu.au</a>
Christian Tietz (UNSW)	<a href="mailto:christian.tietz@unsw.edu.au">christian.tietz@unsw.edu.au</a>



## PEER REVIEW

- 11 STUDYING INDUSTRIAL DESIGN:**  
EXPLORING THE EXPERIENCE OF  
FEMALE STUDENTS  
Cathy Lockhardt, UTS, Sydney, Australia  
Evonne Miller, QUT, Brisbane, Australia
- 27 DISCERNING INDUSTRIAL DESIGN  
FUTURES:** HOW UNDERSTANDING  
GRADUATE STORIES CAN HELP  
Dr. Stephen Trathen,  
University of Canberra, Australia  
Dr. Soumitri Varadaraja,  
RMIT University, Australia

## EDITORS' CHOICE

- 55 ILLUMINATING DESIGN RESEARCH:**  
SHINING LIGHT ON THE ACADEMIC  
DESIGNER  
Rina Bernabei, UNSW, Australia  
Dr. Jacqueline Power, UTAS, Australia

## DOCTORAL RESEARCH

*Recently completed phd design research*

- 79 AN INVESTIGATION: OF INTERNATIONAL DESIGN AWARDS WITH RESPECT TO EVALUATION CRITERIA, RELATED SEMANTICS AND AN AUSTRALIAN CASE STUDY**  
Dr. Brandon Gien
- 83 DESIGN AND CONTEXT: AN INVESTIGATION INTO HEALTH HARDWARE FOR REMOTE AUSTRALIAN INDIGENOUS COMMUNITIES**  
Dr. Christian Tietz
- 87 A DESIGN STUDY: OF METROPOLITAN RAIL CARRIAGE INTERIOR CONFIGURATION TO IMPROVE BOARDING, ALIGHTING, PASSENGER DISPERSAL AND DWELL TIME STABILITY**  
Dr. Selby Coxon

## RECENT WORK

*Student projects*

- 92 MONASH UNIVERSITY**  
IMPALA Bike Tent, Tom Millward  
ORA, Stephanie Tan
- 94 UNSW AUSTRALIA**  
XO wearable, Pamela Ablang  
FIREFRONT, Max Glanville  
FREEDIVE, Edric Verbeek-Martin
- 97 UNIVERSITY OF SOUTH AUSTRALIA**  
WORKSTATION, Paul Townsin  
HIVE, Nick Jolly
- 99 UTS SYDNEY**  
YOLK, William Duong

