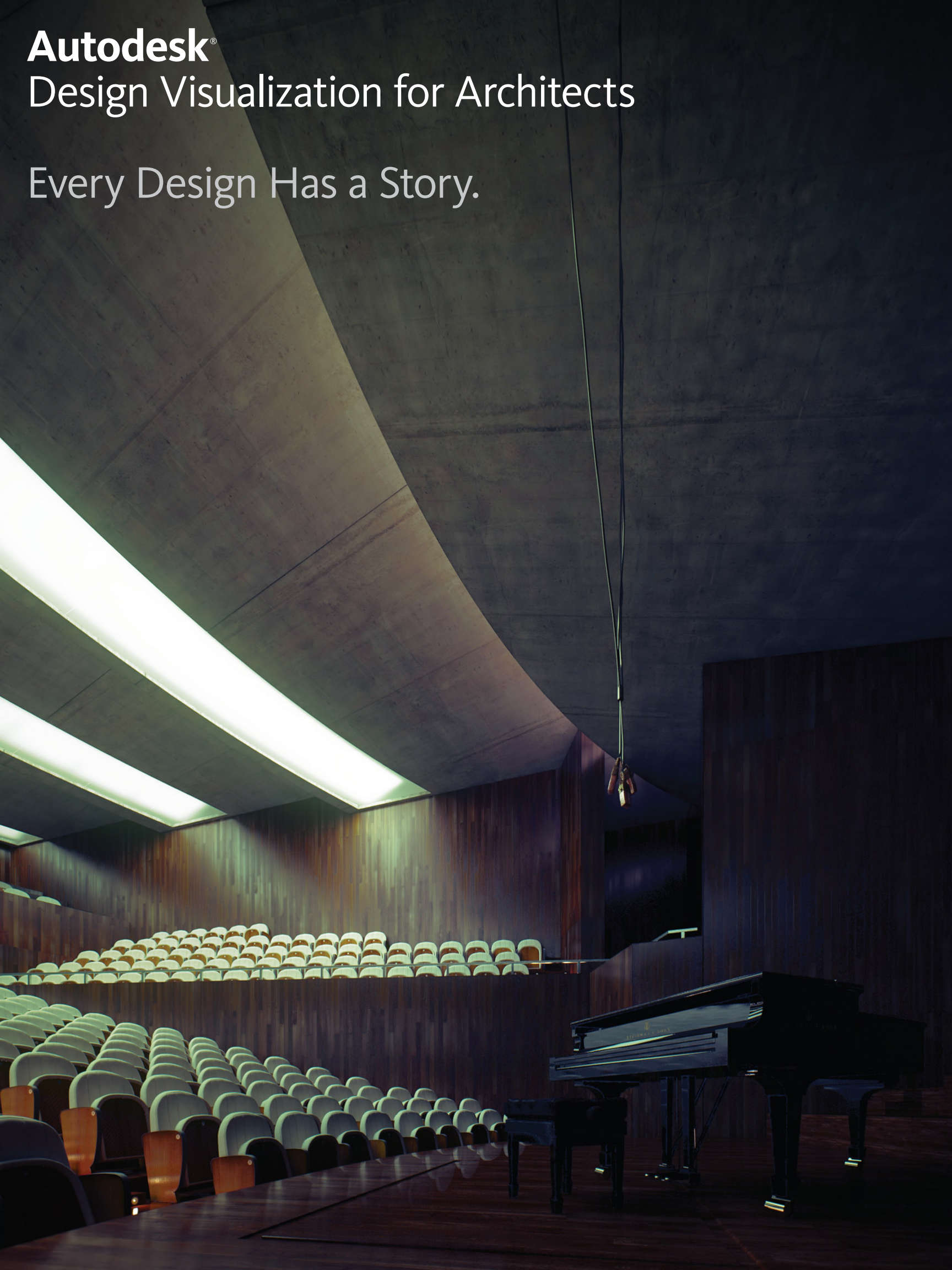# Autodesk®
Design Visualization for Architects

Every Design Has a Story.

A high-impact visualization can make the difference between winning a bid or walking away empty-handed.

Architects, designers, engineers and visualization specialists use Autodesk® 3ds Max® Design software to tell emotionally engaging stories of their designs in order to help win competitive bids. In addition, design visualization with 3ds Max Design helps them make more informed decisions visually throughout the building information modeling (BIM) process. Whether exploring complex organic forms, studying how light interacts with a design, or evaluating designs for planning and public outreach, visualization plays a role at nearly every stage of development, from schematics to final presentation.

Powerful Creative Tools
Autodesk gives you leading 3D design visualization tools that help you gain a deeper understanding of a project before it is real. You can see how the design works and uncover areas where problems exist. The earlier in the design process this type of review is done, the easier issues are able to be resolved. Ultimately, design visualization can help you create better designs and sharpen your competitive edge.

Explore, Validate, and Communicate
At the heart of Autodesk's design visualization solutions is 3ds Max Design software, a comprehensive 3D modeling and visualization application derived from the same technology used to help create Hollywood blockbusters and award-winning game titles. 3ds Max Design can help bring your design to life by importing data from many sources to better establish the context of the design, enabling you to create more compelling visuals to tell your story. 3ds Max Design delivers extensive data interoperability with widely-used Autodesk design software: the AutoCAD®, Autodesk® Revit®, and Autodesk® Inventor® software product families, so that you can spend more time creating and less time tracking down data.
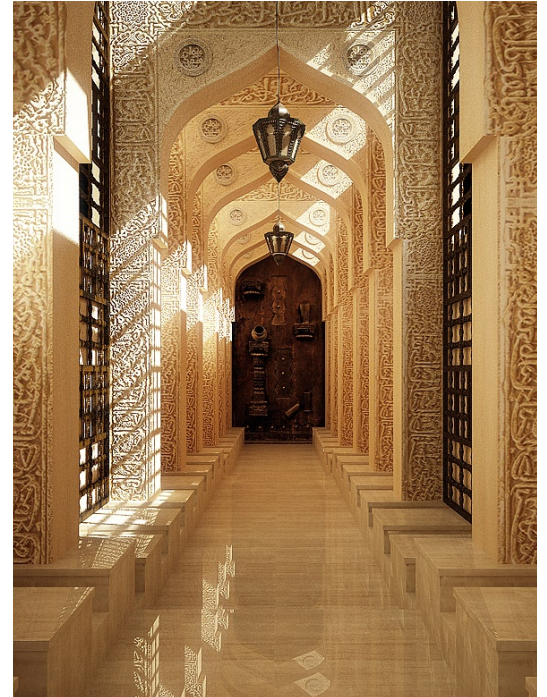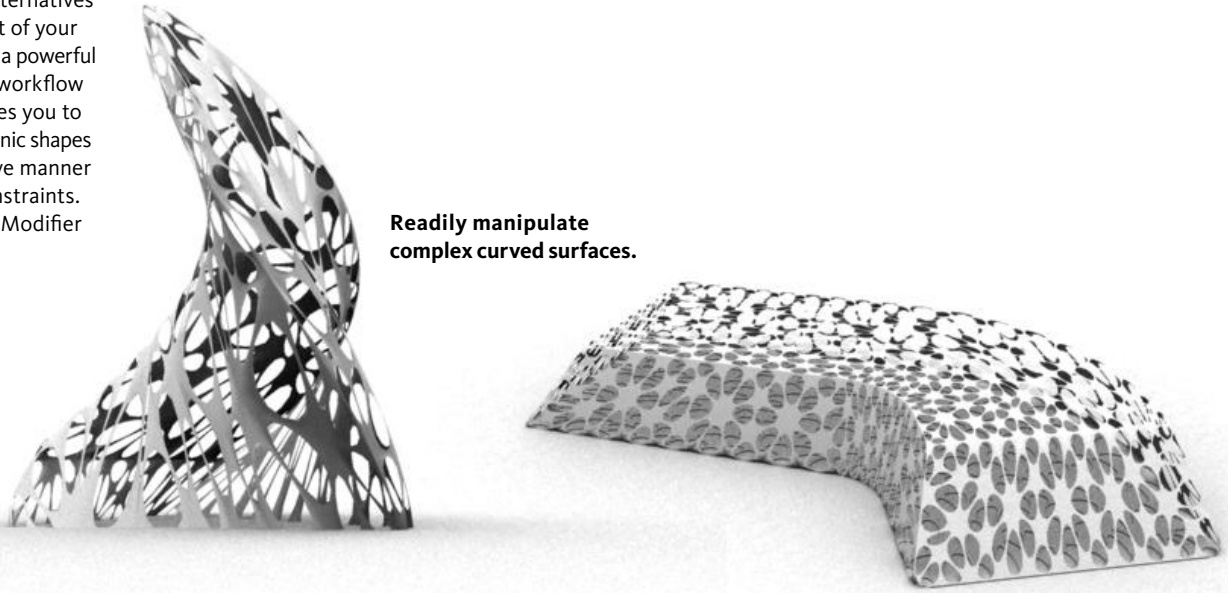

Image courtesy of Rami Emad.

Image courtesy of el dorado inc.

Explore Design Concepts

Create unique organic forms, generate and control architectural form procedurally with scripts, and explore your concepts' impact early in the design process.

The freedom to experiment during the conceptual stage enables you to more quickly explore design alternatives and gain a better understanding of the impact of your ideas earlier on. 3ds Max Design software offers a powerful modeling toolset that complements the BIM workflow during conceptualization. The software enables you to more freely create and manipulate complex organic shapes and drive geometry procedurally in an iterative manner via built-in, rules-based modifications and constraints. You can also develop your own rules with the Modifier Stack in 3ds Max Design.

Readily manipulate complex curved surfaces.

Image courtesy of Dyer Architects.

Validate Design Concepts

Put your design in context, so you and your clients can better understand its impact.

3ds Max Design 2011 delivers simplified interoperability with the Revit 2011 and AutoCAD 2011 software product families, helping to facilitate nondestructive visualization workflows. 3ds Max Design allows you to better visualize your project in context—which is crucial to making informed design decisions. Using the software's Exposure™ technology for helping simulate and analyze sun, sky, and artificial lighting, you can even more accurately visualize how light will interact with your building. The ability to evaluate light intensities in designs may also facilitate the evaluation of indoor environmental quality for LEED® EQ 8.1 certification.
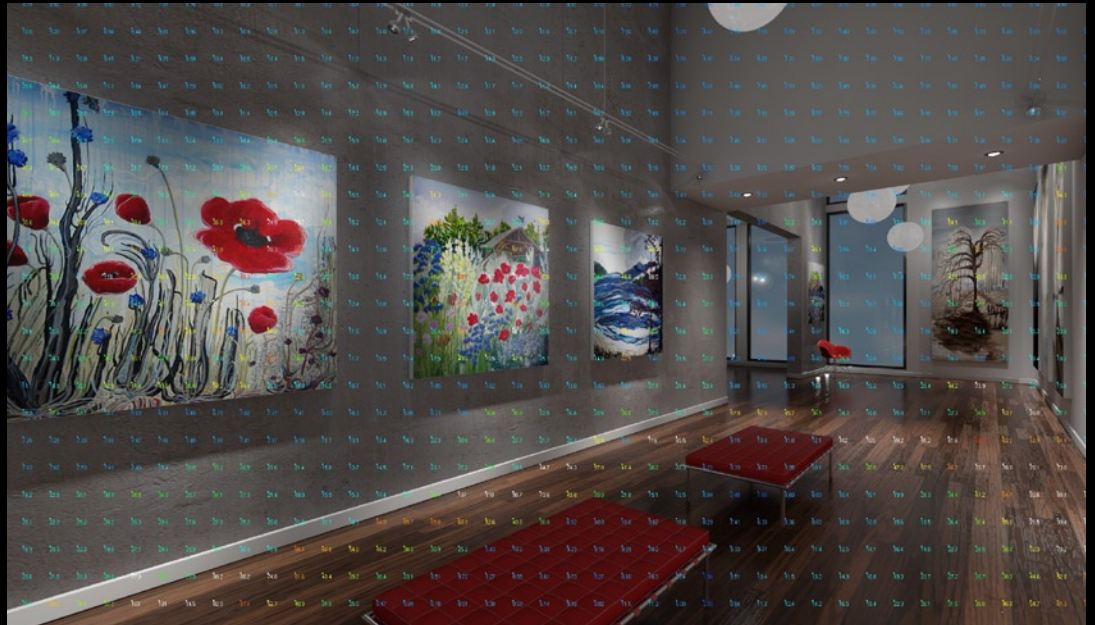

Image courtesy of Hayes Davidson.

Communicate Design Concepts

Help customers make crucial decisions during design reviews and gain valuable buy-in at every stage.

Image courtesy of Graff3D.

3ds Max Design helps you tell the story of your design —throughout the design process—to both colleagues and clients. Communicate a fuller scope of your creative vision by bringing AutoCAD® or Autodesk® Revit® Architecture design data into 3ds Max Design and adding organic elements (drapes, bedding, sofas, towels), real or stylized characters, props, and lighting. Using 3ds Max Design animation and visual effects tools, you can better communicate information quickly, compellingly, and persuasively.

Image courtesy of Visualisation One.

Your Advantage

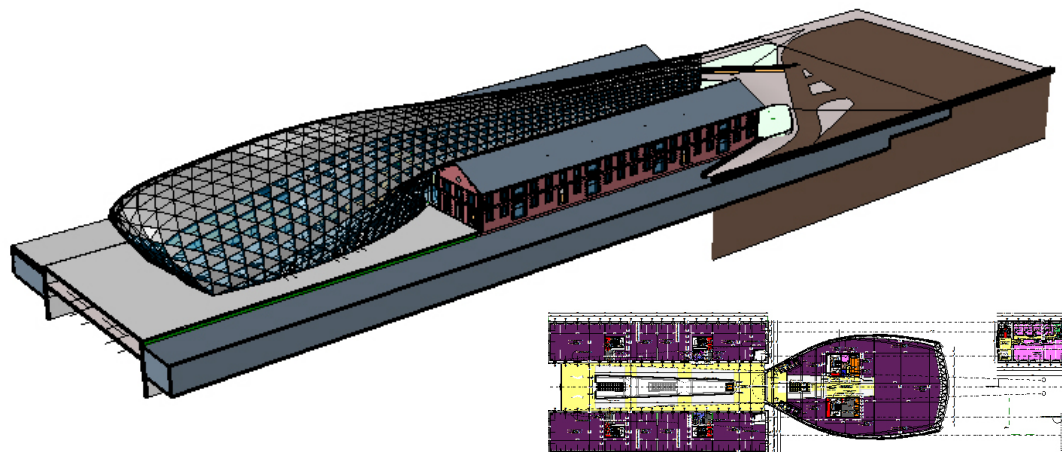## Autodesk 3ds Max Design 2011

Smart Data Workflows

Save time, better manage resources, and deliver higher-precision results with new intelligent workflows for handling data from numerous sources with 3ds Max Design 2011. The new FBX File Link enables 3ds Max Design to receive and manage upstream design changes from Revit Architecture. This more intelligent handling of data helps reduce rework of visualizations when original designs are revised and refined, supporting nonlinear decision-making processes and facilitating collaborative, iterative workflows. The new Autodesk Materials Library helps simplify material data exchange with the AutoCAD and Revit families of software, while a new SKP importer provides higher-fidelity files from Google® SketchUp™ sketching software.

Refine Your Design

Productivity enhancements in 3ds Max Design 2011 mean more time to iterate on your design, enabling you to be more creative and produce higher-quality results. Expanded Graphite and Viewport Canvas toolsets deliver intuitive new brush-based interfaces for 2D/3D painting, texture editing, and object placement, while a new in-context direct manipulation UI helps make polygon modeling faster. Also, the enhanced ability to view most 3ds Max texture maps and materials in the viewport means you can make interactive decisions in a higher-fidelity context, helping to reduce errors and save time. And, for projects where collaboration is critical, a significantly enhanced workflow with Containers enables multiple team members to work in parallel, making tight deadlines less of a challenge.

Higher-Quality Presentations in Less Time

Throughout the design process, you need to present your evolving design to internal and external stakeholders—and the way you do that can make the difference between winning business and walking away empty-handed. 3ds Max Design 2011 brings new tools that help you to create more compelling presentations even when time is at a premium. An intuitive new node-based material editor, Slate, helps make it easier and faster to create and edit complex material networks, while the innovative Quicksilver hardware renderer supports advanced lighting effects and can render at fast speeds, even at larger-than-screen resolutions. Enhance rendered passes and incorporate them into live action footage with 3ds Max® Composite functionality—a high-performance, HDR-capable compositor, based on technology from Autodesk® Toxik™ software. And, with the addition of Save to Previous Release, you can save scene files in a format compatible with the 2010 version.* This enables you to take advantage of the new features in 3ds Max Design 2011 before your entire studio, pipeline, or client base is ready to upgrade.

www.autodesk.com/3dsmaxdesign
www.autodesk.com/designvisualization

Restrictions apply. Refer to the End User License Agreement regarding upgrades and cross-grades.

Dataset courtesy of ONL [Oosterhuis_Lénárd].

Image courtesy of ONL [Oosterhuis_Lénárd].

Visualization is no longer simply a presentation tool; it is a design tool as well.

—Larry Malcic
  Director of Design
  HOK London

Autodesk

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Cover image courtesy of Alex Roman.