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>> *Interior design proposal for the **Hulme F1 supercar***

Kenneth Young © 2008

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Abstract

This research project focused on the development of an appropriate interior design proposal for the Hulme F1 supercar. The Hulme F1 supercar, originally designed by Hulme Supercars Ltd, draws exterior design references from contemporary Formula One Grand Prix race cars. In addition, the Hulme F1 supercar integrated visual design cues expressing luxury, high-performance and exoticness. The existing design established the package, window openings, basic controls and door architecture for this study.

Based on this material, the interior study focused on an overall aesthetic and its integration with ergonomic, technical and functional requirements. The conceptual nature of this project allowed for the inclusion of speculative and experimental design proposals that were not constrained by local contemporary manufacturing and economic issues. Consequently, the project based itself on a technological forecast of five to ten years.

Research first explored and defined several key design motifs central to the Hulme F1 supercar. This involved studies into supercars, luxury, high-performance, exoticness, contemporary Formula One Grand Prix racing and the existing exterior form language. The results from this research established initial themes for development of the interior design proposal.

A review of contemporary theory in visual product communication and experience was undertaken to identify an appropriate framework for this investigation. The research of Monö (1997), Norman (2004a) and Warell (2007) was reviewed. Review

focused on two areas; a structure appropriate for defining design criteria and a comprehensive framework for visual analysis of exemplars to identify visual design trends. The Visual Product Experience (VPE) framework by Warell offered the most appropriate visual framework for this investigation.

Using the VPE framework, a visual analysis of contemporary luxury motorcars, professional race cars and supercars was undertaken. Analysis focused on interior and interior/exterior related design trends. Findings illustrated that luxury motorcars have simple aesthetic compositions with frequent interior/exterior form element repetition. Conversely, professional race cars have complex aesthetic compositions with minimal interior/exterior form element repetition. Meanwhile, supercar interior aesthetics and appear to vary between these two spectrums depending on their overall aesthetic expression. To this end, the analysis illustrated the opposing visual qualities between luxury and high-performance.

This suggested the interior design proposal required a delicate balance between complex and simple aesthetic elements to obtain an appropriate overall visual expression. Consequently, the interior design proposal used a combination of flowing soft surfaces and complex detailing to express luxury and high-performance.

Research also established criteria for the design of interior functional systems required within the interior design proposal. Interior functional systems included control, body-support, display, storage and safety systems.

The development process for the interior design proposal consisted of iterative

design methods. This included concept generation, concept development and three-dimensional form studies. Throughout the development process, concepts were screened against design criteria in order to further direct the iterative process.

Contemporary Formula One race car illustrated an abundance of visual inspiration for the interior design proposal during the development process. Elements such as exhaust and aerodynamic wing details were referenced within the interior design proposal. The intent of this was to create visual harmony between interior and exterior aesthetics.

Research into ingress and egress found a conventionally fixed steering unit impeded participants. As a result, the final design proposed a steering unit that swung towards the centre of the interior for greater entry/exit space.

The interior design proposal was assessed by internal and external ‘design evaluation’ methods. Testing indicated that the interior design proposal had fulfilled most of the experience and performance design criteria and achieved the aim of this research.

Overall, this investigation designed an interior design proposal to compliment the exterior design of the Hulme F1 supercar. The interior design proposal was supported by visual framework developed from this research investigation. In addition, the investigation proposed functional and ergonomic solutions to support the interior design proposal.

Keywords: Supercar, aesthetics, interior, visual product experience, expression, design.

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Contents Page

1.0	Background to the study	1
1.1	Research aim	1
1.2	Central proposition	1
1.2	Research questions	2
1.3	Research objectives	2
2.0	Project scope	3
2.1	Initial design criteria	7
3.0	Background research	8
3.1	Hulme F1 supercar motifs	9
3.2	Contemporary theory on visual product experience	30
3.3	Contemporary aesthetic motorcar exemplars	40
3.4	Functional systems	51
3.5	Background research conclusion	73
4.0	Experience and performance design criteria	76
5.0	Design research	80
5.1	Research approach	81
5.2	Research methods	82
6.0	‘Research for design’ results and discussion	86
6.1	Immersive experience	86
6.2	Ergonomic investigation	91
6.3	Illustrated storyboards	105
6.4	‘Research for design’ conclusion	110

7.0	‘Research through design’ results and discussion	111
7.1	Final design	122
7.2	Cross-section drawings	126
7.3	Final aesthetic model (1:2 scale)	127
7.4	Interior design proposal user storyboard	136
7.5	Reflection on the ‘research through design’ process	138
8.0	‘Design evaluation’ results and discussion	140
8.1	Final design evaluated against design criteria	140
8.2	Qualitative questionnaire study	148
9.0	Conclusion to the study	152
10.0	Recommended areas for further research	153
11.0	Reference list	154
12.0	Bibliography	166
13.0	Glossary	168
Appendix 1	VPE analysis of exemplars	170
Appendix 2	Questionnaire and reference imagery	188
Appendix 3	Questionnaire study ethics approval	194
Appendix 3	Originality declaration	196
Appendix 4	Library declaration	198

List of Figures

Figure 001:	<i>Reading guide</i>xiv	Figure 017:	<i>Imageboard of ‘high-performance’ sporting products</i>18
Figure 002:	<i>(Above) Hulme F1 supercar exterior body – (Below) Hulme F1 supercar package. (Supercarsnz, 2006)</i>1	Figure 018:	<i>Outback Chainless Mountain bike. (Uncrate, 2007)</i>18
Figure 003:	<i>(Above) Interior cabin dimensions – (Below) Hulme F1 supercar package</i>3	Figure 019:	<i>Differing levels of ‘high-performance’</i>19
Figure 004:	<i>Hulme F1 supercar window openings</i>4	Figure 020:	<i>Visual expression against vehicle dynamic performance</i>19
Figure 005:	<i>Interior mockups of the Hulme F1 interior cabin</i>5	Figure 021:	<i>Example of a motorcar modified with aftermarket parts. (Autosalon, 2006)</i>20
Figure 006:	<i>(Left) Denny Hulme – (Right top) McLaren M6A (1967) – (Right bottom) McLaren M14A (1970)</i>5	Figure 022:	<i>Bugatti Veyron 16:4 (Seriouswheels, 2006a)</i>20
Figure 007:	<i>Luxury and exotic goods the target end user would use or purchase</i>6	Figure 023:	<i>The opposing qualities of “luxury” and “high-performance”</i>21
Figure 008:	<i>Background research stages</i>10	Figure 024:	<i>Key design elements which distinguish F1 race cars from road cars</i>22
Figure 009:	<i>Contemporary examples of ‘supercars’</i>11	Figure 025:	<i>Inspirational design features from contemporary Formula One race cars</i>23
Figure 010:	<i>Hulme F1 supercar. (Supercarsnz, 2006)</i>12	Figure 026:	<i>A generalised F1 racing storyboard</i>24
Figure 011:	<i>Exploration into the term ‘exoticness’</i>13	Figure 027:	<i>Hulme F1 supercar exterior form language makes strong reference to contemporary F1 race cars and is predominantly composed of a coherent family of curves (highlighted in green)</i>26
Figure 012:	<i>Exploration into the term ‘luxury’</i>14	Figure 028:	<i>The desired qualities for the interior design proposal</i>28
Figure 013:	<i>Examples of chairs which express luxury in different ways</i>14	Figure 029:	<i>Repeated Hulme F1 supercar exterior form language</i>29
Figure 014:	<i>Continuum of ‘Luxury’</i>15	Figure 030:	<i>Understanding product communication through semiotics. (Monö, 1997)</i>31
Figure 015:	<i>Unintended interpretation of a the Mercedes-Benz hood ornament logo</i>16	Figure 031:	<i>Three Levels of Emotional Design (Norman, 2004a, p.22)</i>33
Figure 016:	<i>The desired qualities of ‘luxury’ in context to this investigation</i>17		

Figure 032:	<i>1961 Jaguar E-type</i> (4Car, 2005).....	34			<i>expressions within the interior design proposal</i>	50
Figure 033:	<i>Visual Product Experience framework</i> (Warell, 2007).....	35	Figure 050:		<i>Term specific features for motorcar interior</i>	51
Figure 034:	<i>Design Format Matrix</i> (Warell, 2001, p.125).....	36	Figure 051:		<i>Audi RS4 Primary control systems (Steering wheel and foot pedals)</i> . (Diseno-art, 2005).....	52
Figure 035:	<i>Levels of visual form structure</i> (Warell, 2001, p.195).....	37	Figure 052:		<i>Left foot brake pedal</i> . (Skene, n.d).....	53
Figure 036:	<i>VPE framework applied to the Hulme F1 supercar</i>	39	Figure 053:		<i>General Motors Hy-Wire Concept Car primary control system</i> . (Howstuffworks, 2002).....	54
Figure 037:	<i>Mercedes-Benz S-Class (2006)</i> . (Seriouswheels, 2006b).....	41	Figure 054:		<i>Secondary control systems</i> . (Bkkautos, 2006).....	55
Figure 038:	<i>Bentley Flying Spur (2005)</i> . (Seriouswheels, 2005a).....	41	Figure 055:		<i>Secondary control systems</i> . (Lidwell et al. 2003.).....	55
Figure 039:	<i>Audi RS4 Quattro (2005)</i> . (Seriouswheels, 2005b).....	41	Figure 056:		<i>Symbols in ISO Standard 2575</i> . (Peacock and Karwoski. 1993, pp.240-241).....	56
Figure 040:	<i>Design format analysis of ‘luxury’ exemplars</i>	42	Figure 057:		<i>“Try hitting the button for station 6, while driving at high speeds in this sports car”</i> . (Norman, 2004c).....	56
Figure 041:	<i>Bentley speed 8 (2003)</i> . (7extrememotorsports, 2003).....	44	Figure 058:		<i>Various state-of-the-art configurations for secondary controls</i>	57
Figure 042:	<i>Porsche RS Spyfer (2007)</i> . (Autocult, 2007).....	44	Figure 059:		<i>Various contemporary road car and racing car display features</i>	58
Figure 043:	<i>Design format analysis of ‘luxurious’ and ‘high-performance’ exemplars</i>	45	Figure 060:		<i>Various innovations in in-car display design</i>	59
Figure 044:	<i>Ferrari Enzo (2002)</i> . (Seriouswheels, 2002).....	46	Figure 061:		<i>Toyota Corolla indirect vision system design feature</i> . (Bkkautos, 2006).....	60
Figure 045:	<i>Pargani Zonda F (2005)</i> . (Seriouswheels, 2005c).....	46	Figure 062:		<i>Hulme F1 supercar window openings</i>	60
Figure 046:	<i>Bugatti Veyron 16:4 (2006)</i> . (Seriouswheels, 2006a).....	46	Figure 063:		<i>State-of-the-art design features and technologies which aid direct and indirect vision</i>	61
Figure 047:	<i>Design format analysis of ‘luxurious’, ‘high-performance’ and ‘exotic’ exemplars</i>	47				
Figure 048:	<i>Above illustrates each exemplar positioned relatively accordingly to their expression, visual composition and form element repetition</i>	49				
Figure 049:	<i>The implications of this analysis on the desired qualities and</i>					

Figure 064:	<i>Comparison of eariler ergonomic research on the Hulme F1 supercar against ergonomic literature from Dreyfuss (2002).....</i>	62	Figure 082:	<i>Formula Challenge racing experience.....</i>	89
Figure 065:	<i>Common types of body support systems.....</i>	63	Figure 083:	<i>1:1 Scale interior buck, bucket seat and steering unit used for ergonomic testing.....</i>	91
Figure 066:	<i>Evaluation of the common types of body support systems.....</i>	64	Figure 084:	<i>Ergonomic test for posture and spatial requirements: participant one.....</i>	92
Figure 067:	<i>Pagani Zonda F Roadster offset driving position. (Autodrome, n.d.).....</i>	65	Figure 085:	<i>Ergonomic test for posture and spatial requirements: participant two.....</i>	93
Figure 068:	<i>Two light method. (Peacock and Karwowski, 1993. p.91).....</i>	65	Figure 086:	<i>Door sill could potentially be used as an arm rest.....</i>	93
Figure 069:	<i>RealFlex concept seat. (IAV, 2004b).....</i>	66	Figure 087:	<i>Static and dynamic reach for a range of users.....</i>	94
Figure 070:	<i>Interior buck ergonomic testing (Nye, et al, 1999, p.87).....</i>	67	Figure 088:	<i>Driver vision boundaries cast by ‘two light’ method.....</i>	95
Figure 071:	<i>Interior buck entry/exit space.....</i>	68	Figure 089:	<i>‘Two light’ instrument developed to investigate trends in driver FOV.....</i>	95
Figure 072:	<i>Common in-car storage features.....</i>	69	Figure 090:	<i>Initial vision boundary tape line results from testing.....</i>	96
Figure 073:	<i>Innovative in-car storage features.....</i>	69	Figure 091:	<i>Final vision boundary tape line results from testing.....</i>	96
Figure 074:	<i>Range of safety system components commonly found in contemporary motorcars. (Autoblog, 2005).....</i>	70	Figure 092:	<i>Trend in driver FOV with different eye heights.....</i>	97
Figure 075:	<i>Airbag units are compact enough to fit into many interior spaces. (MSN-Autos, 2005).....</i>	70	Figure 093:	<i>Testing of visual obstructions within the drivers FOV.....</i>	97
Figure 076:	<i>Common deflection features highlighted in yellow. (Automobiles, 2005).....</i>	71	Figure 094:	<i>Testing of visual obstructions within the drivers FOV.....</i>	97
Figure 077:	<i>The desired qualities and expressions within the interior design proposal.....</i>	74	Figure 095:	<i>Rear vision display mockup in position 1,2 and 3.....</i>	98
Figure 078:	<i>Overall research approach.....</i>	81	Figure 096:	<i>Rear vision display mockup in position 4 and 5.....</i>	99
Figure 079:	<i>Types of research methods used in this investigation.....</i>	82	Figure 097:	<i>Areas identified as appropriate for storage design features.....</i>	101
Figure 080:	<i>The Saker GT.....</i>	87	Figure 098:	<i>Investigation into ingress and egress.....</i>	102
Figure 081:	<i>Ingress and egress was made easier with a steering wheel which horizontally shifted towards the centre of the cabin.....</i>	87	Figure 099:	<i>Investigation into door handle positions.....</i>	103
			Figure 100:	<i>Potential areas for entry/exit support surfaces and door</i>	

	<i>handles.....</i>	103	Figure 121:	<i>Interior design proposal cross-section drawings.....</i>	126
Figure 101:	<i>Front, side and plan ergonomic drawings for the interior design proposal.....</i>	104	Figure 122:	<i>Interior design proposal aesthetic model – view 1.....</i>	127
Figure 102:	<i>Typical user experience storyboard – part 1.....</i>	106	Figure 123:	<i>Interior design proposal aesthetic model – view 2.....</i>	128
Figure 103:	<i>Typical user experience storyboard – part 2.....</i>	107	Figure 124:	<i>Interior design proposal aesthetic model – view 3.....</i>	129
Figure 104:	<i>Proposed F1 user experience storyboard – part 1.....</i>	108	Figure 125:	<i>Interior design proposal aesthetic model – view 4.....</i>	130
Figure 105:	<i>Proposed F1 user experience storyboard – part 2.....</i>	109	Figure 126:	<i>Interior design proposal steering column adjustability and storage compartments.....</i>	131
Figure 106:	<i>Additional performance design criteria.....</i>	110	Figure 127:	<i>Interior design proposal aesthetic model – steering column.....</i>	132
Figure 107:	<i>Initial concept sketching.....</i>	112	Figure 128:	<i>Interior design proposal aesthetic model – foot pedals.....</i>	133
Figure 108:	<i>Selection of a concept for further development.....</i>	113	Figure 129:	<i>Interior design proposal aesthetic model – overhead systems.....</i>	134
Figure 109:	<i>Resolving design issues.....</i>	114	Figure 130:	<i>Interior design proposal aesthetic model – design details and their sources of inspiration.....</i>	135
Figure 110:	<i>Further resolution of design issues.....</i>	115	Figure 131:	<i>Interior design proposal user storyboard – part 1.....</i>	136
Figure 111:	<i>Development of control interfaces, displays, trim and colour selection.....</i>	116	Figure 132:	<i>Interior design proposal user storyboard – part 2.....</i>	137
Figure 112:	<i>Further development of the interior design proposal.....</i>	117	Figure 133:	<i>Evaluation of interior design proposal results summary.....</i>	146
Figure 113:	<i>Development through aesthetic modelling.....</i>	118	Figure 134:	<i>Results for questions 1–3.....</i>	148
Figure 114:	<i>Full scale form study of the concept interior design proposal.....</i>	119	Figure 135:	<i>Results for question 4.....</i>	149
Figure 115:	<i>Development of foot wells and ergonomic testing.....</i>	120	Figure 136:	<i>Interior design proposal and the Hulme F1 supercar exterior.....</i>	152
Figure 116:	<i>Further development of design details.....</i>	121			
Figure 117:	<i>Final design – Interior cabin.....</i>	122	Figure A01:	<i>VPE analysis template.....</i>	169
Figure 118:	<i>Final design – Cabin rear and seats.....</i>	123	Figure A02:	<i>Mercedes-Benz S-Class. (Seriouswheels, 2006b).....</i>	170
Figure 119:	<i>Final design – steering column.....</i>	124	Figure A03:	<i>VPE analysis of the Mercedes-Benz S-Class.....</i>	171
Figure 120:	<i>Final design – displays and controls.....</i>	125			

Figure A04:	<i>Bentley Flying Spur.</i> (Seriouswheels, 2005a).....	172
Figure A05:	<i>VPE analysis of the Bentley Flying Spur</i>	173
Figure A06:	<i>Audi RS4.</i> (Seriouswheels, 2005b).....	174
Figure A07:	<i>VPE analysis of the Audi RS4</i>	175
Figure A08:	<i>Bentley Speed 8 (2003).</i> (7extrememotorsports, 2003).....	176
Figure A09:	<i>VPE analysis of the Bentley Speed 8</i>	177
Figure A10:	<i>Porsche RS Spyder.</i> (Autocult, 2007).....	178
Figure A11:	<i>VPE analysis of the Porsche RS Spyder</i>	179
Figure A12:	<i>Ferrari Enzo.</i> (Seriouswheels, 2002).....	180
Figure A13:	<i>VPE analysis of the Ferrari Enzo</i>	181
Figure A14:	<i>Pagani Zonda F.</i> (Seriouswheels, 2005c).....	182
Figure A15:	<i>VPE analysis of the Pagani Zonda F</i>	183
Figure A16:	<i>Bugatti Veyron 16:4.</i> (Seriouswheels, 2006a).....	184
Figure A17:	<i>VPE analysis of the Bugatti Veyron 16:4</i>	185
Figure A18:	<i>Questionnaire – page 1</i>	187
Figure A19:	<i>Questionnaire – page 2</i>	187
Figure A20:	<i>Questionnaire – page 3</i>	188
Figure A21:	<i>Questionnaire – page 4</i>	188
Figure A22:	<i>Questionnaire – page 5</i>	189
Figure A23:	<i>Questionnaire – page 6</i>	189
Figure A24:	<i>Reference imagery – page 1</i>	190
Figure A25:	<i>Reference imagery – page 2</i>	190
Figure A26:	<i>Reference imagery – page 3</i>	191
Figure A27:	<i>Reference imagery – page 4</i>	191

List of tables

Table 001:	<i>Experience design criteria – part 1.....</i>	76
Table 002:	<i>Experience design criteria – part 2.....</i>	77
Table 003:	<i>Performance design criteria – part 1.....</i>	78
Table 004:	<i>Performance design criteria – part 2.....</i>	79
Table 005:	<i>Description of each ‘research for design’ methods used in this investigation.....</i>	83
Table 006:	<i>Description of each ‘research through design’ methods used in this investigation.....</i>	84
Table 007:	<i>Description of each ‘design evaluation’ methods used in this investigation.....</i>	85
Table 008:	<i>Design evaluation testing of interior design proposal – part 1.....</i>	141
Table 009:	<i>Design evaluation testing of interior design proposal – part 2.....</i>	142
Table 010:	<i>Design evaluation testing of interior design proposal – part 3.....</i>	143
Table 011:	<i>Design evaluation testing of interior design proposal – part 4.....</i>	144
Table 012:	<i>Design evaluation testing of interior design proposal – part 5.....</i>	145

Reading guide

The overall purpose of this written component is to compliment, document and present creative design work undertaken during this study. Research data is analysed and discussed to inform the design process of issues relating to perception, functionality and ergonomics. Ultimately, this written component provides background support and context for the decisions made during design work.

This written component is structured into 13 main sections. For an overview of this written component, the content of each section is also outlined within Figure 001.

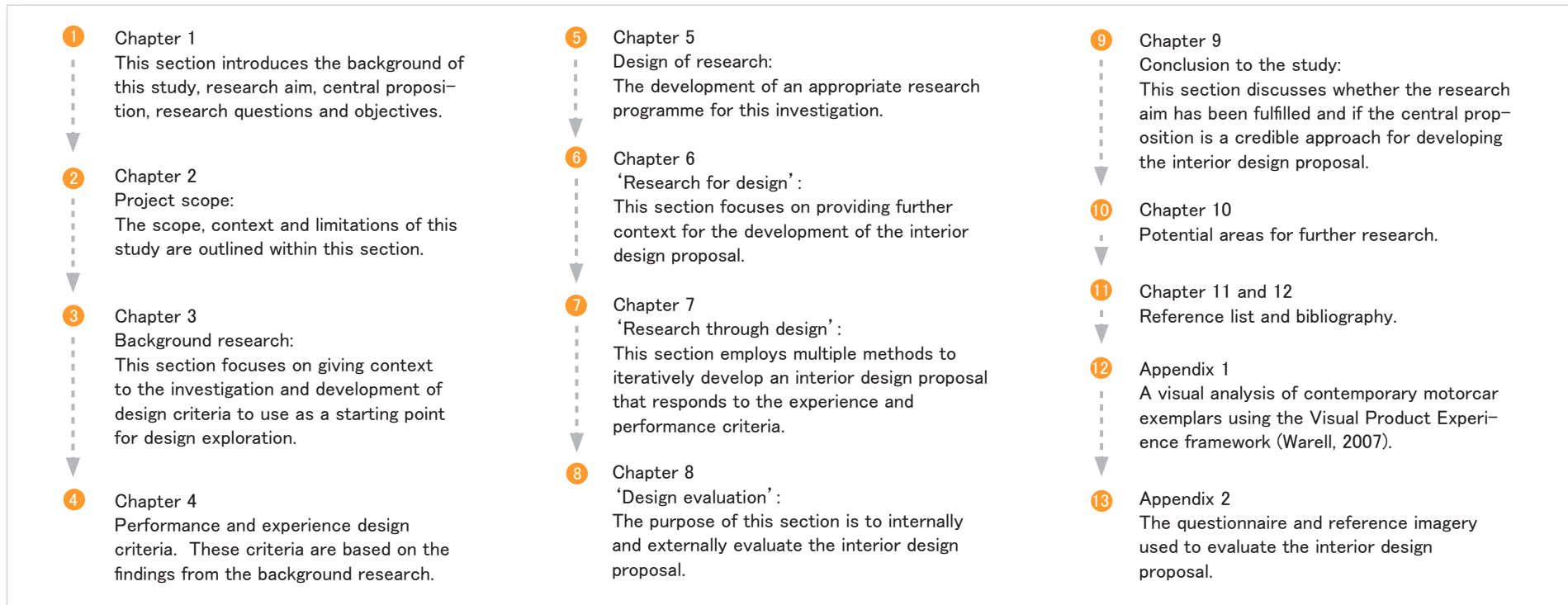


Figure 001. Reading guide.