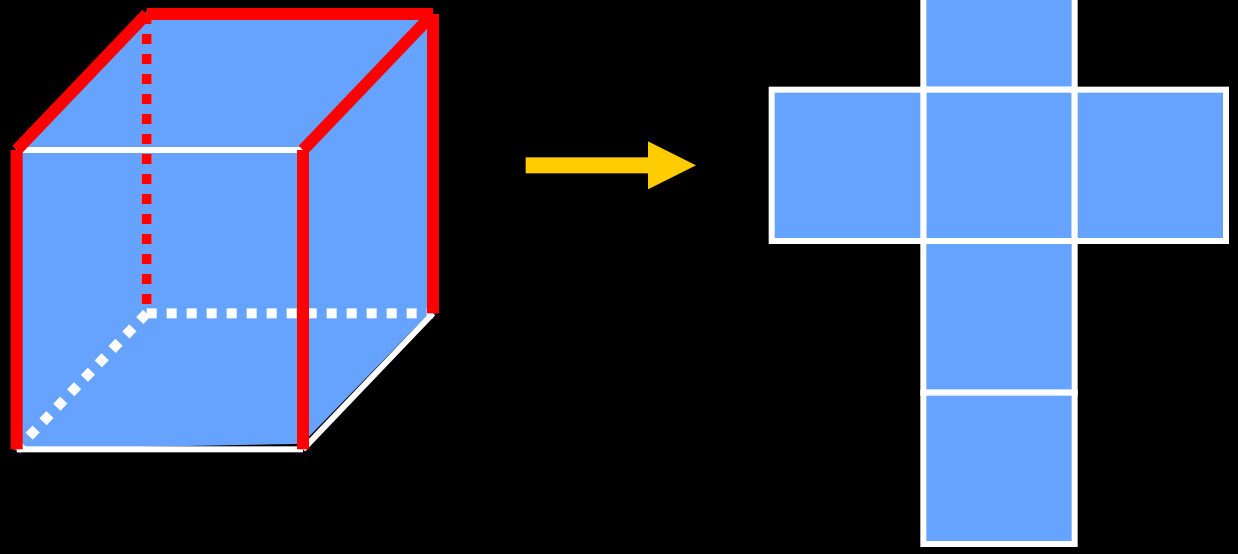
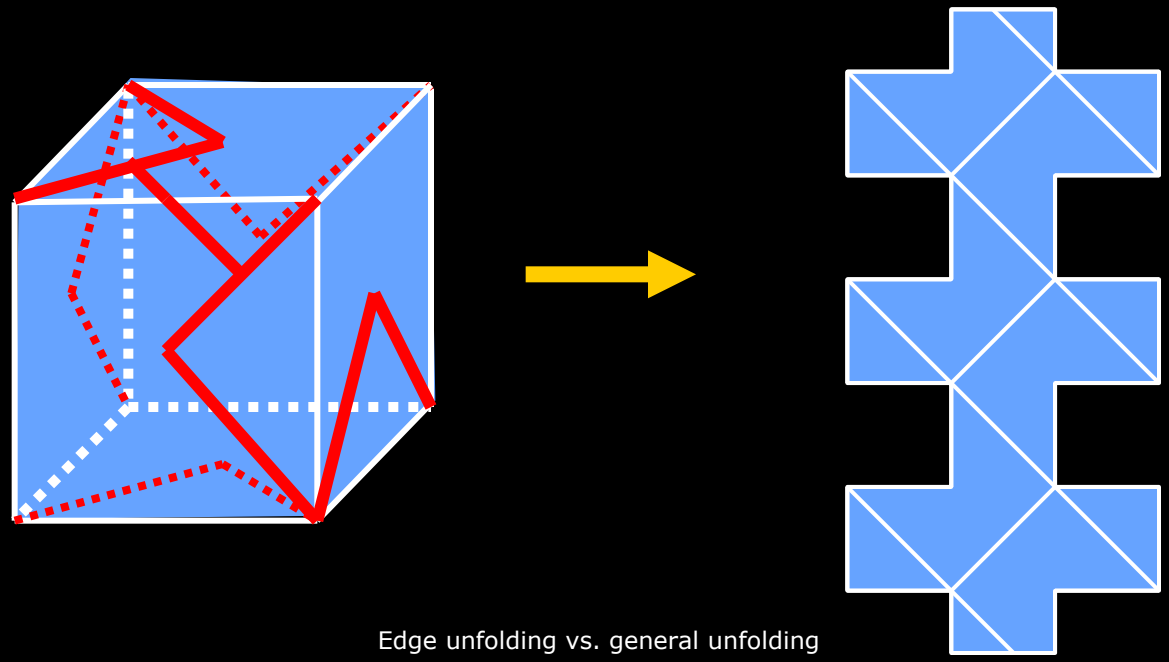




Edge unfolding vs. general unfolding

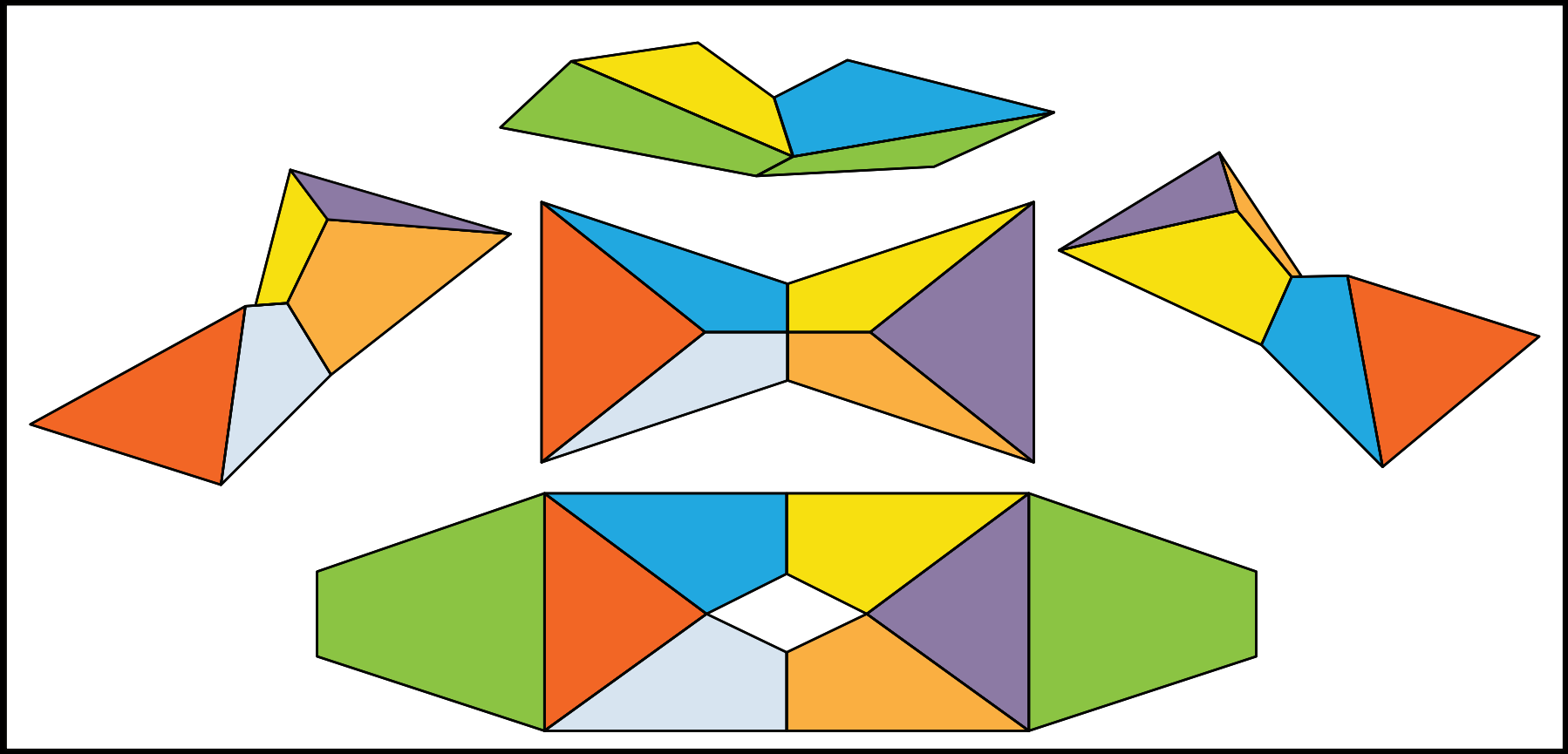
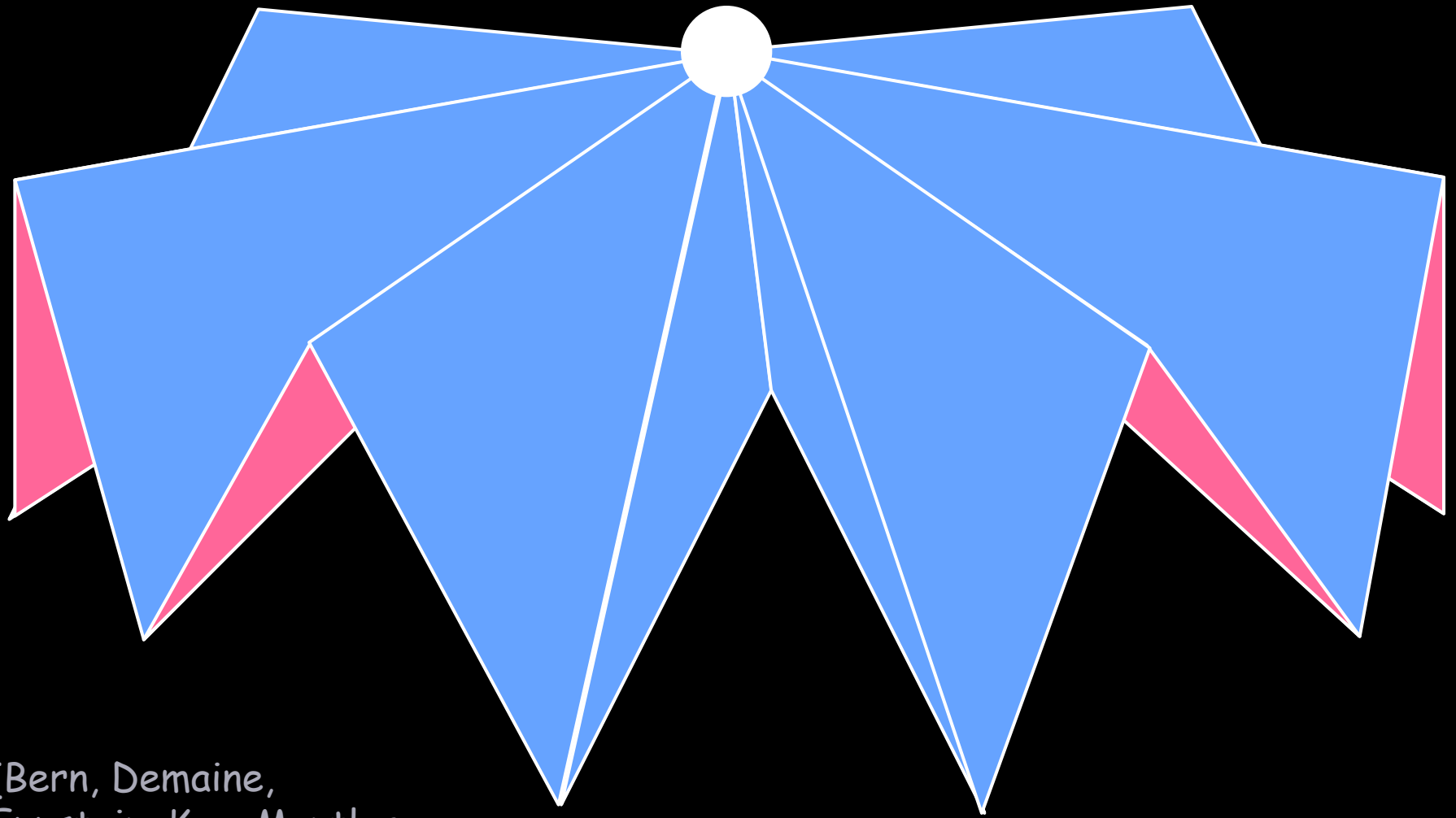
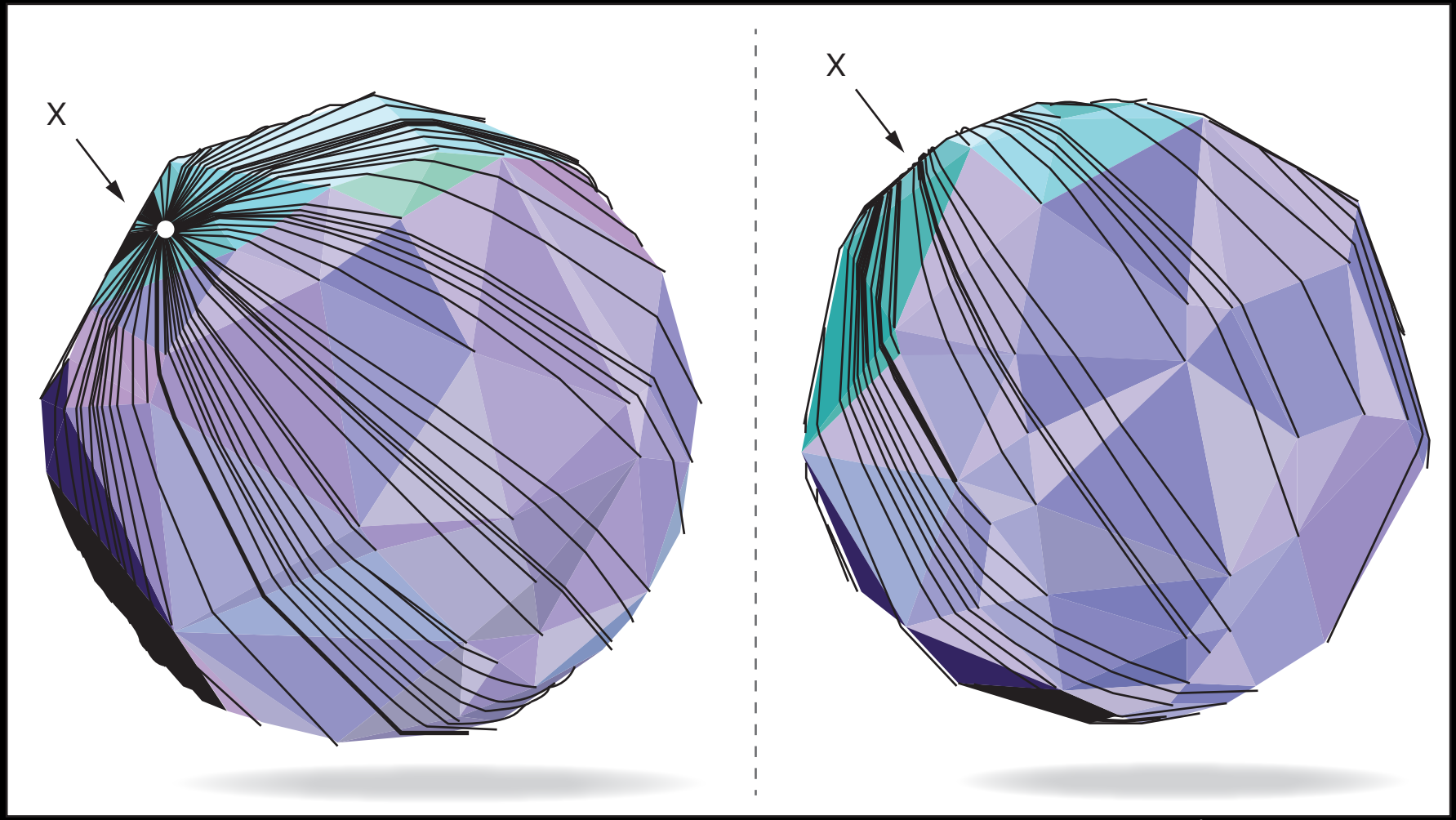


Image by MIT OpenCourseWare.
See also: http://erikdemaine.org/papers/Ununfoldable/.

[Bern, Demaine,
Eppstein, Kuo, Mantler,
Snoeyink 2003]



[Bern, Demaine,
Eppstein, Kuo, Mantler,
Snoeyink 2003]



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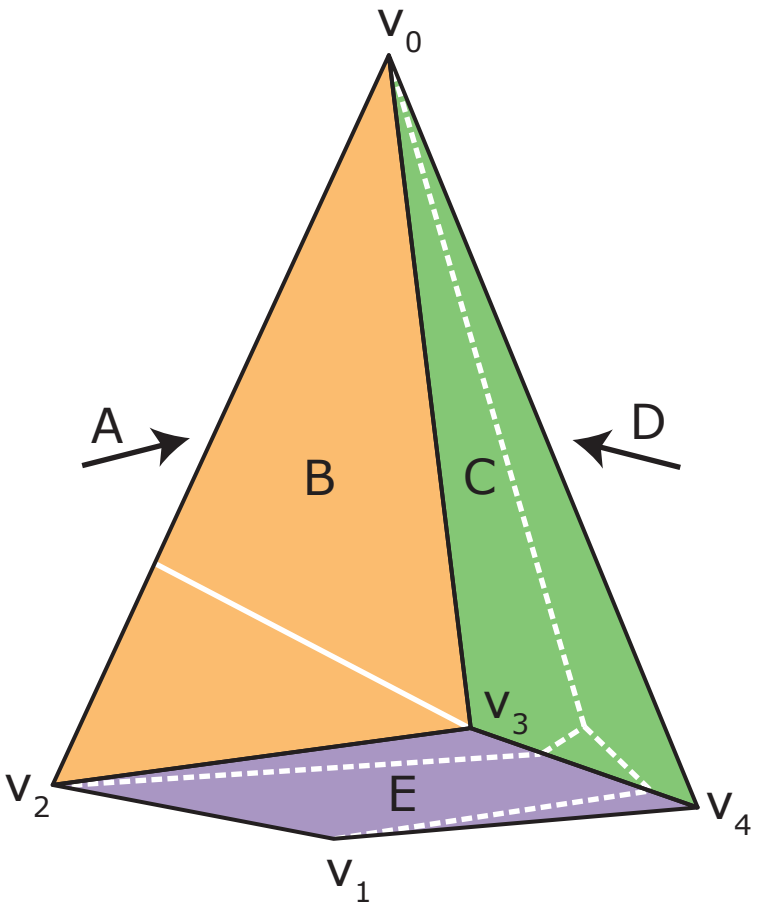

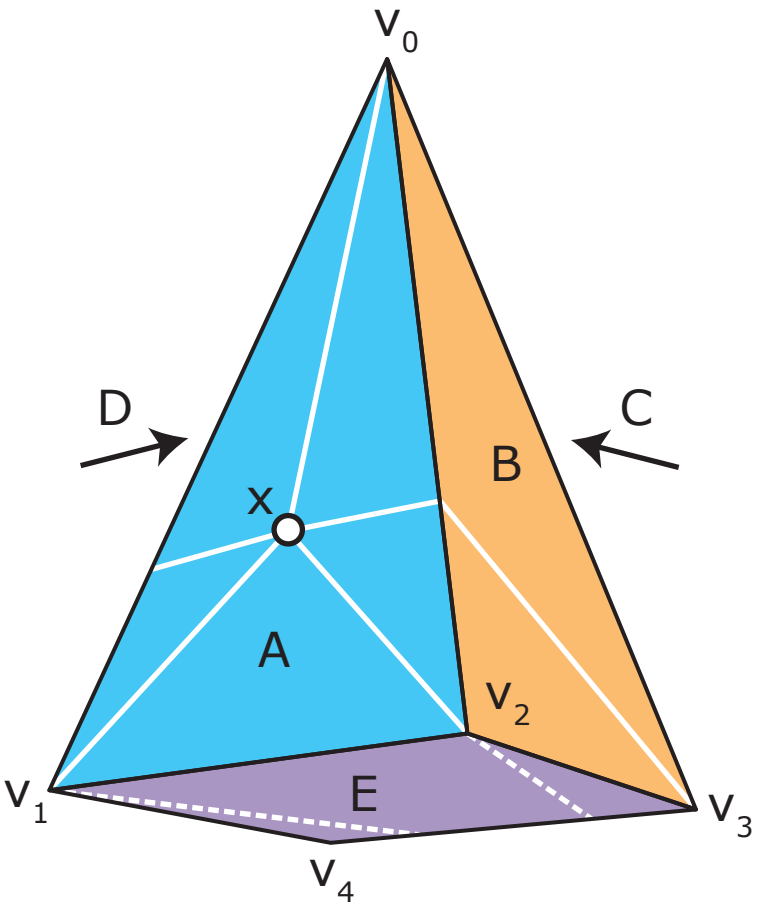

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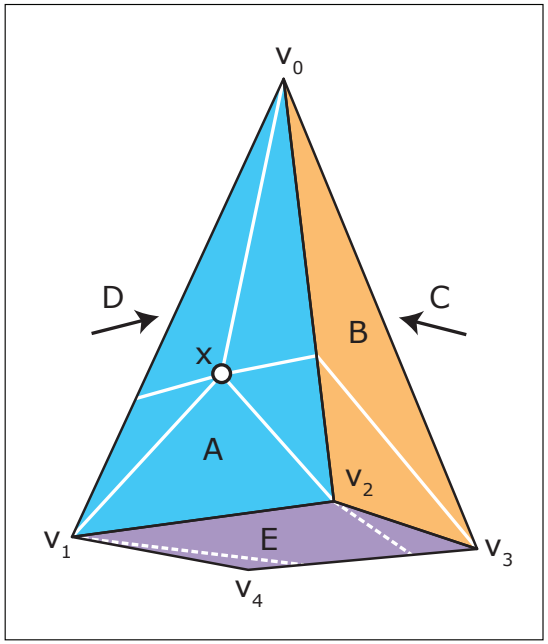

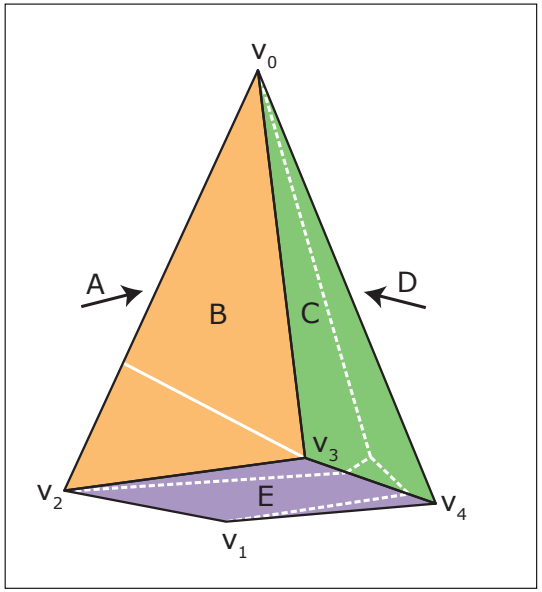

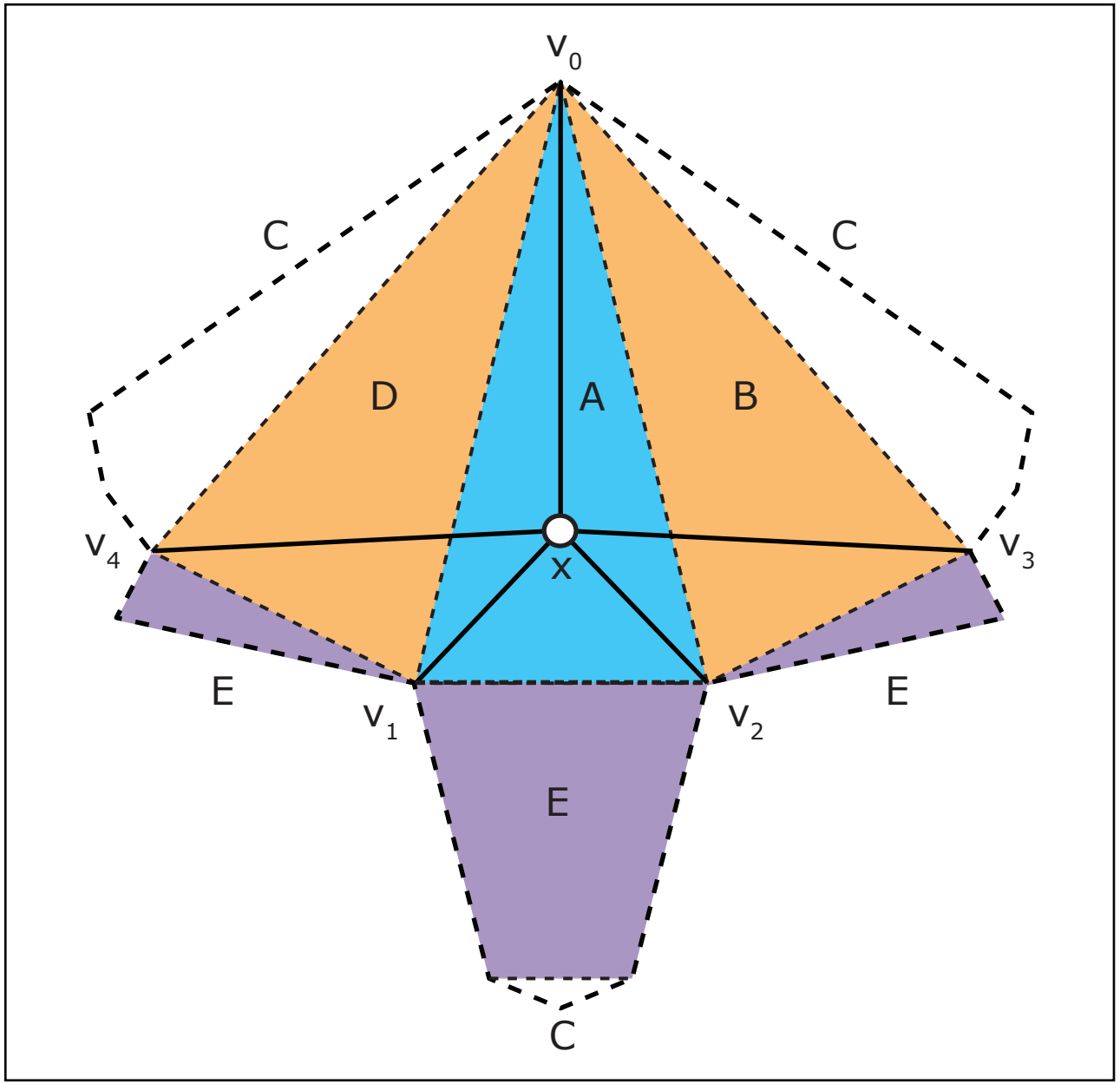

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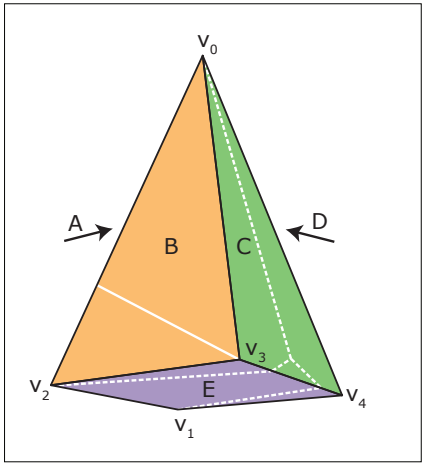

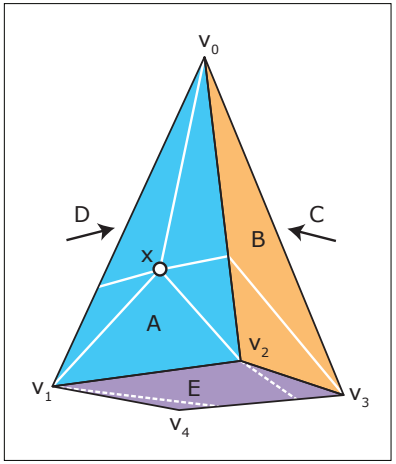

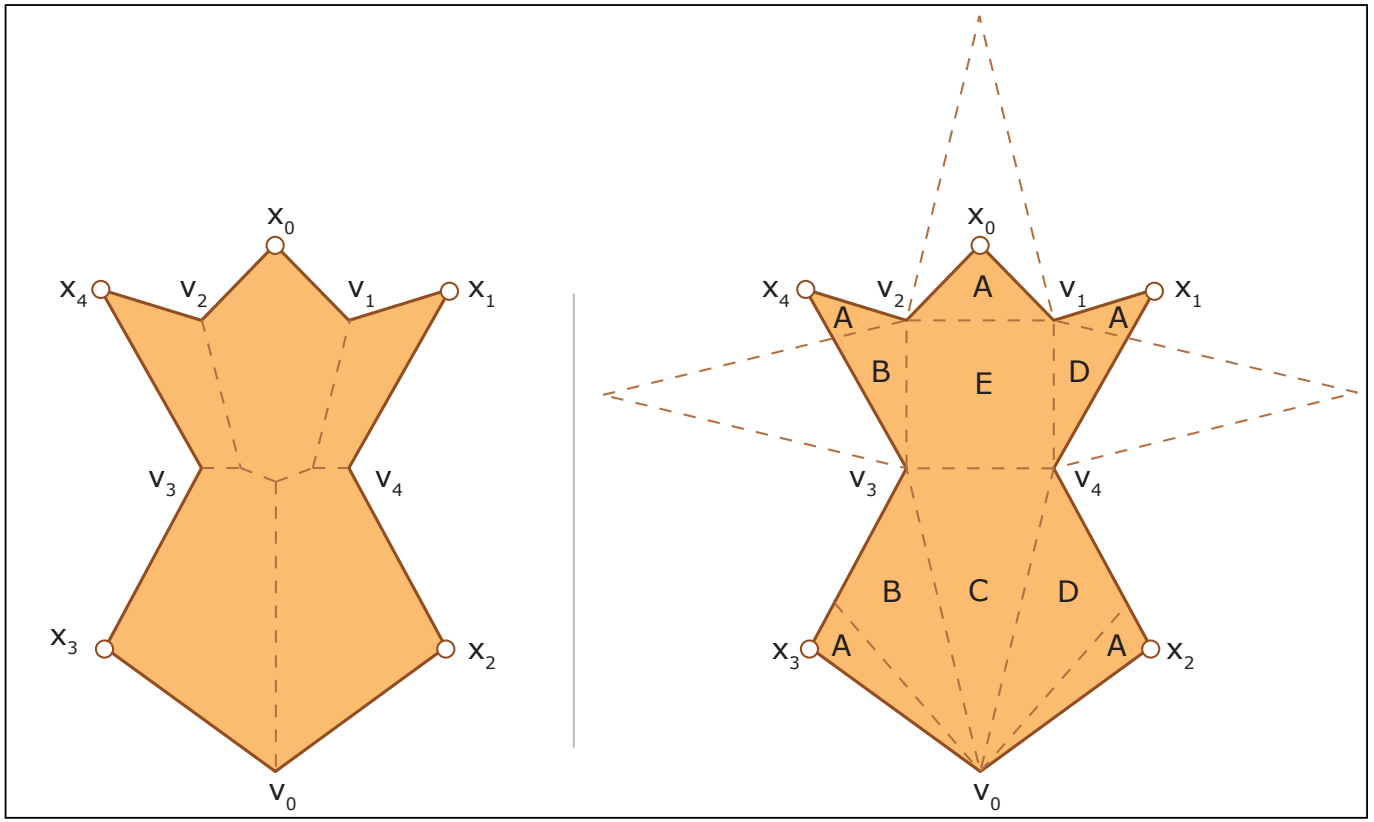

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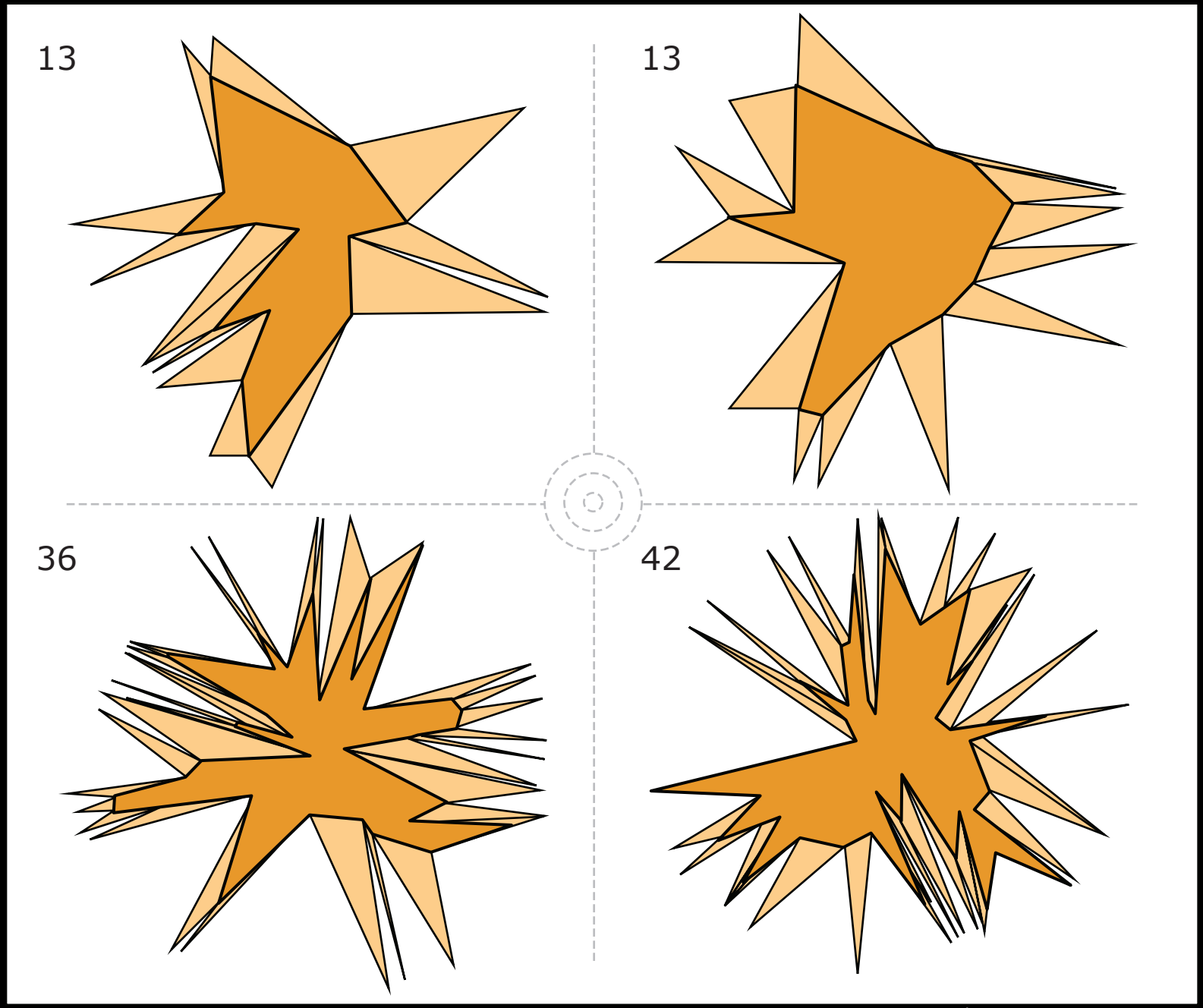

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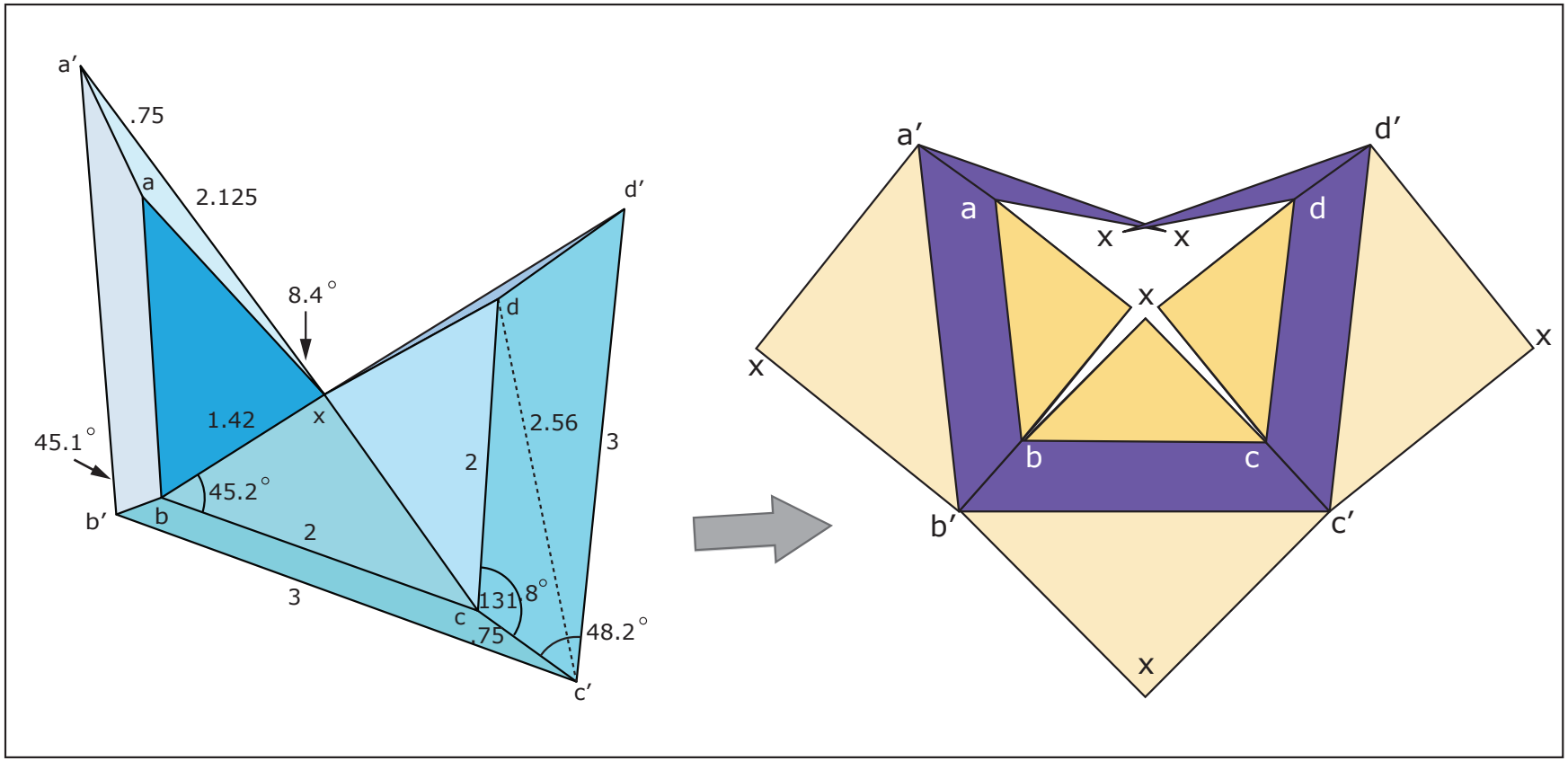

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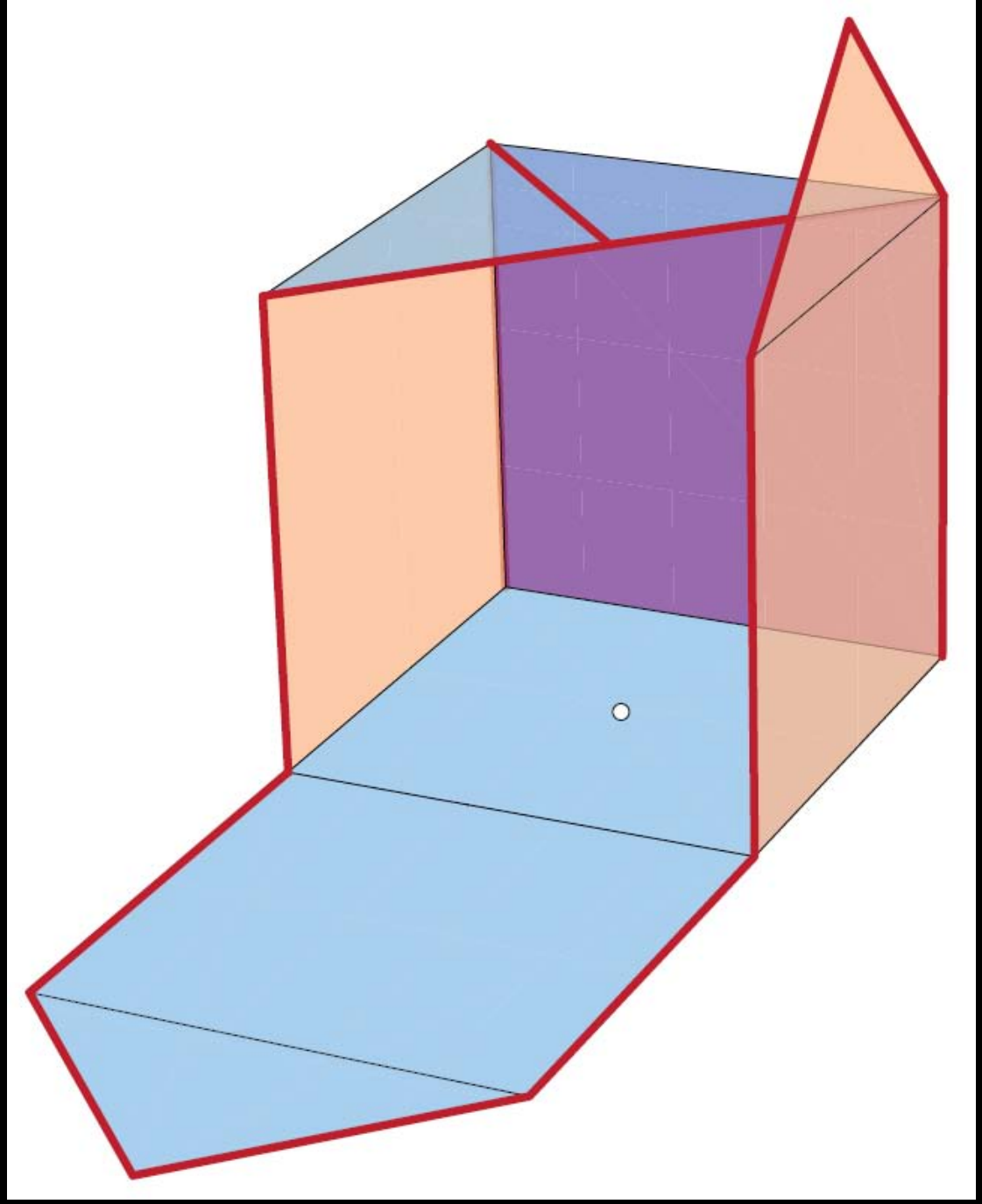


Courtesy of Erik D. Demaine, Martin L. Demaine, Vi Hart, John Iacono, Stefan Langerman, and Joseph O'Rourke. Used with permission.

[Demaine, Demaine, Hart, Iacono, Langerman, O'Rourke 2010]

Albrecht Dürer (self-portrait)

Melancholia I [1525]

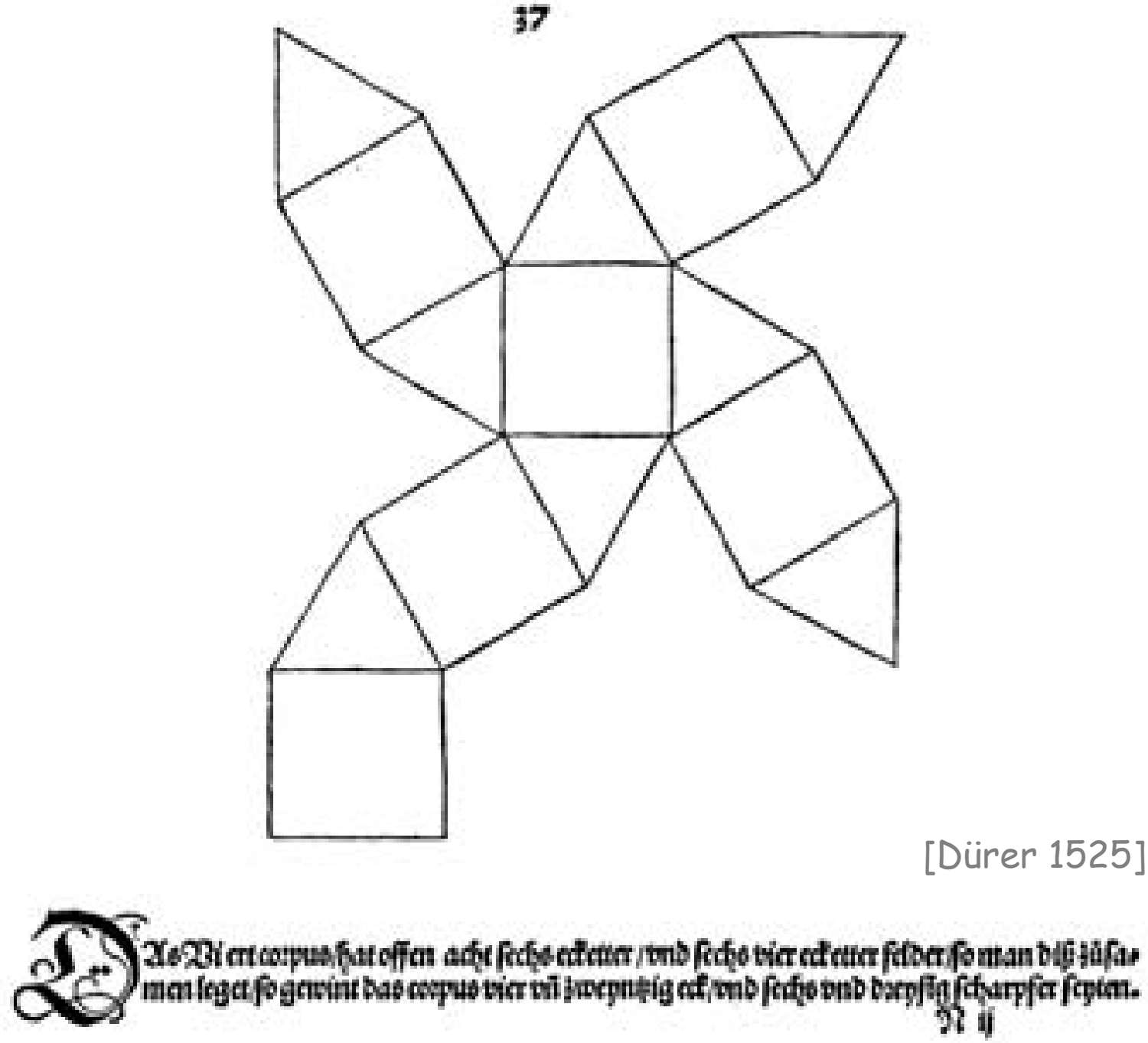
Dürer's self-portrait and Melancholia I are are in the public domain.

Vnderweysung der messung/mit dem zirckel vñ richt
scheyt/in Linien ebnen vnnd gantzen corporen/
durch Albrecht Dürer zů samen getzogē/
vnd zů nutz allē kunstlieb habenden
mit zů gehörigen figuren/in
truck gebracht/im jar.
M. D. X X v.

"The Painter's Manual: A Manual of Measurement of Lines, Areas, and Solids by Means of Compass and Ruler Assembled by Albrecht Dürer for the Use of All Lovers of Art with Appropriate Illustrations Arranged to be Printed in the Year MDXXV (1525)

Mit begnadung Kayserlicher im end eyngeleibter Frey-
heyt damit sich ein yglicher vor scha
den zů hůten weyß ꝛc.

Scan of Dürer's *The Painter's Manual* are in the public domain.



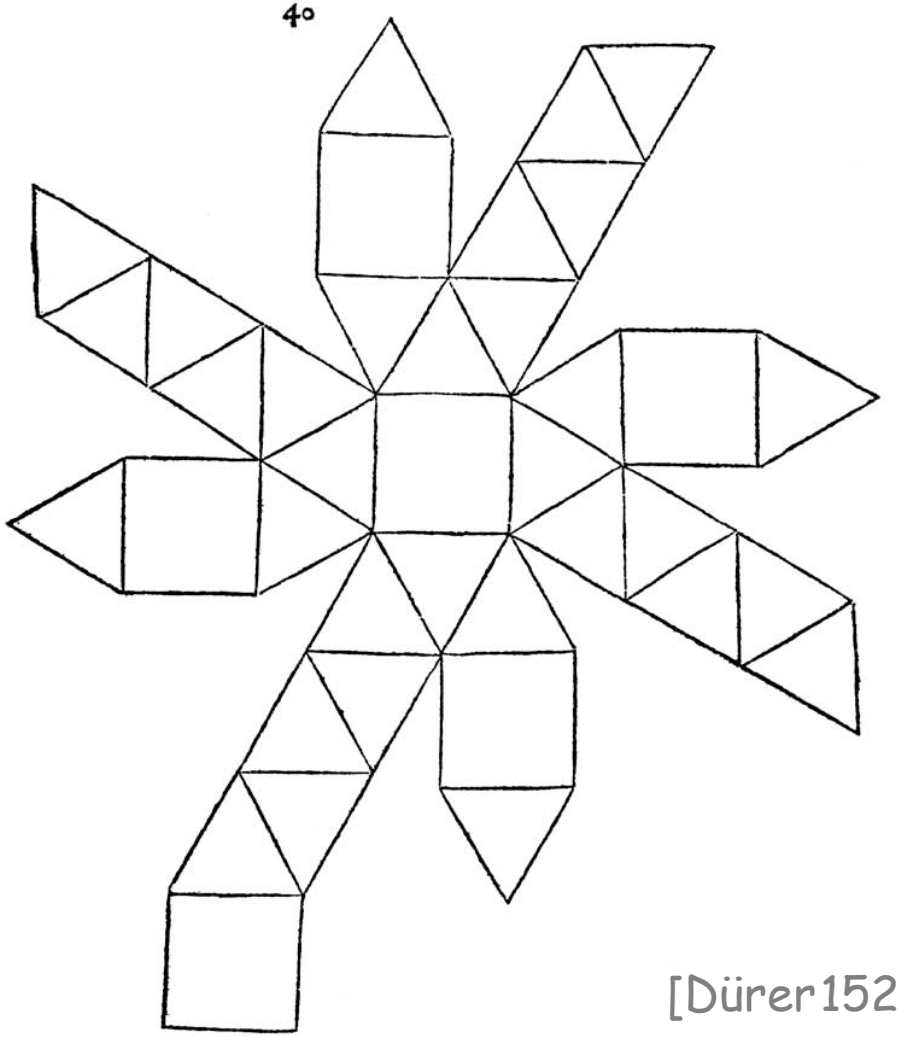
[Dürer 1525]

Image of cuboctahedron removed due to copyright restrictions.

Scan of Dürer's *The Painter's Manual* are in the public domain.

Das Sechst corpus/ so das auffhan wirt/ hat es sechs gefierte/ vnd zwey vnd dreyssig Dryangli che felder/ so man das zůsamen leget. gewint es vier vnnd zweyntzig eck/ vnnd sechtzig scharpfer seyten.

40



[Dürer1525]

Das Sibent vnd nach folget corpus/ so es offen leyt/ hat es sechs acht ecketter/ vñ acht sechs ecketter/ vnd zwelf vier ecketter felder/ vñ so man das zůsamen leget/ so gewint es acht vnd viertzig eck/ vnd zwo vnd sibentzig scharpfer seyten.

Image of Snub cube removed due to copyright restrictions.

Scan of Dürer's *The Painter's Manual* are in the public domain.

Images of polyhedra animations and respective unfoldings removed due to copyright restrictions.

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Refer to: Fig. 40c from Schlickenrieder, W. "Nets of Polyhedra." Technische Universität Berlin, Masters's Thesis, 1997.

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Refer to: Fig. 35 from Schlickenrieder, W. "Nets of Polyhedra." Technische Universität Berlin, Masters's Thesis, 1997.

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Refer to: Fig. 38, 42b from Schlickenrieder, W. "Nets of Polyhedra." Technische Universität Berlin, Masters's Thesis, 1997.

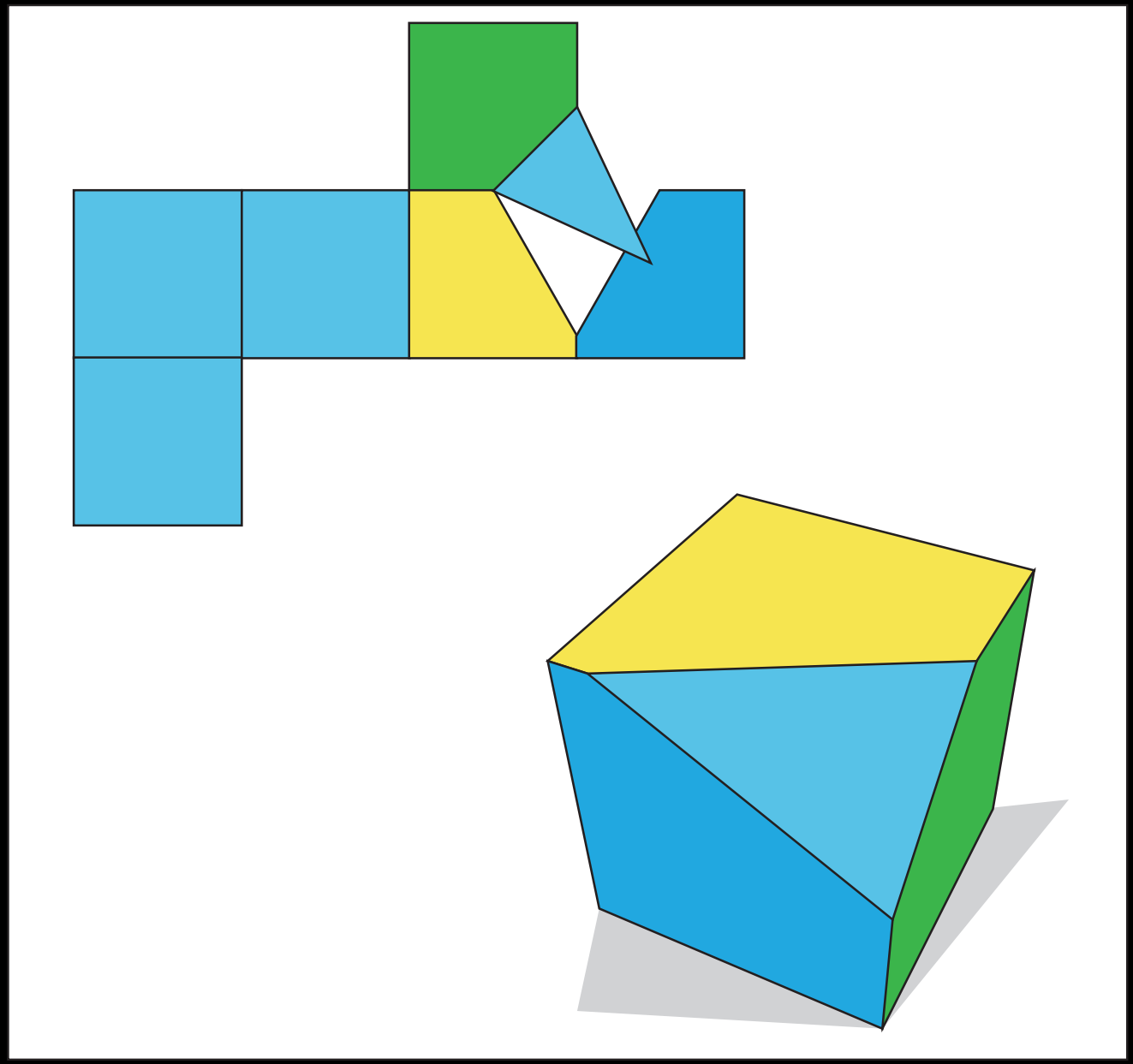
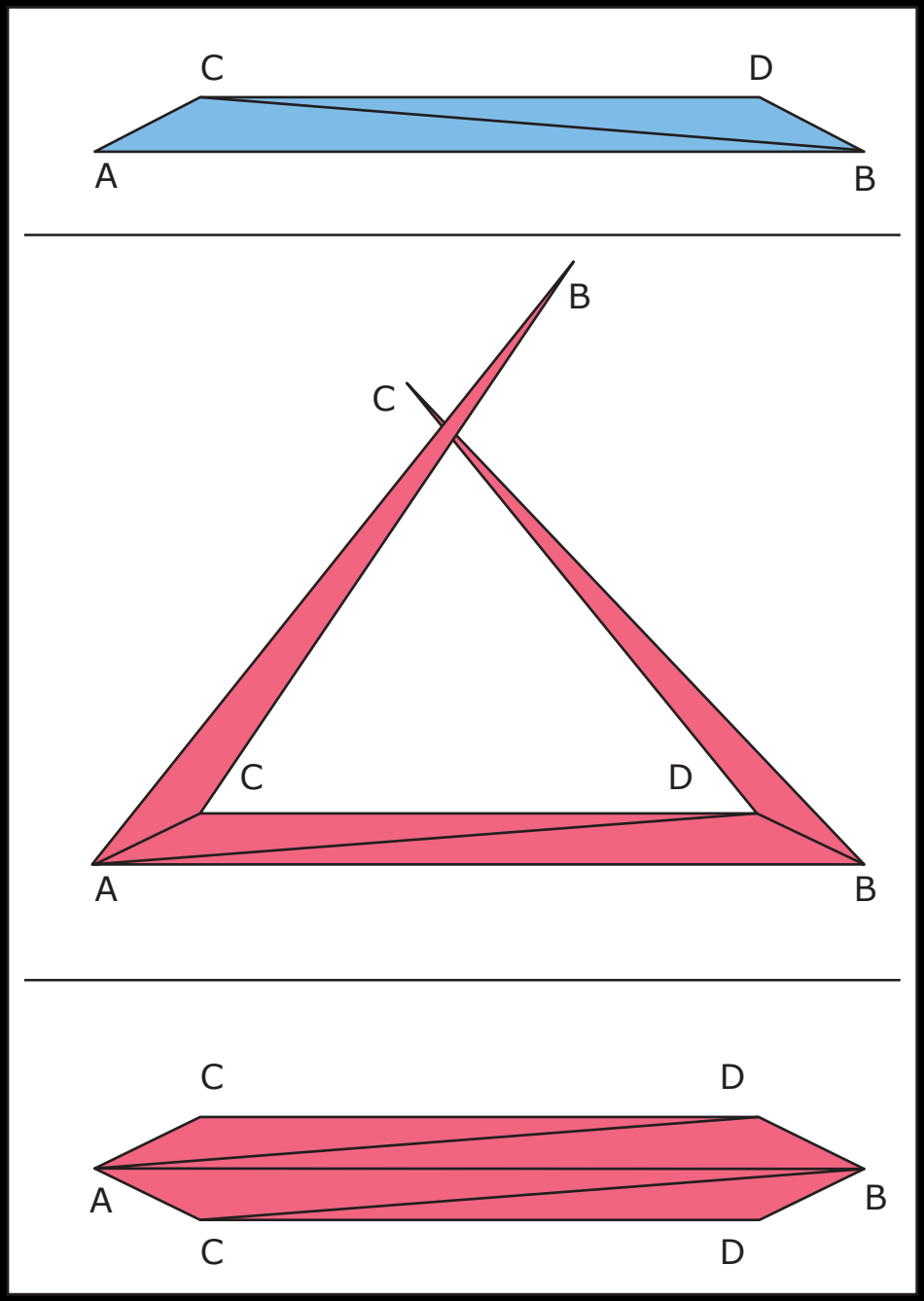


Image by MIT OpenCourseWare.

[Namiki & Fukuda 1993]



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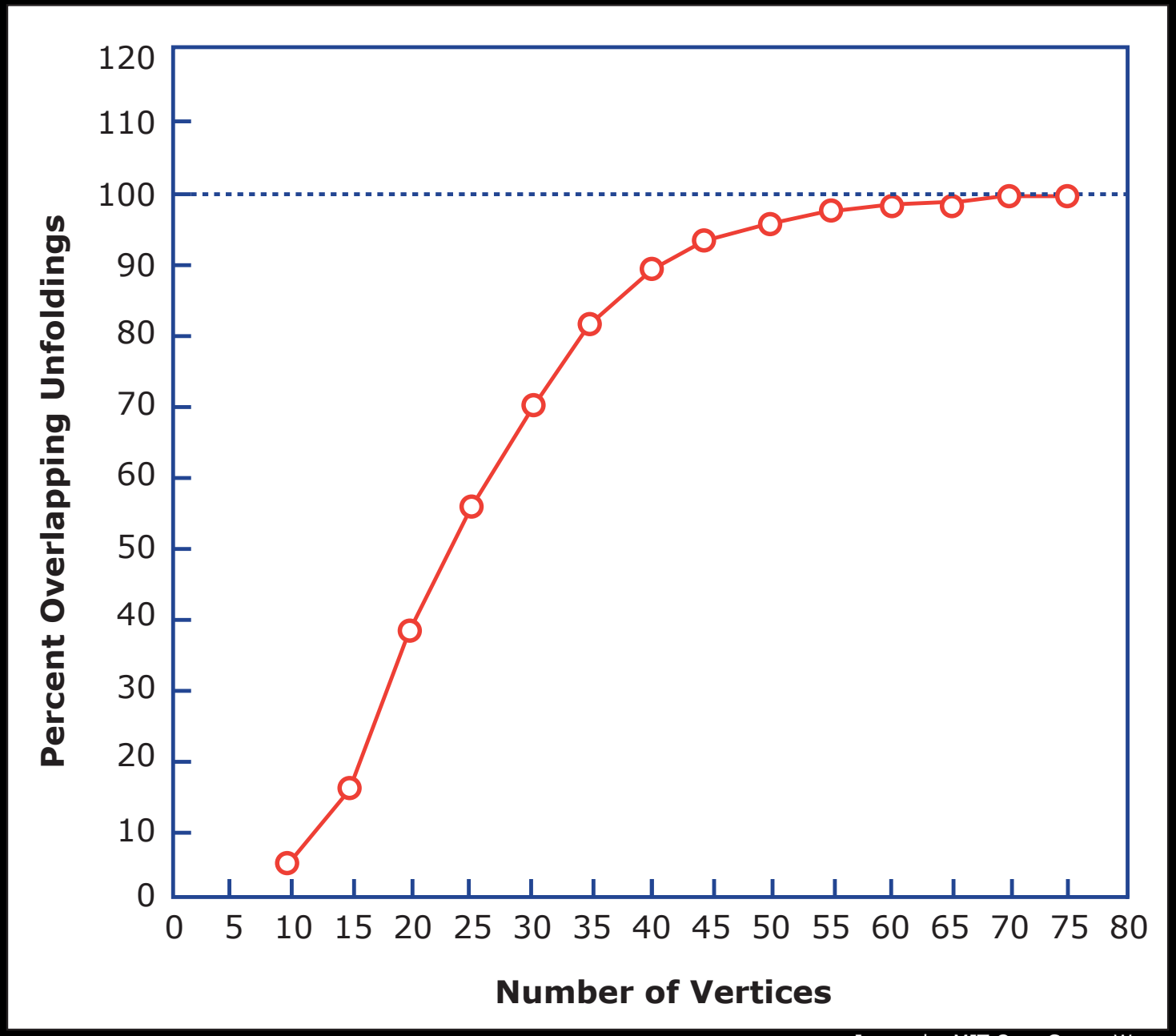
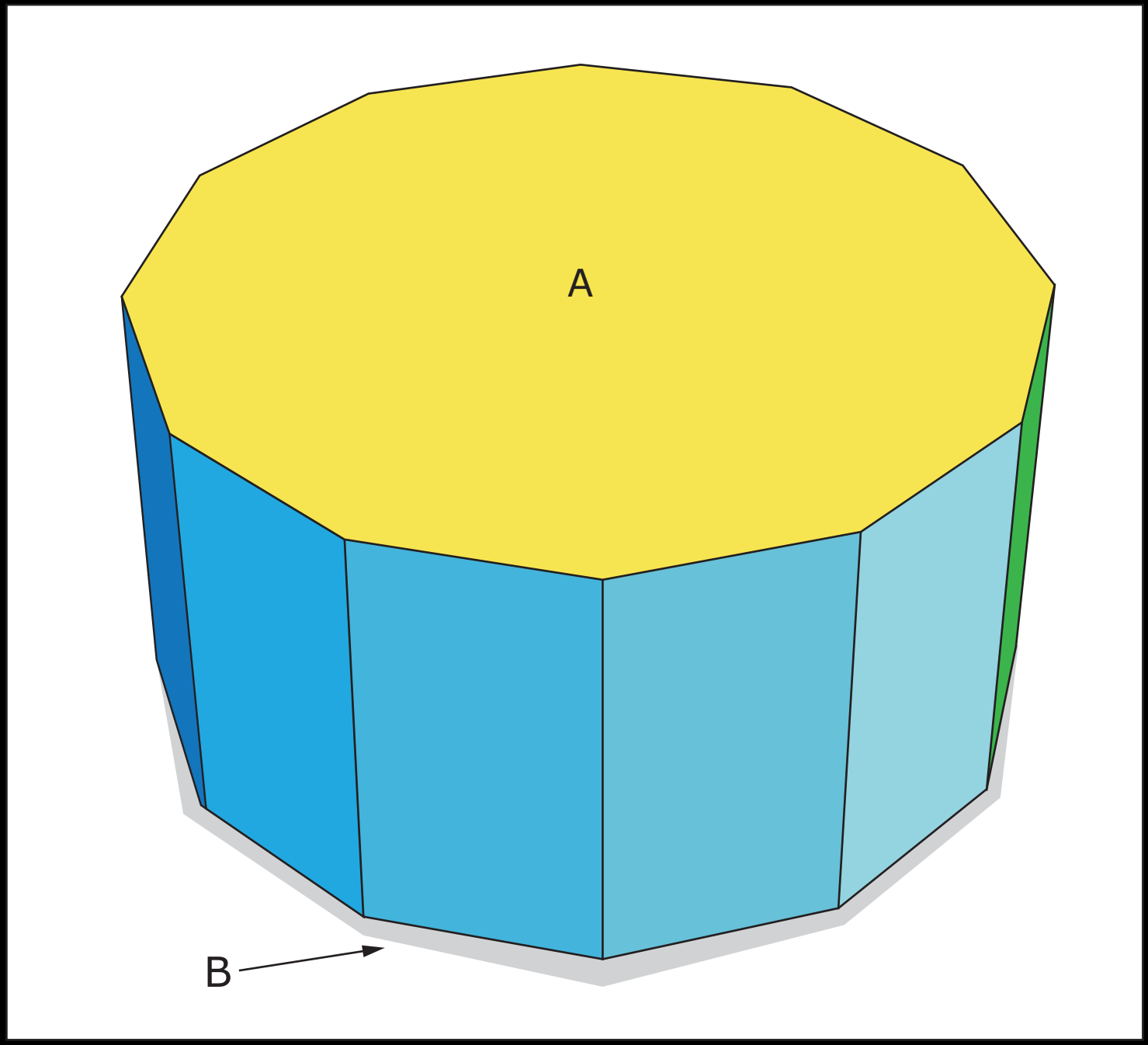


Image by MIT OpenCourseWare.

[Schevon 1989]



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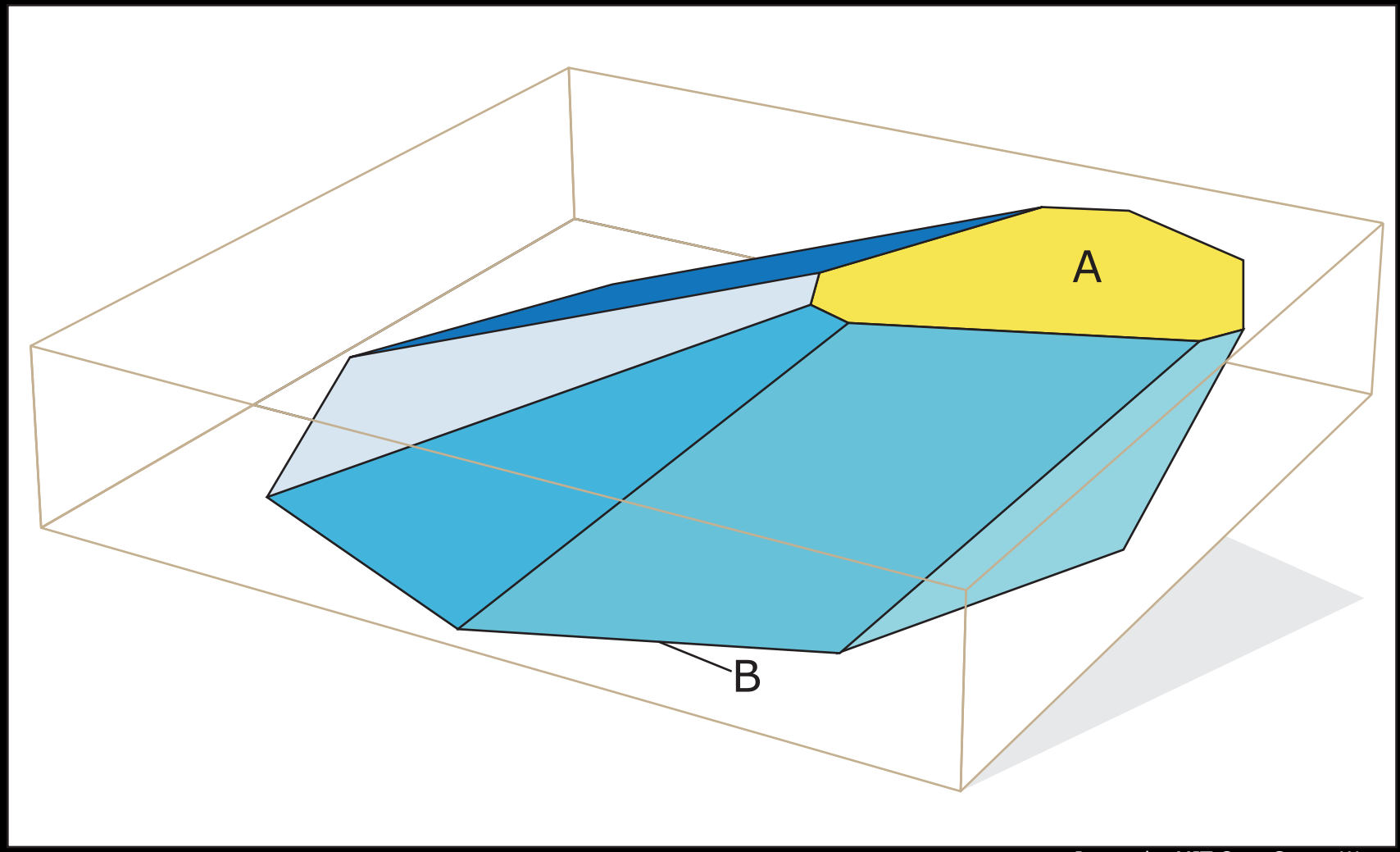

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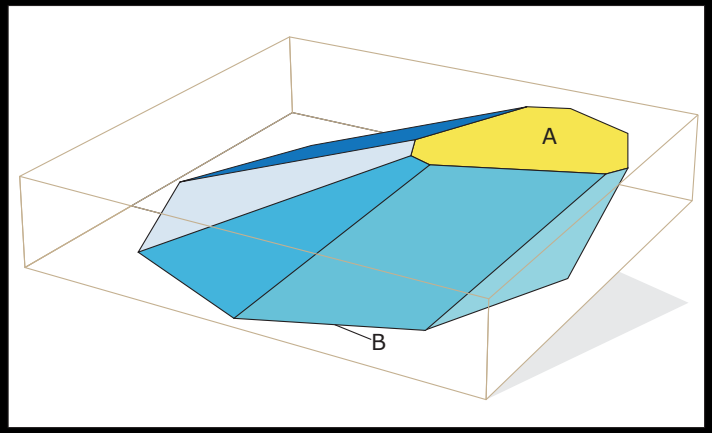

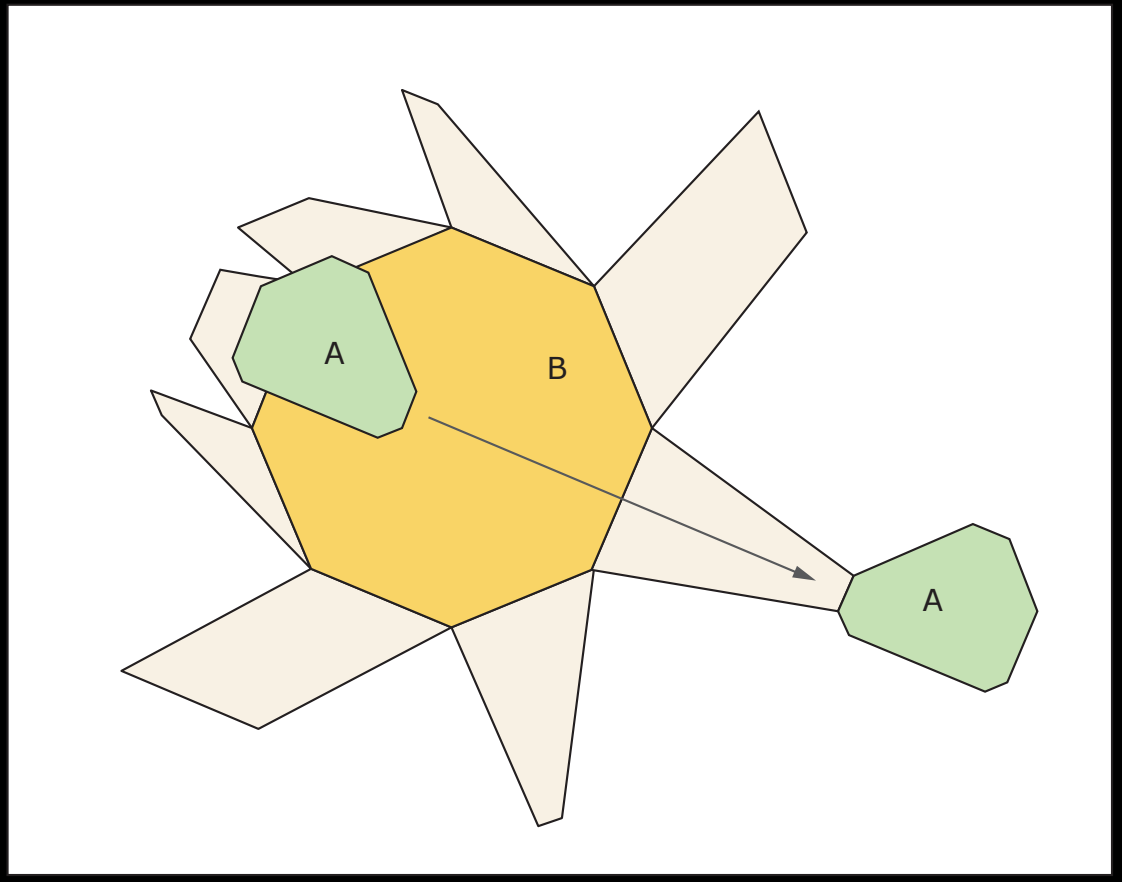

[O'Rourke 2001]

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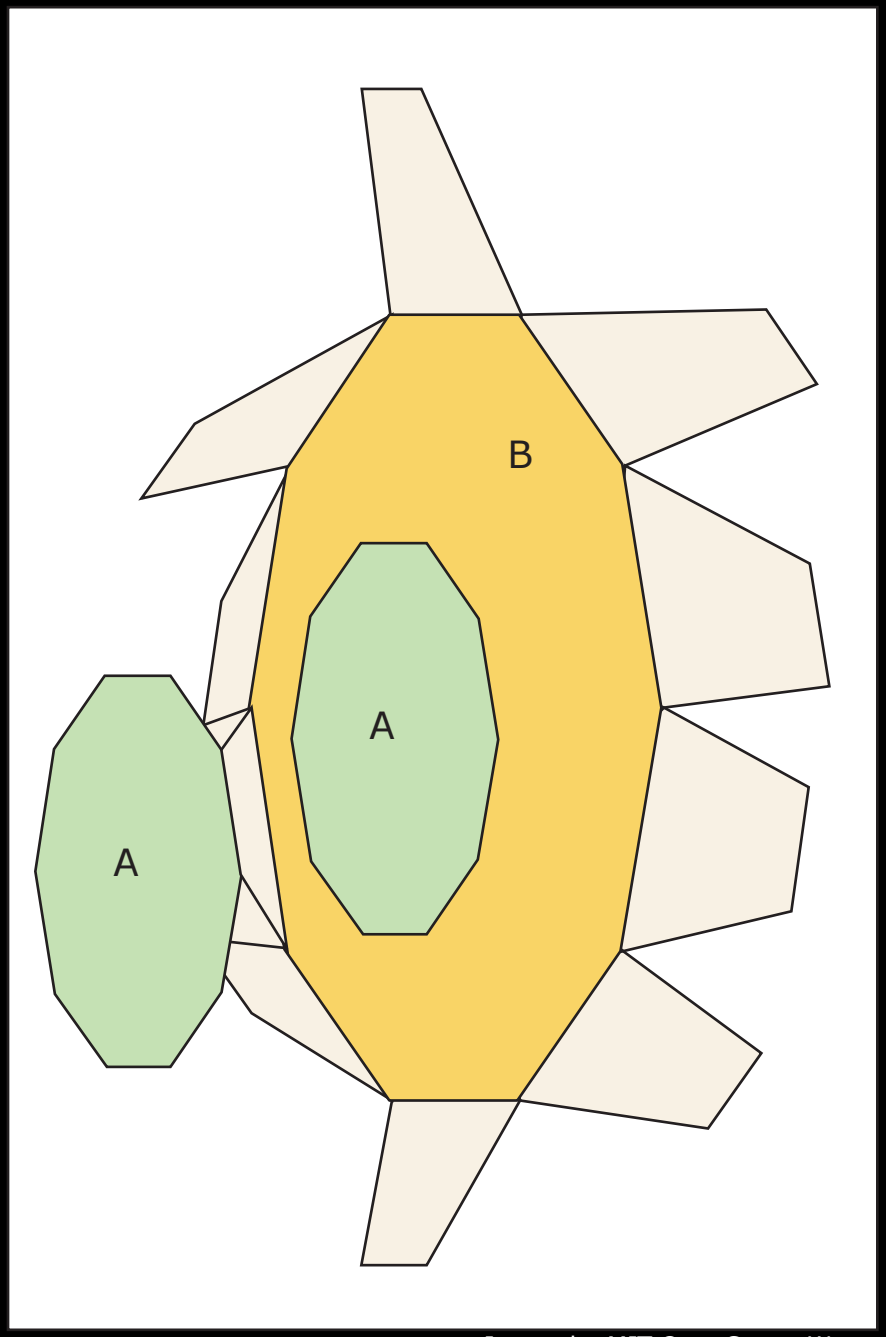

[O'Rourke 2001]

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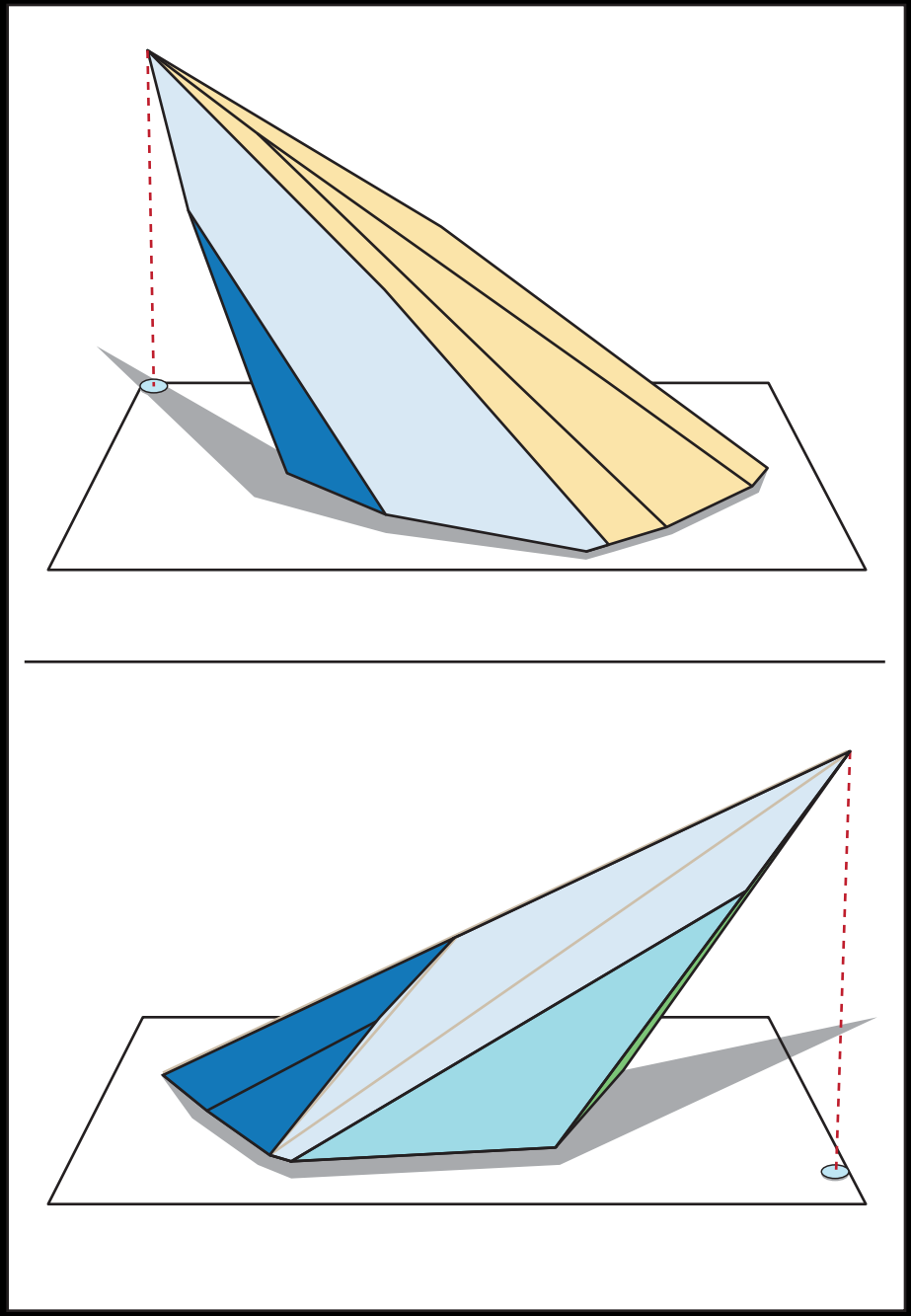

[O'Rourke 2007]

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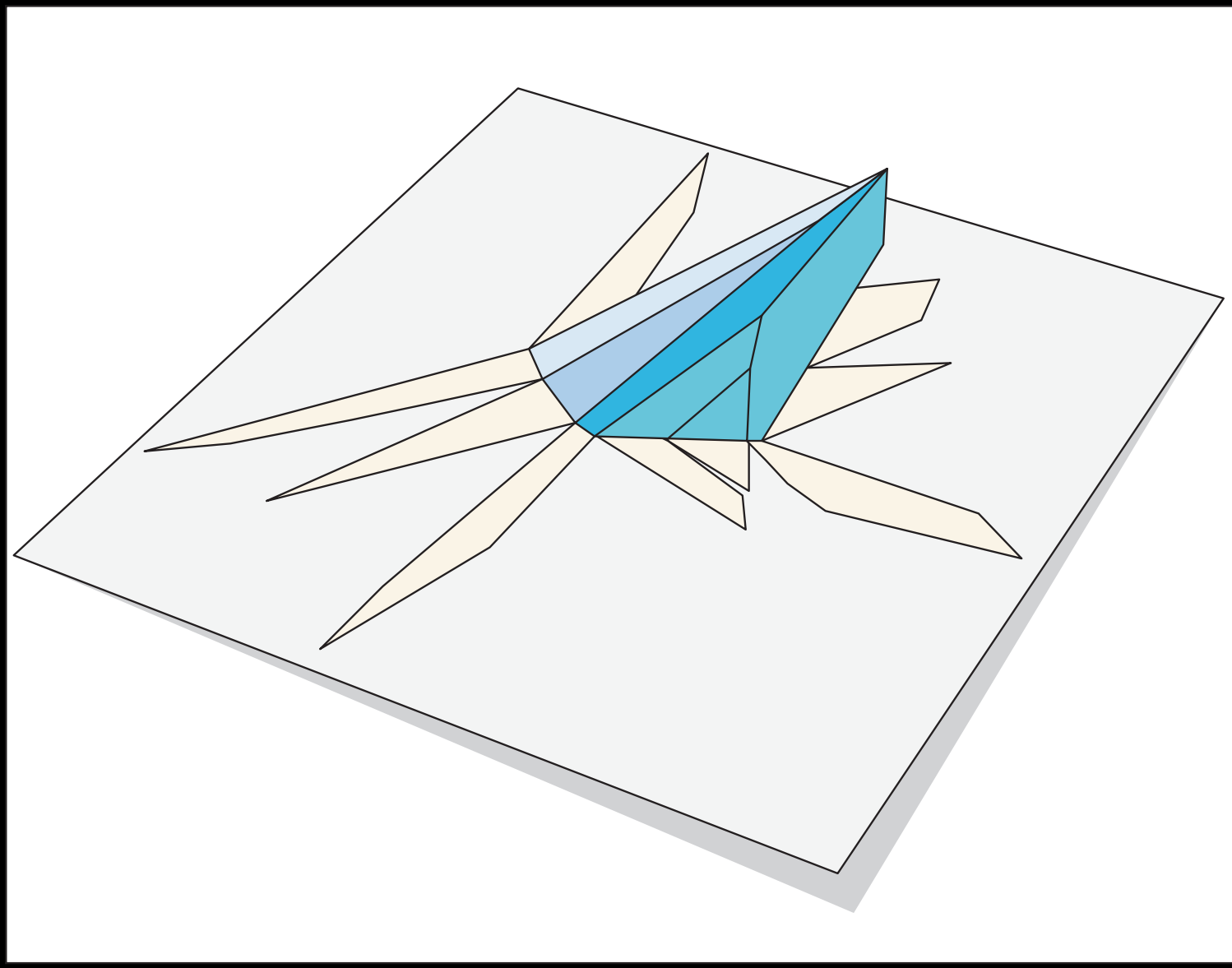

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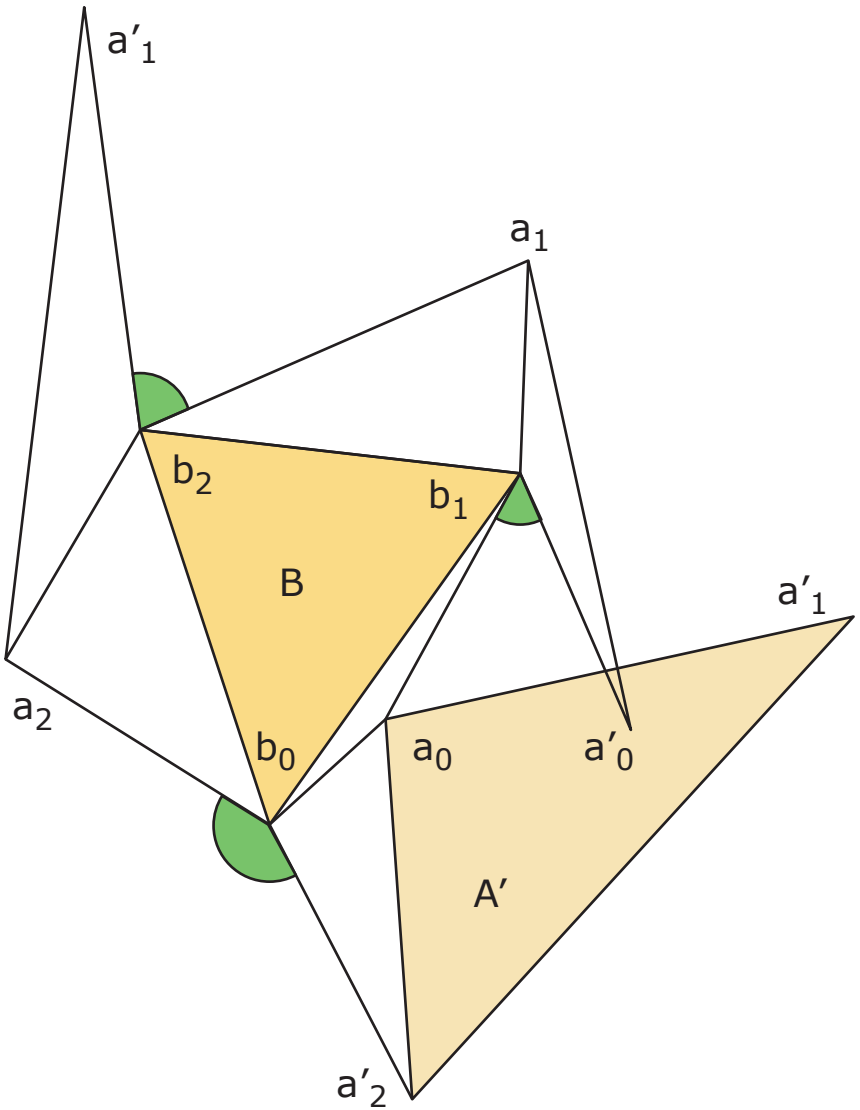
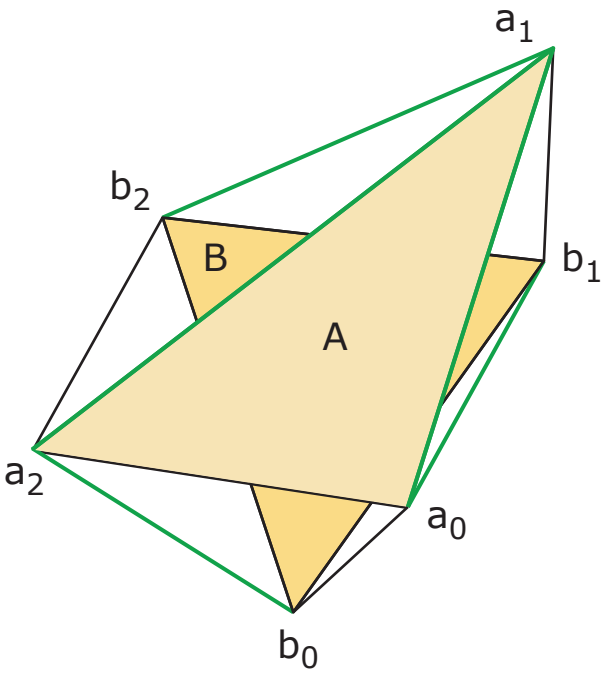
[O'Rourke 2007]





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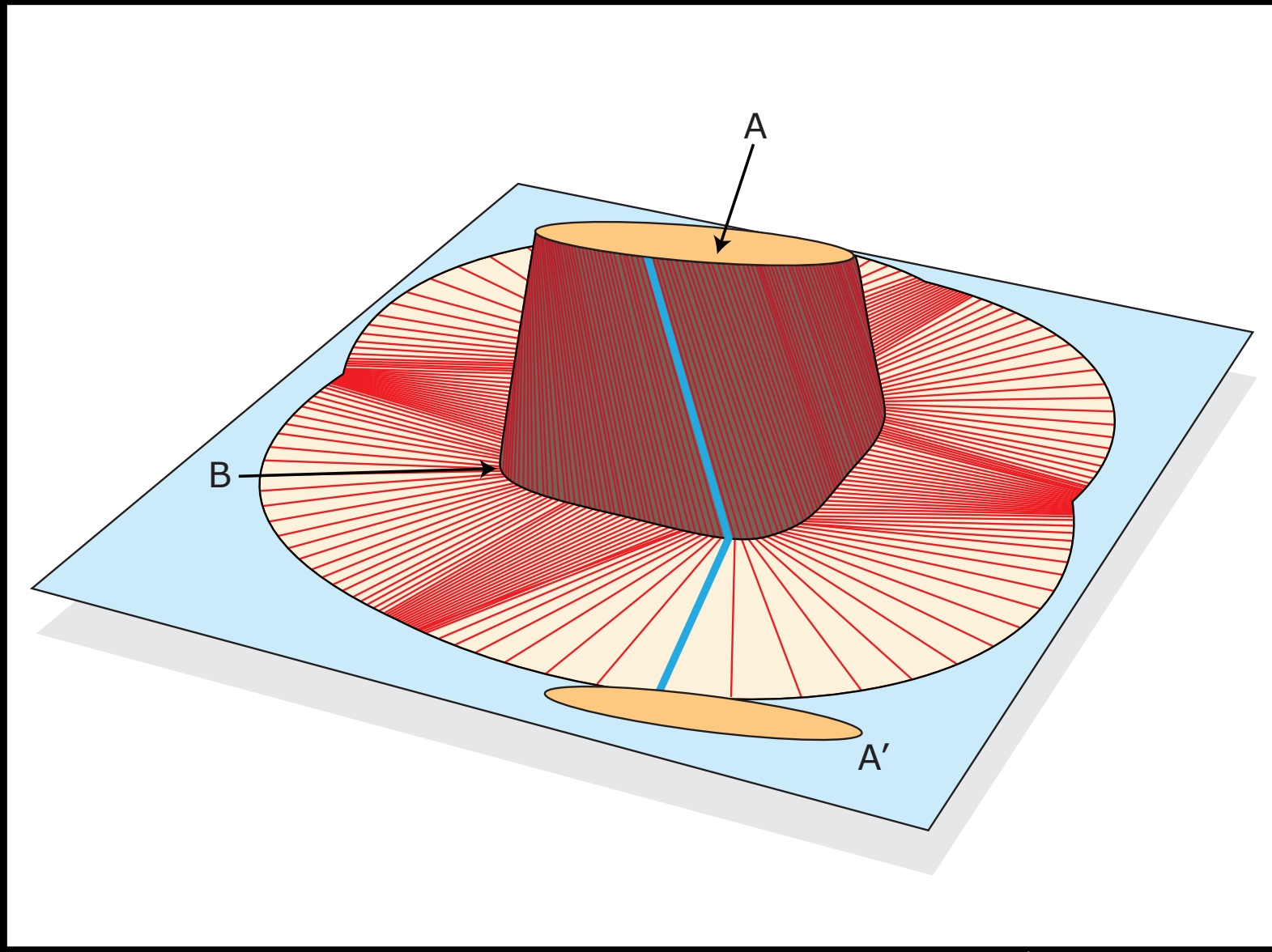

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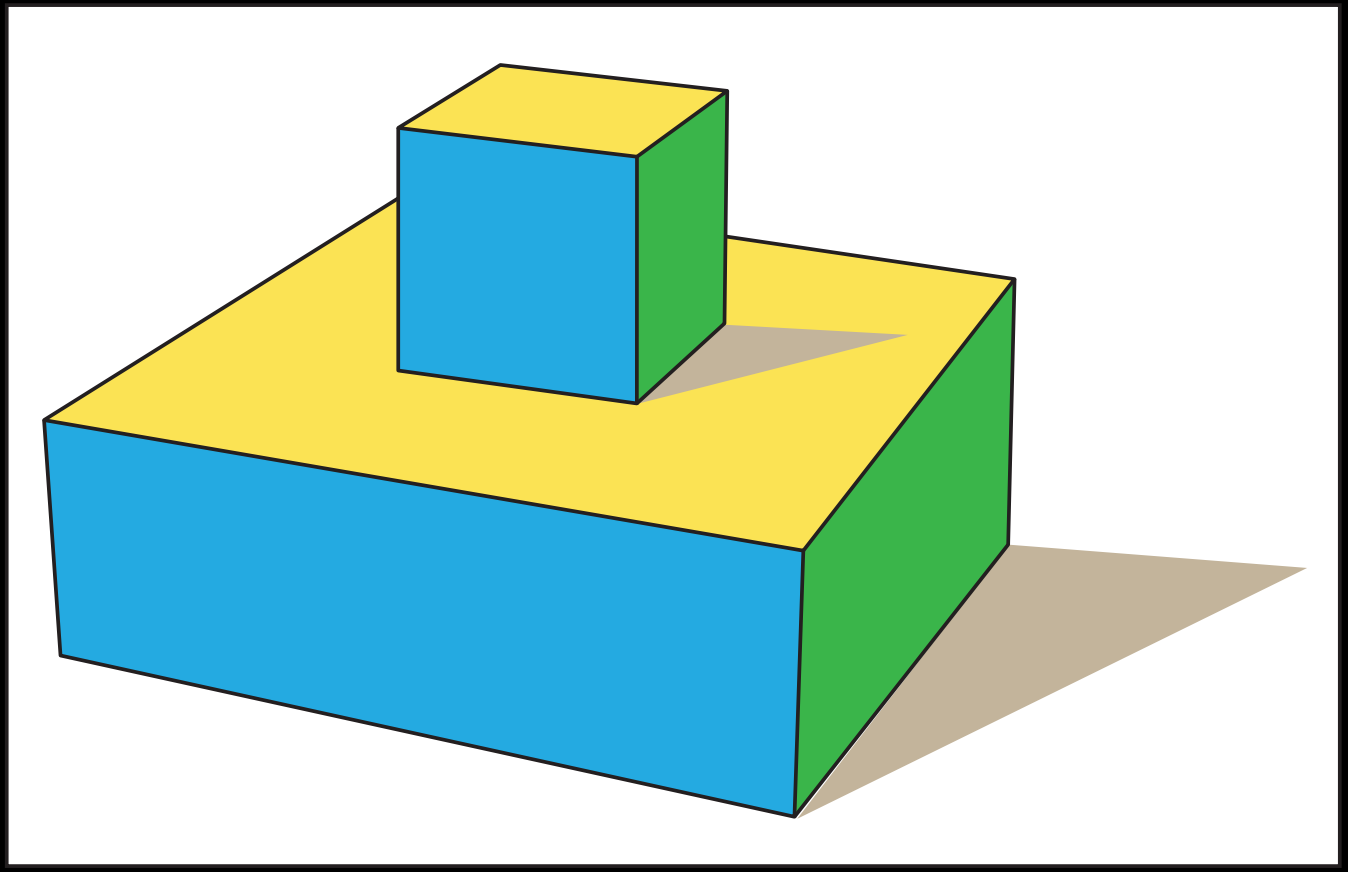
[Benbernou, Cahn, O'Rourke 2004]



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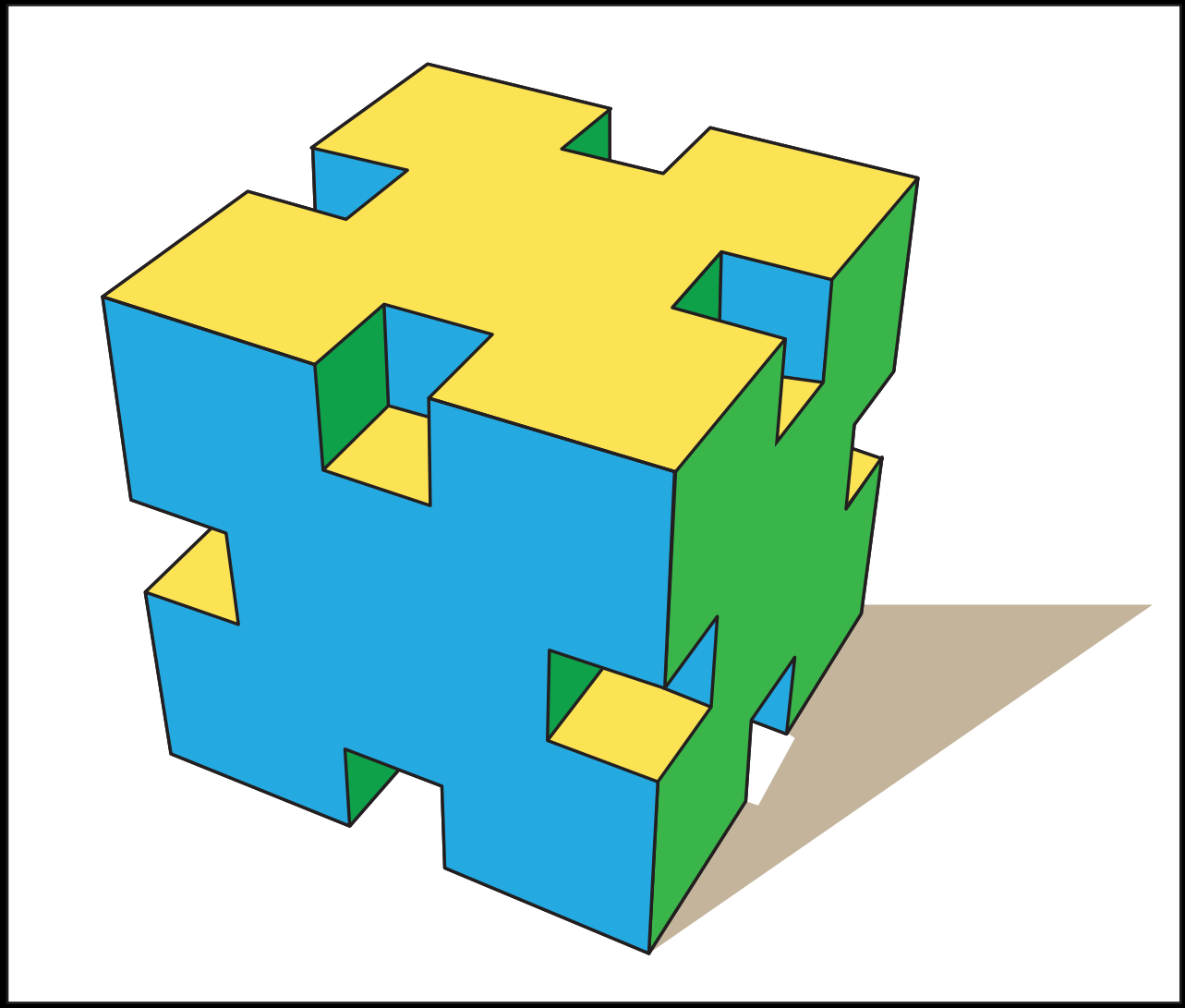
See also http://erikdemaine.org/papers/CCCG98b/.

[Biedl, Demaine, Demaine, Lubiw, Overmars, O'Rourke, Robbins, Whitesides 1998]



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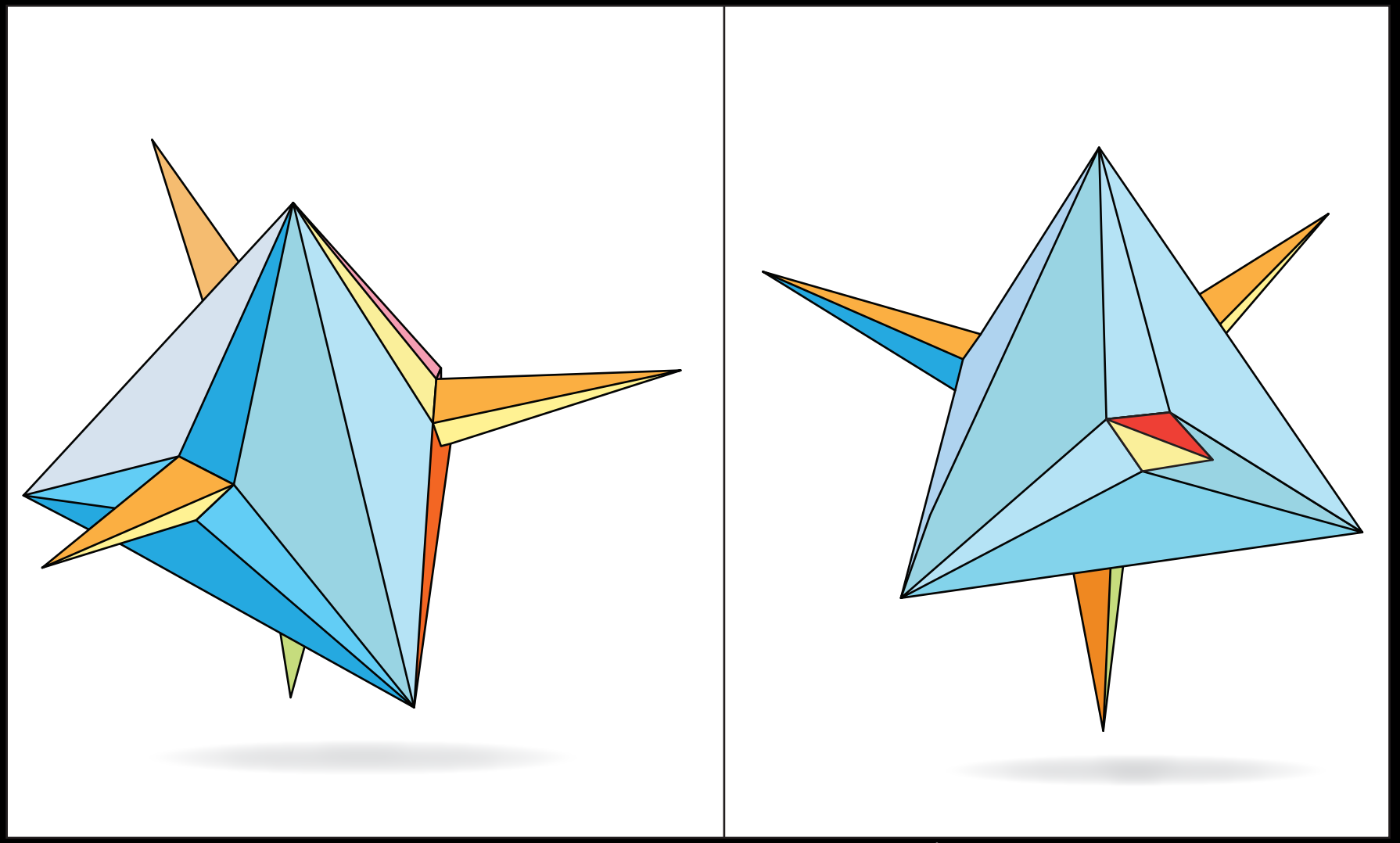

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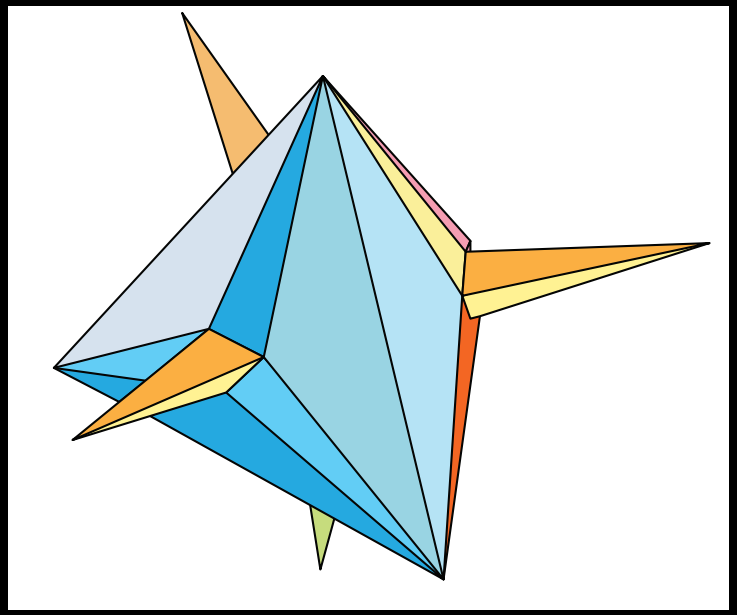
[Bern, Demaine, Eppstein, Kuo, Mantler, Snoeyink 2003]



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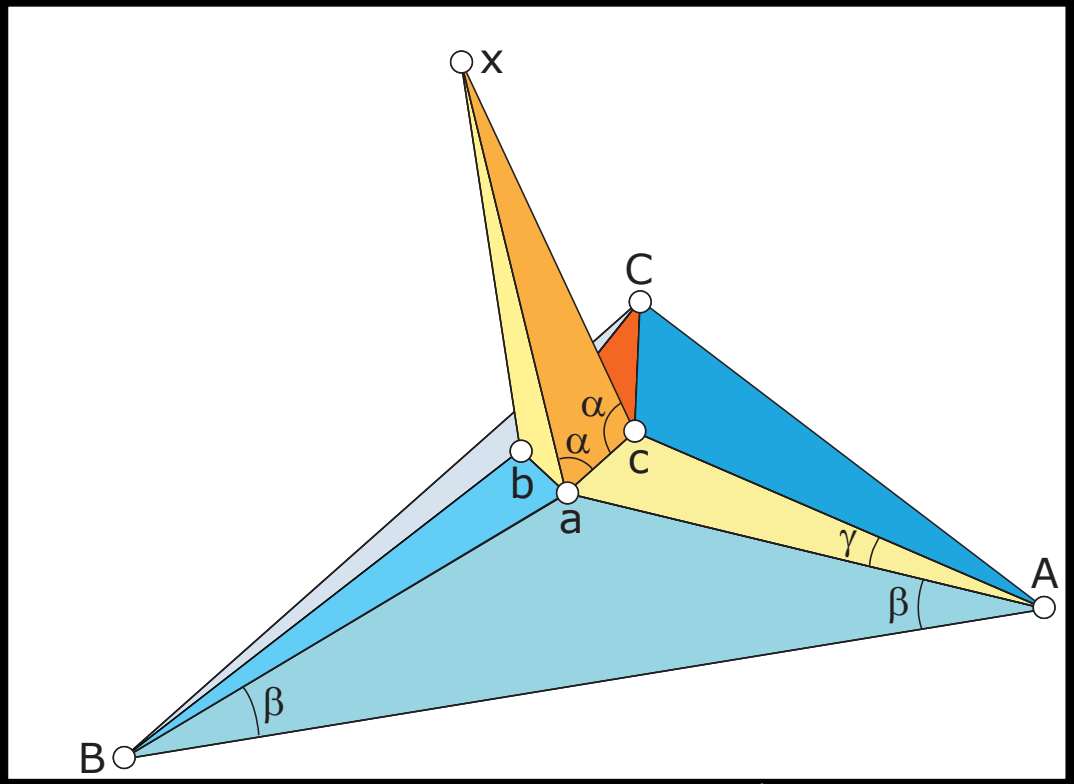

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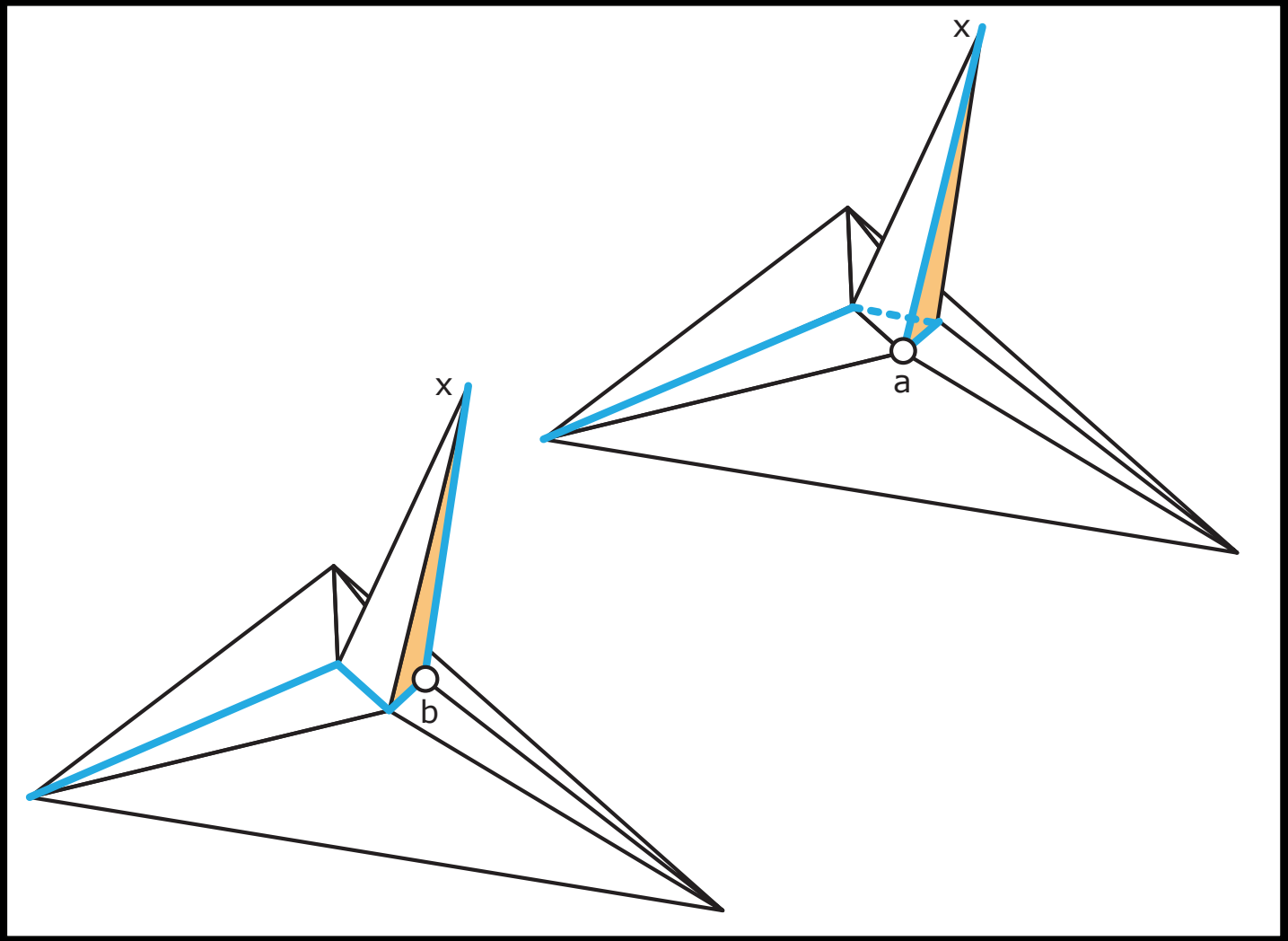
[Bern, Demaine, Eppstein, Kuo, Mantler, Snoeyink 2003]



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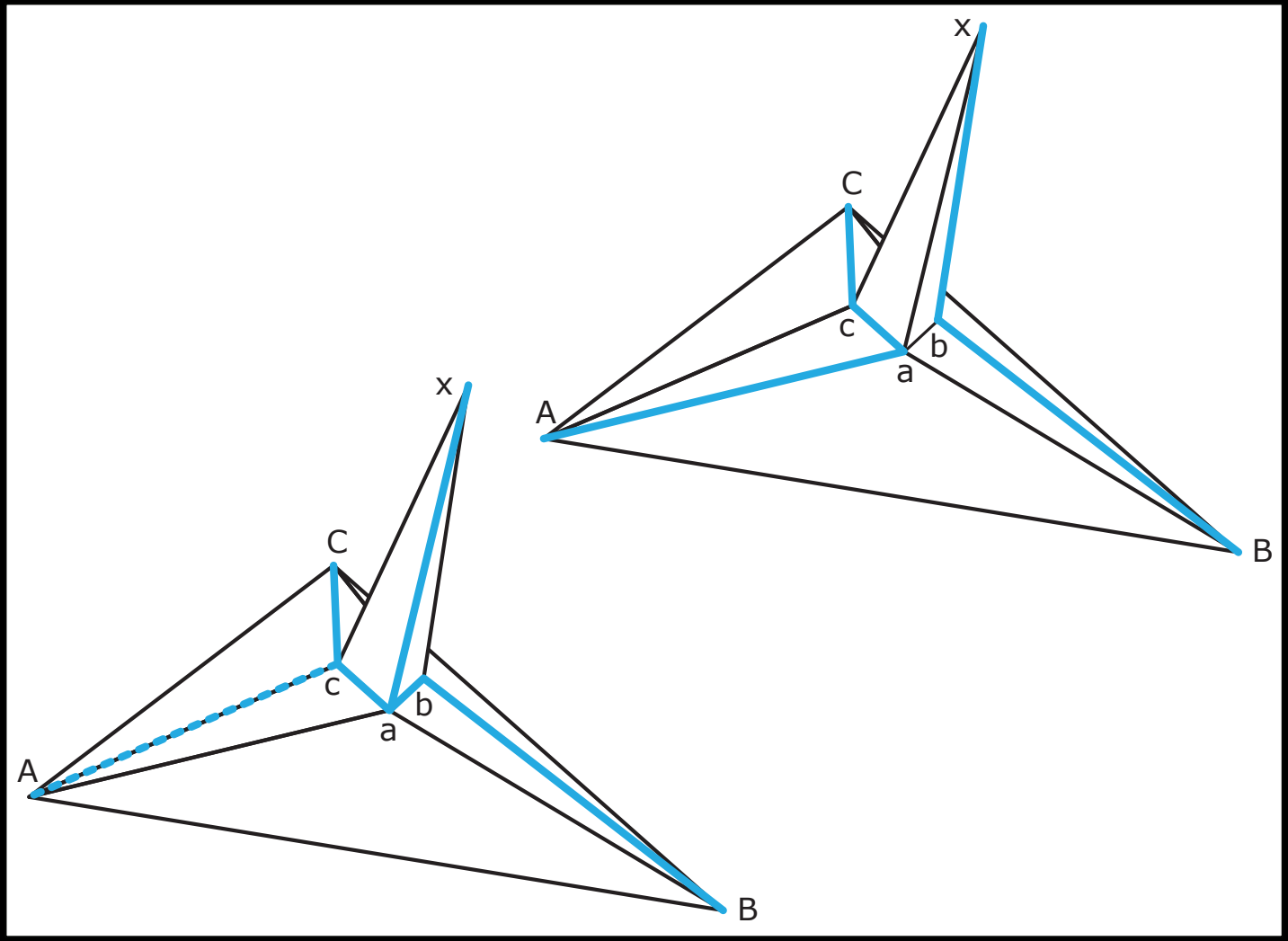

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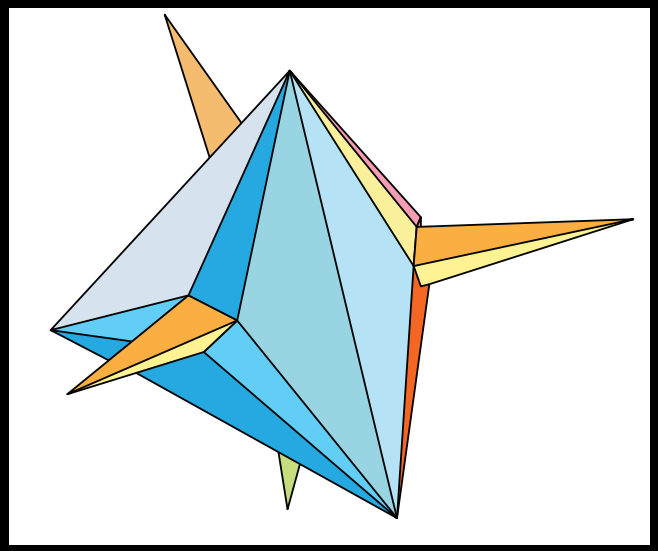

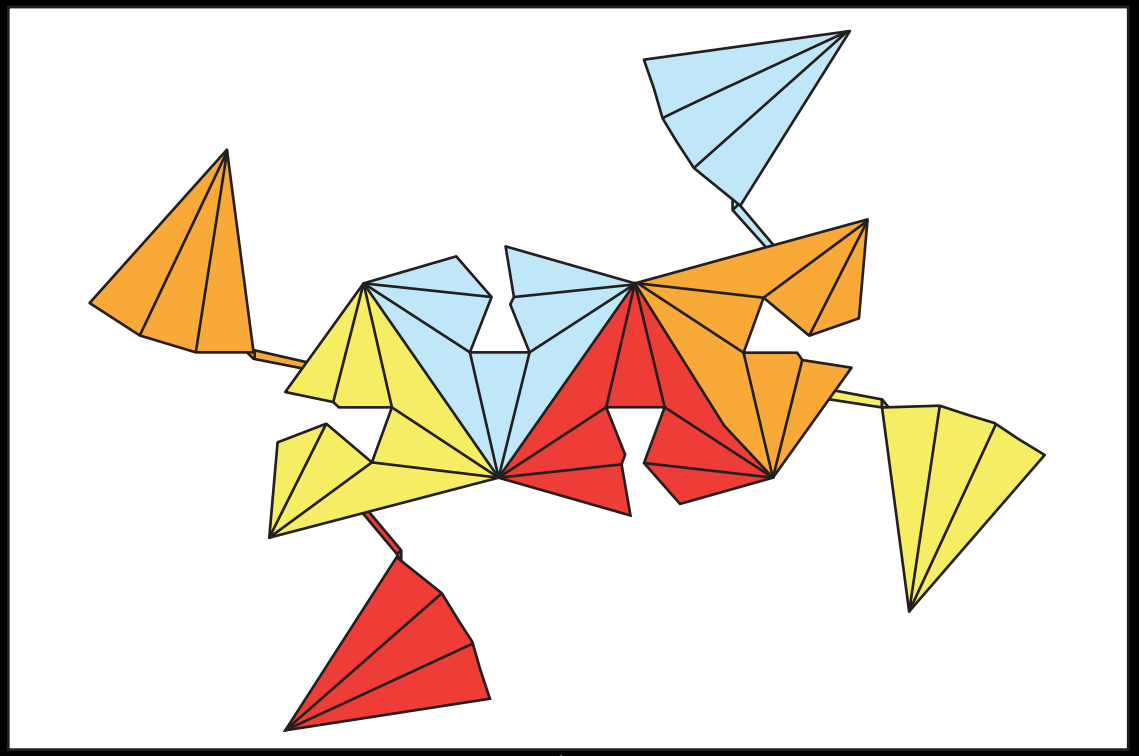

[Bern, Demaine, Eppstein, Kuo, Mantler, Snoeyink 2003]

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6.849 Geometric Folding Algorithms: Linkages, Origami, Polyhedra
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