Spatial Agency Bias and Rule of Thirds for the enhanced engagement of generated images.

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Abstract

The Spatial Agency Bias (SAB) is a cognitive bias that refers to the tendency for people to associate agency with the left side of space and the lack of agency with the right side of space. This bias is thought to be rooted in the way that we learn to read and write. In most languages, we read and write from left to right. This means that we are constantly scanning text from left to right, and we associate this movement with agency. Agency in this context, we are referring to an individual that has the ability and capacity to act and make independent decisions that can influence others. Agency is closely tied to a sense of empowerment and autonomy. The SAB has been shown to have a number of implications for social cognition. The Rule of Thirds is a fundamental principle in photography and visual arts that helps create balanced and visually appealing compositions. It involves dividing the frame into nine equal parts using two equally spaced horizontal lines and two equally spaced vertical lines, creating a grid with four intersections. These concepts combined with the visually stunning capabilities of Imagery Generative A.I. should open up an entirely new level of user engagement.

Introduction

Let's start out with one example of Spatial Agency Bias is that people are more likely to perceive someone as being more agentic if they are facing to the left. This is because we associate the left side of space with agency, and we assume that someone who is facing to the left is moving forward and taking action.

The SAB can also influence how we perceive the power and status of others. For example, studies have shown that people are more likely to perceive cars as being faster and more desirable if they are facing to the right. This is because we associate the right

side of space with agency and power, and we assume that a car that is facing to the right is more likely to be moving forward and taking action.

The SAB is a powerful cognitive bias that can have a significant impact on our social perceptions. By understanding the principles of the SAB, we can become more aware of how it influences our judgments of others.

Key Points

Here are some of the key principles of the spatial agency bias:

- The SAB is a cognitive bias that refers to the tendency for people to associate agency with the left side of space and the lack of agency with the right side of space.
- The SAB is thought to be rooted in the way that we learn to read and write.
- The SAB has been shown to have a number of implications for social cognition, including how we perceive the power and status of others.

By understanding the principles of the SAB, we can become more aware of how it influences our judgments of others.

Application to Image Generation

Spatial Agency Bias more explicitly refers to the intentional or unintentional favoring of certain regions or areas in an image during the process of image generation. This bias can have a significant impact on the engagement level of viewers. When applied strategically into generative A.I. space with the aim of higher engagement, Spatial Agency Bias can lead to several effects:

- 1. Focused Attention: By emphasizing specific regions in an image, Spatial Agency Bias can guide the viewer's attention to the most important or visually appealing elements. This can increase engagement by capturing the viewer's focus and encouraging them to explore the image further.
- 2. Storytelling: Spatial Agency Bias can be used to create a narrative within the image. By highlighting particular objects, characters, or scenes, the image can tell a story, making it more intriguing and emotionally resonant for the viewer.
- 3. Emotional Impact: By applying Spatial Agency Bias to enhance certain emotional cues in an image, creators can evoke specific feelings or reactions in viewers. This emotional connection can foster a deeper engagement with the image.
- 4. Visual Hierarchy: Spatial Agency Bias can establish a visual hierarchy, organizing the image in a way that makes it easier for viewers to interpret the content. This clarity can enhance engagement by reducing cognitive load and facilitating a smoother visual experience.

- 5. Personalization: Depending on the intended audience, Spatial Agency Bias can be used to tailor the image to different groups, considering their preferences and cultural backgrounds. Personalization can foster a sense of connection and relevance, thereby increasing engagement.
- 6. Interactive Experiences: In interactive image generation, Spatial Agency Bias can be utilized to respond dynamically to user input, ensuring that the generated images align with the user's interests or needs. This can lead to higher engagement as users feel actively involved in the creative process.
- 7. Branding and Marketing: In the context of branding and marketing, Spatial Agency Bias can be employed to emphasize specific brand elements, products, or messages. By doing so, it can boost brand recognition and increase the effectiveness of promotional materials.

However, it's important to note that the application of Spatial Agency Bias should be done thoughtfully and ethically. Introducing bias in image generation may raise concerns about misrepresentation, reinforcing stereotypes, or promoting harmful content. Generative A.I. platforms and applications should be mindful of these potential issues and takes steps to ensure that the bias aligns with the intended purpose of the image generated as a post recommendation in an effort to avoid causing harm or perpetuating prejudice.

Rule of Thirds

By following the Rule of Thirds, photographers can create images that are more visually pleasing, interesting, and well-balanced. Many modern cameras and smartphone apps even have an option to display a Rule of Thirds grid overlay on the screen, making it easier for photographers to compose their shots effectively.

- 1. Balancing Elements: Placing the main subject or focal point of the photograph along one of the vertical lines helps balance the image. By avoiding a centered subject, you create visual interest and draw the viewer's eye into the frame. For example, when photographing a portrait, you can position the subject's eyes near one of the upper intersections, enhancing the overall composition.
- 2. Landscape Photography: In landscape photography, the Rule of Thirds is commonly applied to divide the horizon. Placing the horizon along either the top horizontal line (for emphasizing the sky) or the bottom horizontal line (for highlighting the foreground) helps create a harmonious and captivating scene.
- 3. Leading Lines: Leading lines are important compositional elements that draw the viewer's attention into the photograph. By aligning leading lines with the gridlines, such as roads, fences, or natural elements like rivers, you can guide the viewer's gaze through the image and add depth and perspective.
- 4. Placement of Points of Interest: Placing points of interest, like a person, animal, or an object of significance, at the intersections of the gridlines makes them more visually impactful. This technique draws attention to those points and enhances the overall visual flow.

- 5. Creating Dynamic Compositions: By distributing various elements of the scene across the gridlines, you can create a dynamic and well-balanced composition. This is particularly useful when capturing busy scenes, as the Rule of Thirds helps prevent clutter and confusion.
- 6. Portraits and Eye Placement: In portrait photography, aligning the subject's eyes along one of the horizontal lines often produces a more engaging and powerful portrait. The eyes are a focal point, and placing them in line with the grid helps capture the viewer's attention.
- 7. Foreground and Background Interest: When shooting images with distinct foreground and background elements, aligning them with the gridlines can create a sense of harmony and depth. This is especially useful in landscape photography or when capturing architectural scenes.

Rule of Thirds in Post-Processing: The Rule of Thirds is not limited to the initial composition; it can also be utilized during post-processing. Cropping an image to adhere to the Rule of Thirds can improve its overall visual impact and composition.

It's important to note that while the Rule of Thirds is a valuable guideline, it is not a strict rule. Artistic expression often involves breaking conventions, and there will be instances where other compositional techniques work better for a particular photograph. However, the Rule of Thirds serves as an excellent starting point for photographers to develop a strong understanding of composition and to create visually compelling images. As photographers gain experience, they may choose to adapt or deviate from the Rule of Thirds to achieve their desired artistic effect.

Conclusion

The manner in which these concepts should be implemented in any generative A.I. solutions for image generation has the potential to significantly impact viewer engagement by guiding attention, conveying narratives, evoking emotions, and creating personalized experiences. When S.A.B. and Rule of Thirds is used responsibly and in line with the intended goals of social media influencers and brands, it can enhance the overall visual experience and connection between the image and its audience.