InDesign CS Creative Potential 3: Transparency

A Paradigm Shift in Graphic Design

Pfeiffer Consulting is a research and consulting company with its roots in creative markets. We have been following the creative design and publishing environment for years, since desktop publishing started to revolutionize the way printed documents were produced. In the course of these years, several true paradigm shift occurred in the way in which creative professionals and designers work. The first one was the arrival of the initial wave of page layout applications. The second occurred when Adobe Illustrator opened up the possibilities of PostScript-based vector illustration, yet another, with the arrival of the first desktop based digital retouching tools such as Adobe Photoshop.

In many respects, InDesign could represent another such paradigm shift: the arrival of a new generation of tools which could profoundly impact the way designers work - and ultimately, the way designs look.

Since the arrival of InDesign, Pfeiffer Consulting has conducted a number of research projects around page layout and design processes, including technology analysis and productivity measures comparing Adobe's page layout software with other design workflows. During this process we realized something surprising. InDesign redefines the way graphic designers can use their page layout tool, and opens up significant creative possibilities; yet many designers are not aware of this potential, or only use the program in a limited way.

Researching Creative Potential

This project was conceived to explore InDesign's creative potential, and it does so through a research-based approach, by analyzing and experimenting some of the thousands of possible combinations of original functionality included in the program. The illustrations included in the research reports have not been created to showcase design; their aim was **to explore new possibilities and to demonstrate unusual combinations.**

In other words, we are not trying to demonstrate different ways of achieving the effects you already use; we are investigating visual structures and design combinations which would be impossible or extremely time consuming to achieve.

All examples in these reports (and of course the reports themselves) were created **using only InDesign, without resorting to additional programs**. From the outset it was clear that key software applications often used in conjunction with page layout software (Adobe Photoshop and Illustrator, for instance) are essential for handling vector illustrations and pixel images; nevertheless, their use tends to slow down the graphic design process if these programs are used as a substitute for missing functionality in the page layout application.

To underscore that point, **we measured the time necessary to achieve a given design or effect**. **Because in the end, how fast you can achieve something is as important as what you can do.**

Major Findings:
Adobe InDesign CS integrates many design possibilities **which previously required specialized software applications.**

Combinations of functionality such as transparency, complex table designs, expert typography and others **provide strongly increased creative potential.**

In addition to creative potential, **this integration offers a strong increase in productivity** and speeds up the design workflow considerably.

About Pfeiffer Consulting:
Pfeiffer Consulting is an independent technology research institute and consulting operation focused on the needs of **publishing, digital content production, and new media professionals.**

www.pfeifferreport.com

Understanding the Nature of Graphic Design

Expanding the creative horizon

Whatever we create—be it a global ad-campaign of a simple PowerPoint presenta-tion—the tools we use have a strong impact on our creations. We embrace their potential, we bow to their limitations and integrate them in our way of working. **The tools, their shortcomings and constraints as much as their possibilities, define the shape of our creative work.**

This is particularly true in graphic design. The built-in design possibilities of the page layout application will determine how far a graphic designer can go and what he can do without resorting to additional applications. **This is an important aspect: however powerful programs such as Adobe Photoshop and Illustrator may be, having to use an imaging application to create simple graphic effects is not only disruptive and time consuming, it limits the designer in the scope of things he or she can achieve.** Who would want to use a word processor to correct a typo in a headline?

The logic of graphic design

Let's forget for a second everything we know about computer programs and desktop publishing, and let's look at the graphic design process itself. What is the basic design workflow? How does it work? How important is the integration of tools? What are the levels of excellence required?

Major Points:

Page assembly, graphic design and image work are **different aspects of the creative process** with different needs and requirements.

Integration of design tools with the core page layout environment is essential.

InDesign **expands the basic tool set** for page production in a number of ways.

Assessing the new tools: InDesign extends the possibilities of the page layout environment significantly beyond the possibilities currently available in other applications of the kind, including transparency, expert typography and a complete set of table building tools.

Some of these functionalities, such as high-end composition, should have been part of desktop page layout tools for a long time; others integrate possibilities which used to require a second software application. Yet another group of functions go well beyond the existing page-building paradigms: this is particularly true for nested frames and compound paths, which may not seem spectacular at first but open up enormous design possibilities.

However, the true creative potential stems from the fact that all of these tools are integrated with each other in the standard page layout environment and can be combined in thousands of ways.

Transparency Core Functionality:

- Object transparency
- Soft-edge drop shadows on objects, text, and placed images and graphics
- Feathered edges on objects, text, and placed images and graphics
- Transparency support in Photoshop, Illustrator and PDF files
- Transfer modes for objects, text, and placed images and graphics

Table Design Core Functionality:

- Header and Footer rows (repeating)
- Custom line styles and alternating fills
- Transparency support
- Supported by nested and compound frames
- Content extending over cell borders
- Content cropped by cell borders
- Support for tilted, rotated and sheared tables

Expert Typography:

- Full OpenType support, including automatic replacement of alternate glyphs, discretionary ligatures, old-style figures etc.
- Hanging punctuation
- Hyphenation and justification on paragraph level, with support for horizontal scaling
- Optical kerning
- Nested style sheets

Graphic Design Core Functionality:

- Nested Frames
- Compound paths
- Stroked text
- Gradient on text
- Gradient on strokes and lines
- Custom line styles
- Transfer modes

There are three levels of visual work involved in the majority of graphic design projects: page layout, which usually consists in assembling texts and images created by others; then there is **graphic design** which consists in shaping the graphic identity of the project and elements necessary for it, and finally **image work and illustration**, which consists in creating and applying image retouching and styling effects to selected image elements.

It would only seem logical for the graphic design part to be controlled by the art director in the environment used for the page layout and assembly of elements. **However, since the advent of desktop publishing tools in the late eighties, the limitations of page layout applications have resulted in a shift of design work to programs initially conceived for image and illustration work, such as Photoshop and Illustrator.**

Indeed, the limitations of most widely used page layout tools have shaped the way in which design work is currently practiced. So much so that many professionals do not necessary perceive these limitations any more.

The need for speed—and integration

Anybody who works creatively (and that includes just about anybody who has ever had to produce a document of any kind) has a devouring need for speed. When you are in the process of giving form to a vision, any slowdown can interrupt the creative process, disrupt a stream of ideas, and ultimately make the difference between a masterpiece and a failed attempt which lands in the dustbin (be it physical or digital).

Creativity is thinking about the project, not about the tool. Painters do not think about their brushes when they paint, writers give little thought to the mechanical aspects of their craft—and usually hate it when anything stands in the way of their inspiration. That's why in computer related work, speed (or more precisely absence of delay) is so important. **What needs to happen needs to happen immediately. Imagine a word processor that would make you wait for each sentence to appear on the screen, or a pencil that would leave a mark a few seconds after you have drawn a line.** Anything which creates a delay or an interruption can have a terrible impact on or work—and if it happens on a repetitive basis, will shape and mould our work in ways we may not even imagine.

Revolutionary combinations

InDesign expands the basic tool set of the page layout environment significantly by adding support for transparency, expert typography and complex tables. These are impressive tools. The ground-breaking aspect of InDesign's new possibilities, however, lies in their combination and integration. **Taken individually, all of the functionalities provided by InDesign are convenient. Used in combination, they add up to a entirely new tool set.** Transparency is useful, and so are tables. But imagine what you could do by combining them… and imagine the effects you could achieve by adding nested frames… and expert typography…

Methodology: The InDesign Creative Potential Research Project was conducted by Pfeiffer Consulting for Adobe. **The project is based on extensive research, technology analysis and productivity measures.**

The methodology for analyzing creative potential consisted in **isolating four key areas of functionality which InDesign brings to the market:** Transparency, sophisticated table support, expert typography and new design functionality. We then set out to research **the possible combination between these functionalities and experiment their creative implications.** The main aim of this analysis was not to see how InDesign could change current design practices, but how the software might change the way designers combine certain graphic possibilities.

All design examples in these reports were created using only InDesign, without resorting to additional programs.

Productivity Measures: For each major example, **the necessary time to achieve the design was measured using the standard Pfeiffer Consulting methodology for benchmarking and productivity measures**. To find out more, please visit www.pfeifferreport.com.

In traditional computer design workflows, the page layout tool acts mostly as an aggregator: the program which is used to combine text and graphic elements to produce a page. As soon as a desired effect cannot be achieved within the page layout program, designers need to resort to other applications.

Graphic design, however, is different from image work: while Photoshop and Illustrator are essential tools for creating and manipulating vector illustrations and pixel images, they should not be required for the mainstay of graphic design work, which needs to be carried out within the page design environment to be efficient.

Photoshop/Illustrator		Page Layout Application
		Traditional Workflow
		InDesign Workflow
Image Work	**Graphic Design**	**Assembly**
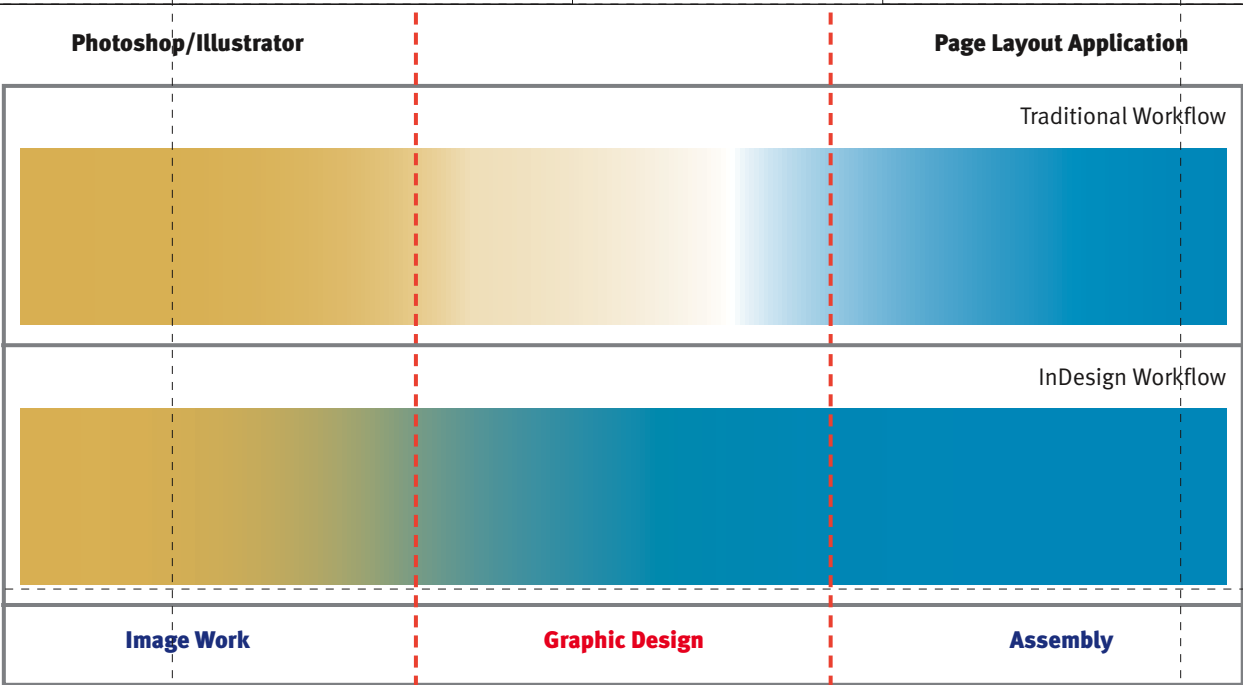
Transparency: The Basic Tool Set and its Combinations

What transparency brings to the design process

Ever since desktop publishing was invented over a decade ago, transparency was the single most important missing piece of the puzzle. Sure there were always ways of creating some transparency effects using photo retouching applications such as Photoshop, but the process was cumbersome to say the least. And even when Illustrator started to support transparency effects, the integration with page layout was far from easy.

This limitation of the design toolbox had strange effects on graphic design. **The use of transparency is most often limited to the odd tracing paper effect over a photograph, or to occasional stylized headlines**—to the extent that designers who are moving to InDesign may have to rethink what transparency actually means for them.

Transparency support in InDesign covers a wide range of options, and just to envisage the number of possible combinations with other tools such as tables, compound and nested frames, is staggering. **The range of possible combinations is where the true creative potential of transparency in InDesign lies.**

There is another important aspect: in traditional design workflows, any effect which can be created in an imaging application, can not interact with other page elements, which of course this severely limits its range. **In an InDesign based workflow on the other hand, the designer can integrate transparency information contained in a Photoshop, Illustrator or PDF file, and use it in conjunction with elements created in the page layout environment.**

Major Points:

Transparency holds enormous creative potential, **which goes well beyond the effects usually associated with this functionality.**

In particular in conjunction with typography, **transparency can yield very astonishing results**.

One of the main aspects of transparency in InDesign is the **integration with the full array of design tools**, which allows considerable creative freedom.

That's wonderful—but will it print?

The history of computer based publishing is lined with ground-breaking innovations which could bring the sturdiest image setter to its knees if used without proper considerations: in earlier versions of Illustrator gradients could cause havoc at output time, and even pixel images had their fair share of problems. Innovation requires experience and learning, and this process repeats itself whenever we venture into something new.

Adobe InDesign pushes the envelope in terms of graphics capabilities, and that means that some adaptation of our production reflexes is in order. When using a modern PDF based workflow, the risks for problems are relatively minimal: the latest iterations of the PDF file format (1.4 and 1.5) were designed to handle transparency, and Postscript Level 3 devices in general should be able to handle this feature. Older versions of the Postscript can be more problematic: Since PostScript has not been conceived initially to handle transparency, this capability (and features related to it such as drop shadows or feathered edges) can become a problem when used on older image setters.

The most important aspect when outputting to such a device is to pay attention to transparency flattening, a technique which basically renders transparent objects before output. In any case, with proper preparation, there should not be any insurmountable problems: a growing number of high-profile publications around the globe routinely use InDesign in production.
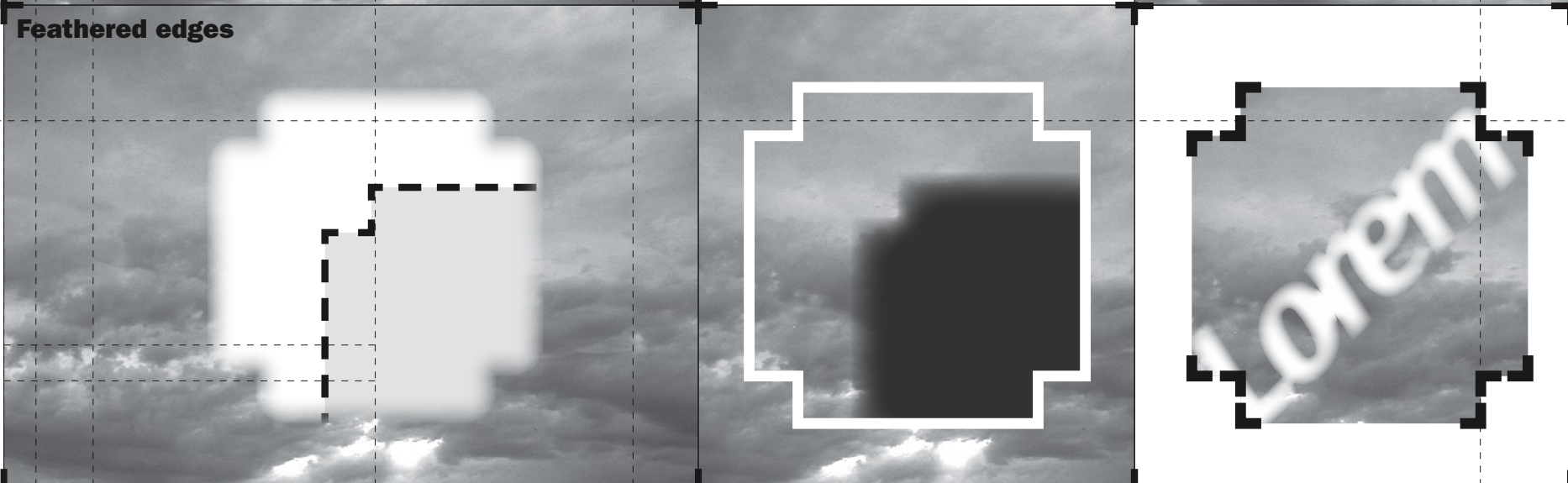
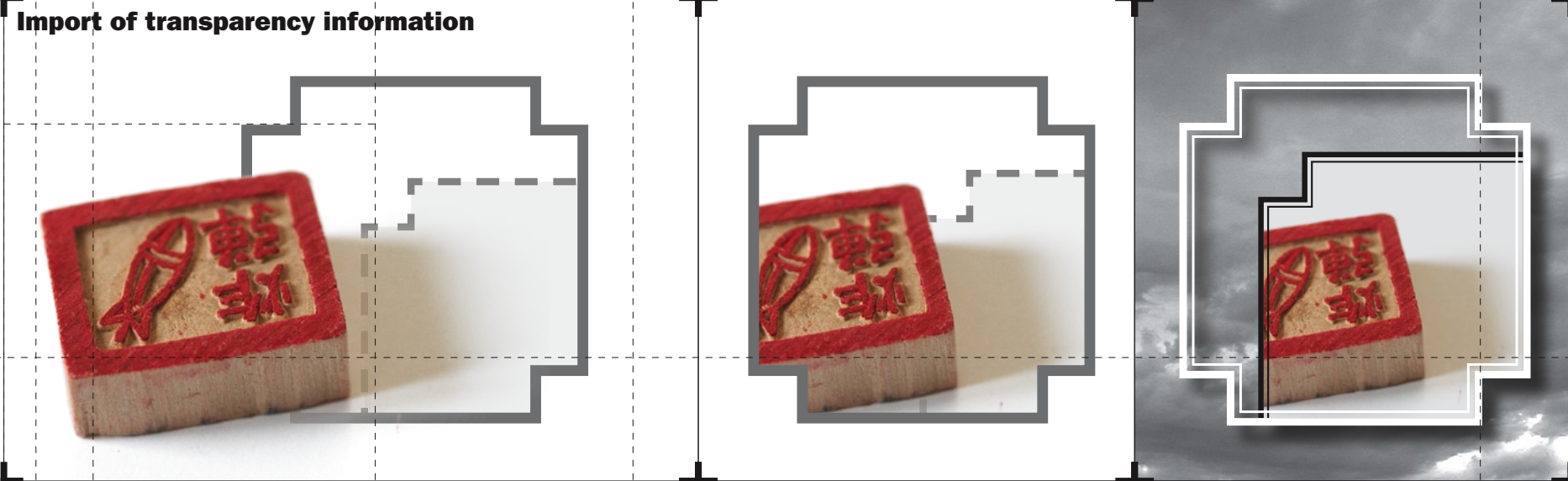# Basic creative possibilities and combinations with other tools or functions
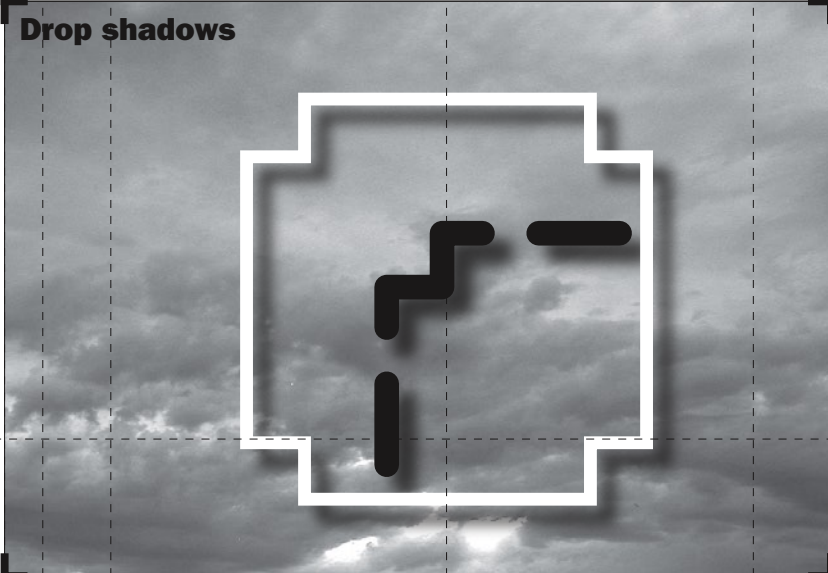
Object transparency

Feathered edges

Import of transparency information

Drop shadows

Transfer modes

Transparency: Design Combinations in Standard Applications

Limitations of the current workflow

Transparency in graphic design is mostly associated with a handful of simple effects which are commonly used in page production, for instance to make text over an placed photograph easier to read. In most standard design workflows, these simple transparencies are created using Adobe Photoshop, or in some case, Adobe Illustrator.

Apart from being slow and complex, this method obviously limits the extent to which a transparency effect can interact with other elements on the page: **while a placed vector illustration can contain a transparent element, this will not let the page background shine through** if the page layout application has no support for transparency.

As an example, one could create a transparent headline in Illustrator—but once placed in the page, it would have to be on a spot where no other graphic element is present. Otherwise any background element would have to be included in the original illustration, creating a whole new set of challenges for the designer.

The importance of experimentation

In InDesign, transparency is a basic parameter of any object or group of objects. Creating a translucent overlay over an image is as simple as drawing a frame and setting its transparency value to the desired effect. Creating transparent type only requires removing the background color from a frame containing text.

Ease of use is one of the most important aspects of any innovative technology. Being able to achieve a certain result is one thing, doing it easily and quickly yet another. In terms of design potential, the ease of combination and experimentation is absolutely crucial. Being able to try out the result of a new design possibility in conjunction with other elements on the page, and to see immediately the results allows the creative mind to roam. **This means that an effect which used to be the end-result of an effort becomes the starting point of a new exploration. And this is where InDesign's true creative potential lies.**

In the case of transparency, even simple combinations can yield astonishing results. Overlapping transparent glyphs, for instance provide a whole new set of creative options for designing display type, for instance. Used with the transfer modes provided by InDesign, partially overlapping pictures can be used to create innovative compositions without having to leave the page layout environment.

Design possibilities become yet more interesting when the basic functions are combined with core design tools such as nested or compound paths. Since transparency is applied on an object basis, it is very simple to group frames with different transparency settings and to paste them into another frame or compound object. The examples on the following page show some of the possibilities.

Major Points:

Transparency is a major addition to the basic design toolbox.

Integration with other tools is essential since it makes it easy to experiment with creative options in the page layout environment.

Design techniques such as transparency effects, which used to be a simple visual element produced in a different application, **become the starting point for creative exploration** within the page layout environment.
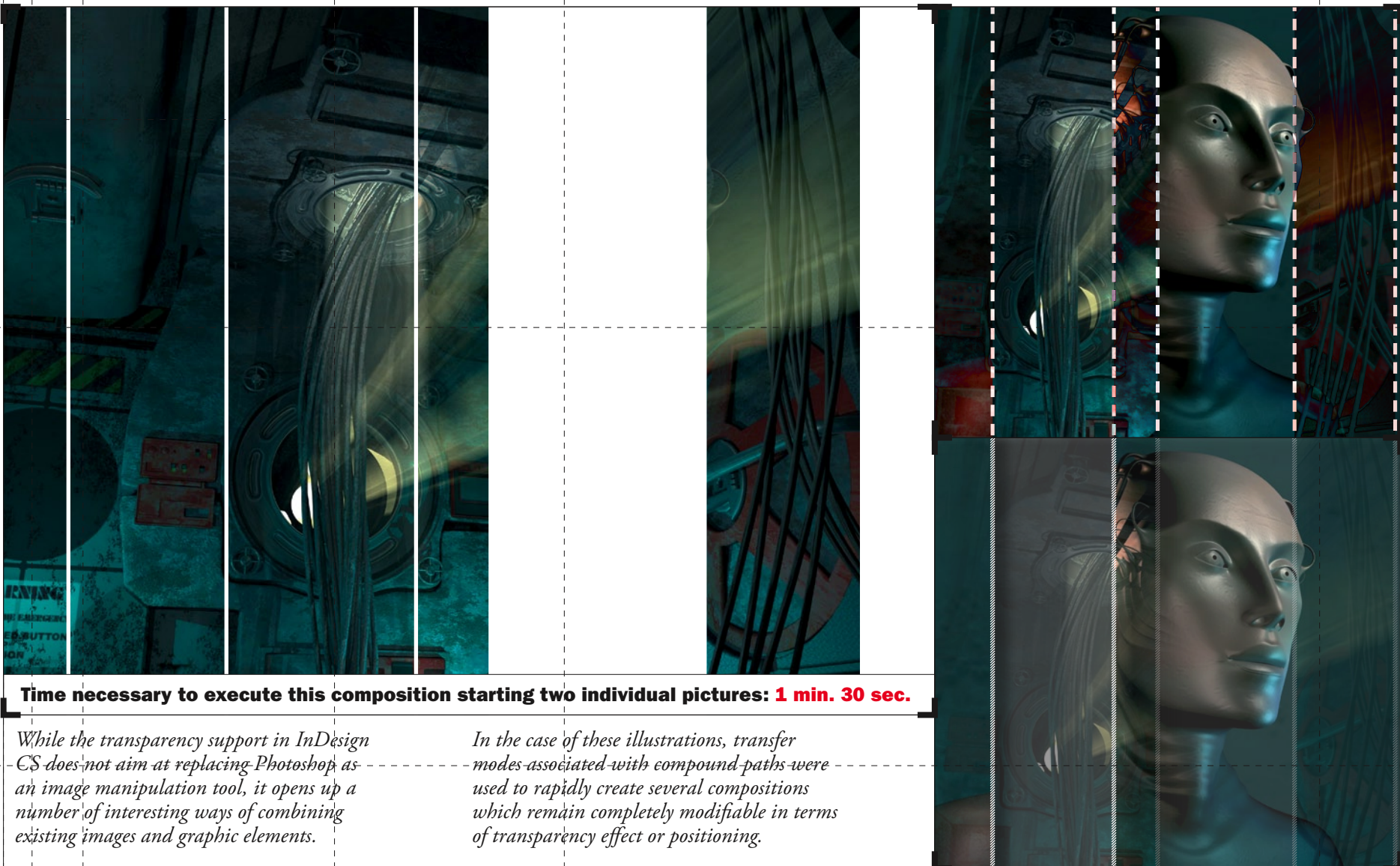
Time necessary to execute this composition starting from 1 formatted glyph: 0 min. 48 sec.
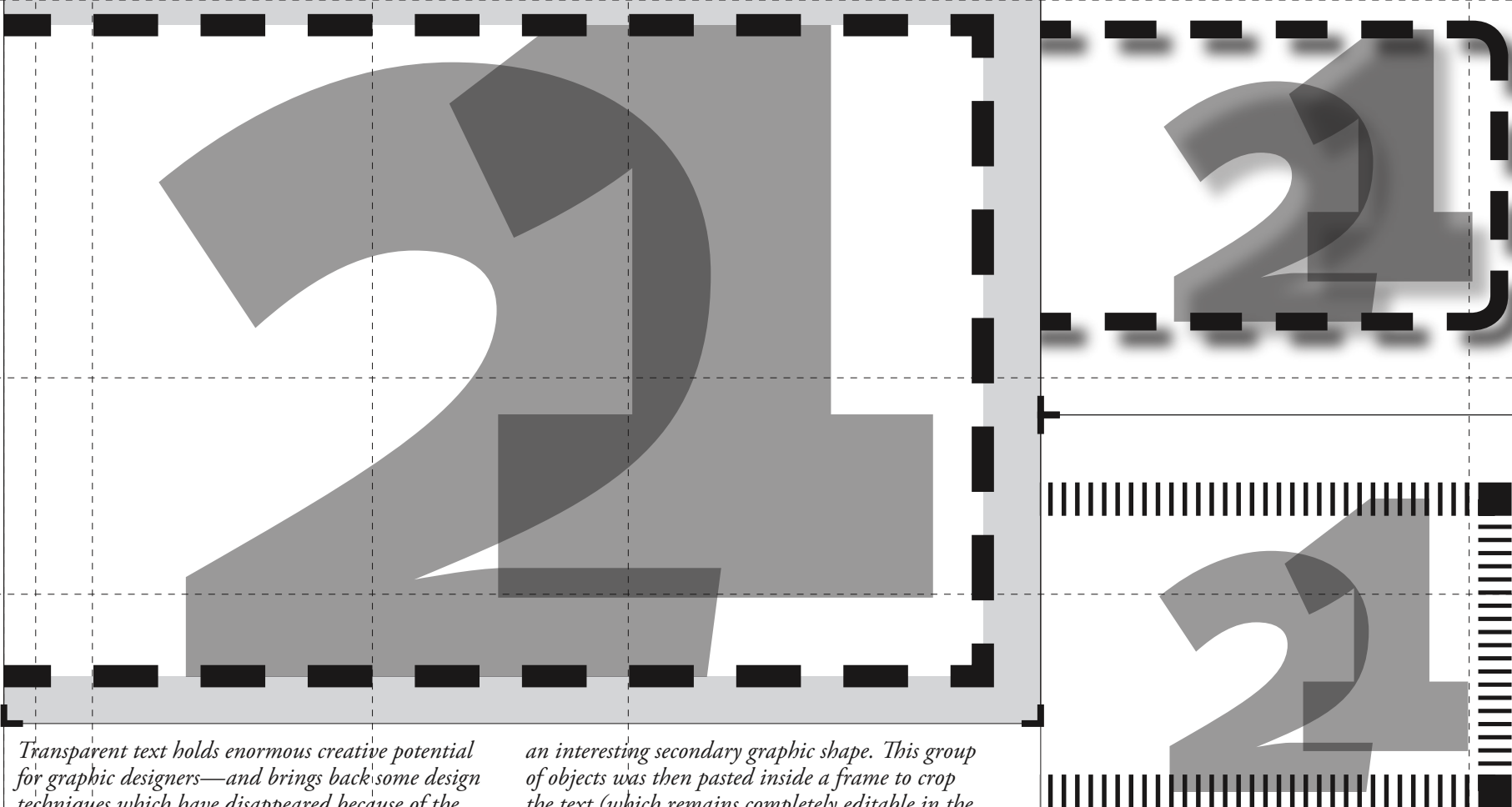
Transparent text holds enormous creative potential for graphic designers—and brings back some design techniques which have disappeared because of the limitations of current page layout tools. In this example, transparent text is made to overlap, creating an interesting secondary graphic shape. This group of objects was then pasted inside a frame to crop the text (which remains completely editable in the process). Other example combinations include a drop shadow effect and custom line and corner styles.

Time necessary to execute this composition starting two individual pictures: 1 min. 30 sec.

While the transparency support in InDesign CS does not aim at replacing Photoshop as an image manipulation tool, it opens up a number of interesting ways of combining existing images and graphic elements.

In the case of these illustrations, transfer modes associated with compound paths were used to rapidly create several compositions which remain completely modifiable in terms of transparency effect or positioning.

Transparency: Design Combinations in Extreme Applications

Going beyond the obvious

Once a designer starts to experiment with transparency in conjunction with other design possibilities, the considerable creative potential of these tools becomes immediately apparent. **It is also quite clear that this will lead to designs which are far beyond what we are used to see today.** Whatever the medium, the tool shapes our creation, and this is true not only for drawing and painting. The standard combination of computer tools for designers—and their limitations—has heavily influenced the style of graphic design we see today.

The examples here are a case in point. They are impossible to create with other page layout programs; if one uses vector illustrations packages such as Adobe Illustrator, it is technically possible to achieve a result along those lines—but it is quite unlikely that a designer would create that kind of effect when using such a program. There is a reason for this: **creative experimentation usually draws upon complex combinations of simple tools and effects. The natural capacities of the tool at hand will invisible guide this process.**

Navigating complex structures

While the graphic structure in the following examples may seem complex, it is born out of a few very simple steps and ideas. The variations we present here are also very straightforward. It would take only a few mouse clicks to push the design exploration much further.

What differentiates InDesign from other software for graphic designers is the ease to create, navigate and experiment with graphic structures. The example on the next page is a case in point.

The basic structure is easy enough to create: the starting point is the formatted main headline, which is copied to the clipboard. Next a set of parallel frames is created, transformed into a compound path, and positioned on top of the headline. In the following step, the initial text frame is pasted <u>inside</u> the compound paths. Since InDesign remembers the exact position of the object when pasting it inside another frame, it appears at the exact spot where it was copied—but cropped by the parallel stripes.

The rest is quite simple: using the icons on the control palette, we can select the text inside the compound path, and shift it using arrow keys. The graphic effect of color inversion is achieved by setting the transfer mode (available in the Transparency palette) to "Screen".

Different transfer settings yields very interesting results, even without touching the basic composition any further. **But experimentation should only start here:** one could easily group and cut the complete deign and paste it into another shape to crop it further, or to apply another transparency effect to the whole group.

Major Points:

The usefulness of transparency in the design process goes well beyond the most obvious possibilities.

InDesign's core strength lies in **the ease with which designers can set up, navigate and modify** complex graphic structures

Layering information through the use of compound paths can be used with transparency effects such as transfer modes to create complex designs easily.

Words

Words Words

While this example may not look like it has a lot to do with transparency, it would very cumbersome to achieve otherwise. In fact this effect is very easy to create: it uses compound paths (the stripes), and a duplicated text *frame which is then pasted inside the stripes and shifted. A transfer mode does the rest. Obviously the text remains completely editable: changing it could be done through a simple search and replace operation.*

Transparency: A new Dimension for Designing with Type

Getting to know transparency

It is quite surprising how we adapt the limitations we are confronted with. Since page layout tools prior to InDesign 2.0 never supported transparency, graphic designers only made very sparing use of it. Transparency was limited to the pixel-universe of Photoshop, and integrating it in a meaningful way into a complete page design was generally very complex and time consuming.

The example project on the following page shows a number of ways in which transparency can be used in page design—without as much as opening Photoshop. Using InDesign's transfer functions in addition to object level transparency values allows a number of very interesting effects.

It is certainly in the realm of display type that this newly found freedom will produce the most surprising results. Nested frames allow cropping and slicing of text in a number of ways. Playing with super-imposition of such elements through transfer effects and transparency opens up a vast array of unexplored creative possibilities.

Particularly important in this process is the ease of modification. Creating a type design such as the one featured in our example would be pointless if it weren't extremely easy to shift elements around and experiment with different modes and options. This extends to the edition capabilities of the text itself. Should the publisher of the present tome suddenly decide that the projected book will use the word "Torment" rather than "Turmoil" in its title, this change could be made in a few seconds, through a simple find and replace operation.

Major Points:

While InDesign does not aim at replacing Photoshop, **its transparency options form a natural extension to its design capabilities**.

Transparency will **provide significant boost to creative page design**, especially in conjunction with display type.

The fact that **all transparent elements remain completely editable** is essential for creative exploration.

About the design
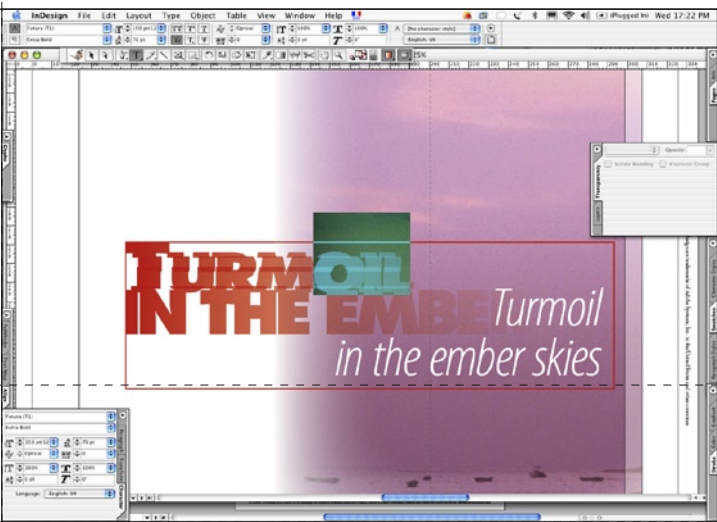
Technical aspects:

The main headline of the cover project was created by using nested frames and transparency in conjunction. To create the impression of text fading into the background image, a red to white gradient was assigned to the headline text.

One of the transfer functions provided in the Transparency palette was used to achieve the fading effect.

Time required:

It took **1 minute and 30 seconds** to create the main headline.

This included creating the "shattered" effect of the text, achieved by pasting the same headline into several adjacent frames which were then shifted.

Transparency linked to the overlap of the text frames added to the overall effect.

Soledad O'Casey

TURMOIL
IN THE EMBER

*Turmoil
in the ember skies*

Hollow & Globe

Colophon:

This report was created entirely with InDesign CS.

No other software was used to create any of the illustrations and examples used in this publication; all designs featured in these pages were used as live design elements, pasted inside a frame for positioning and cropping.

Designs and Illustrations: Eileen Brunswick and Laszlo Nahar.

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