

Chapter 21 Modeling Materials Technology and The Designers Perceptual Span

The perceptual span is the range of stimuli that a person can perceive at any given moment. It is a key factor in determining the success of a design, as it affects how people interact with and experience the design. Materials technology can be used to expand the perceptual span and create more innovative and successful designs.

The Perceptual Span

The perceptual span is determined by a number of factors, including the size and shape of the stimulus, the contrast between the stimulus and its background, and the viewer's distance from the stimulus. The perceptual span can also be affected by the viewer's age, experience, and expectations.



Materials Experience: Chapter 21. Modeling Materials Technology and the Designers' Perceptual Span

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When a stimulus is too large or too small, or when the contrast between the stimulus and its background is too low, the stimulus may not be perceived. Similarly, when a viewer is too far away from a stimulus, or when the viewer's expectations are not met, the stimulus may not be perceived.

Materials Technology and the Perceptual Span

Materials technology can be used to expand the perceptual span by increasing the size or contrast of the stimulus, or by reducing the viewer's distance from the stimulus. For example, a designer could use a high-contrast material to make a product more visible, or could use a transparent material to make a product appear closer.

Materials technology can also be used to create new and innovative stimuli that cannot be perceived with traditional materials. For example, a designer could use a thermochromic material to create a product that changes color in response to temperature, or could use a piezoelectric material to create a product that generates sound when it is touched.

The perceptual span is a key factor in determining the success of a design. Materials technology can be used to expand the perceptual span and create more innovative and successful designs. By understanding the relationship between materials technology and the perceptual span, designers can create products that are more visible, more appealing, and more interactive.

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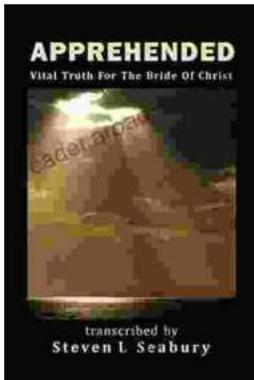
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