

# AXIS

Concepts on the horizon

June  
2011  
vol.151

feature  
**Breakthroughs in Design**  
cover interview  
**Anthony Dunne & Fiona Raby**

特集  
**デザインのブレークスルー**

表紙インタビュー

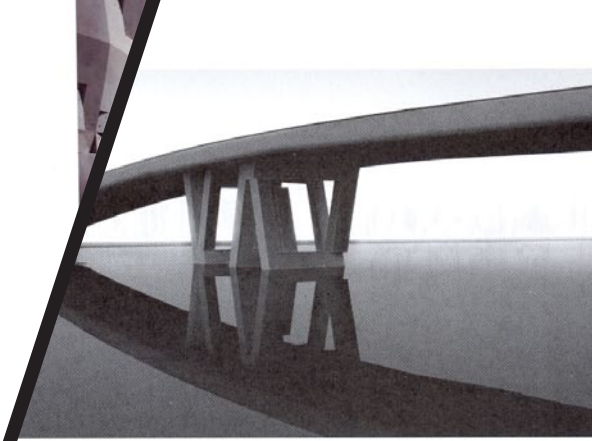
**アンソニー・ダン  
&  
フィオナ・レイビー**



クアドロール開発のきっかけとなった  
スワロフスキーのフロアシャンデリア。  
The Swarovski floor chandelier that  
inspired development of QuaDror.



クアドロール・ウォール  
QuaDror wall.



多様な用途とスケールに対応する構造ユニット  
スタジオ・ドロール「クアドロール」

QuaDror by Studio Dror—A structural

applicability derives from

Emergency housing in disaster areas

シンプルであるが

ニューヨークを視  
開発した「クアドロ  
ティションであり  
やテーブルを支  
用途を持つシ  
クアドロール  
するのは、  
L字型パーツの  
れぞれが広く手  
として機能はス  
平らな点でも、  
にはなるものだ  
もなり、簡  
果たすという

異なったパート  
性を探求してい  
結ぶ。このシステ  
用方法などで16のバ  
地域や国ごとにライ  
法によって、応用を広  
(山口 龍子)

developed by Studio Dror based in New York is a system with diverse uses, such as partitions, and trestles that support tables or bridges. Dror has an extremely simple configuration of identical L-shaped pieces. A special geometry allows those L-shaped pieces to interlock and function together as an autonomous structural element. Depending on the material used and thickness, QuaDror can be stored and transported as a flat object and opened up into a three-dimensional structure to accomplish its purpose.

Dror Benschtrit of Studio Dror says structural engineers were skeptical when he first showed them this system. They thought something had to be missing, and were very surprised when its strength was verified through computer analysis.

Benschtrit says he got the idea when he was designing a lamp for Swarovski. He was searching for a way to get two small wooden square frames to function as a structural element. Benschtrit was looking for a lamp design that wouldn't divide a space into inside and outside. After attempting various solutions, he finally came upon a geometry in which the corners of the frame interlocked and supported each other. Although the lamp was small—it's a cubic form with one meter high sides—as Benschtrit proceeded to analyze the system with the structural engineers he realized that it had hundreds of applications, from small objects to large structural elements.

Large QuaDror elements, for example, can be used as sound barriers along highways, in which case a pin-shaped element is necessary to secure neighboring units to each other. They can also be employed as support trestles for bridges. When the elements are made of concrete or steel, a casting method is used in their manufacture. Other applications most certainly include partitions or decorative walls for rooms. The pieces can also be cut from sheets of thin material.

Benschtrit is most excited about the use of QuaDror in emergency housing in disaster areas. A simple house can be built quickly by setting up two QuaDror elements, placing wall material on the inside and covering the top with roofing material.

Although Studio Dror has emergency housing projects underway in earthquake devastated Haiti, as of late March at the time of the reporting, Benschtrit said he was also searching for a way to help victims of the Tohoku Earthquake. Interestingly, Benschtrit's QuaDror Home kit is compact enough that 1,750 of them can be transported in a single forty-foot container.

QuaDror's expandability, both in terms of scale and usefulness to society, is a major leap for Studio Dror. QuaDror can become a considerable plus to society by serving as infrastructure at larger scales and by fulfilling its purpose conveniently and with a minimum use of materials. According to Benschtrit, it's for that very reason he wants to enter into unprecedented partnerships and explore the possibilities of QuaDror. (Text by Noriko Takiguchi)

ドロール・ベンシュトリット  
Dror Benschtrit.

