

# 立體影像應用於超現實之空間表現研究

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## 摘要

超現實主義中表現出的神秘、虛幻、或是重疊的空間意象與全像立體影像所帶給人視覺效果有所關聯。本研究將探討有關全像應用於平面設計可能性之研究。研究均提出若在 2D 的媒材上，加上具有 3D 效果的立體圖形，在畫面構成上去表現三度的空間效果，例如運用立體影像具立體深度效果之特性，便能幫助觀者在觀看平面作品時能呈現出立體感之效果。因此在如何使用立體影像的媒材去結合海報呈現超現實般的空間視覺效果為本論文發展的重點。

本研究目的在於探討超現實表現手法所呈現空間視覺效果與全像立體影像之間的關聯性，藉由達利的作品對於立體影像的過程與啟發，來探討立體影像與視覺應用之趨勢，最後透過全像這新媒材，將超現實手法呈現空間視覺效果由二維平面的部份中去表現三維空間的立體概念，並且建立超現實表現手法中應用全像立體媒材的圖像表現規則。

本研究首先從超現實文獻的歸納及整理，目前針對超現實空間表現手法中歸納出九種超現實表現手法，透過實驗一結果，發現其中三種的超現實表現手法呈現視覺空間感較佳，因此實驗二便針對這三種呈現空間感最佳的超現實表現手法與不同立體影像媒材結合並進行實驗。探討從表現出的空間感和超現實風格層面，是否優於平面輸出媒材。

研究結果：

(1)超現實手法於平面之視覺空間程度中，「時空之置換」、「比例尺寸放大縮小」、「重疊交錯的意象」在九種超現實表現手法中較具有空間感，也與文獻中單眼線索裡的視覺空間表現形式相互驗證。

(2)在超現實表現手法「時空置換」結合立體影像媒材中，經過實驗後發現反射式全像媒材表現空間感最佳，也是較符合「時空置換」超現實風格。

(3)在超現實表現手法「比例尺寸放大縮小」結合立體影像媒材中，經過實驗後發現反射

式全像媒材表現空間感最佳，但是在符合「比例尺寸放大縮小」超現實風格上，點陣式全像媒材較能表現出其風格。

(4)在超現實表現手法「重疊交錯的意象」結合立體影像媒材中，經過實驗後發現反射式全像媒材表現空間感最佳，也是較符合「重疊交錯的意象」超現實風格。

(5)本研究結果證明，以超現實手法結合全像立體影像的表現出來的虛實之間的空間感以及超現實獨特的風格優於平面影像的表現。

關鍵字：超現實表現手法；全像立體影像；視覺空間

# Research on the Spatial Representation of Surrealism Through the Stereo-image of Holographic

## Abstract

The mysterious, visional, and overlapped space images of Surrealism can be connected with the visual effect which hologram produces. The study will discuss the possibility to apply hologram in graphic design. Many research mentions that a 2D media putting 3D effect pictures, the 3D space feelings would help the viewers to have the 3D effect feelings when viewing the plane project. Therefore, it is the aim of this research is using 3D images resources combined with posters to show the surrealism spatial visual effect.

The purpose of the study is to discuss the correlation between spatial visual effect in the representation of Surrealism and hologram. Adducing Dali's theory of stereography to discuss the trend of stereography and visual application. Finally, through the new media, hologram, the study constructs the techniques Surrealism presents the visual effect of 3D spatial concept from 2D graphic concept and the rules Surrealism applies in using hologram.

The first step of this research generalized nine representations of Surrealism from the literature. From the results of experiment one, the research finds that three of these nine representations can produce better visual spatial sense. Therefore, in experiment two, this research combines each of these three representations with different media of stereography to explore if the spatial sense and Surrealistic styles of these three representations are better than those of graphic media.

The study results are as follows:

(1) In visual spatial sense of Surrealism, "space exchange", "enlarge/shrink scaling dimension", and "overlapped interlace image" of the nine representations of Surrealism have better spatial sense, and it also can be proven in the visual spatial representations of

monocular cue in literature.

(2) In the combination between one of the representations of Surrealism “space exchange” and stereography, reflection hologram can produce the best spatial sense and it also conforms to the Surrealistic style of “space exchange”.

(3) In the combination between one of the representations of Surrealism “enlarge/shrink scaling dimension” and stereography, reflection hologram can produce the best spatial sense, but Dot printer Holographic can produce better Surrealistic style in conforming to “enlarge/shrink scaling dimension”.

(4) In the combination between one of the representations of Surrealism “overlapped interlace image” and stereography, reflection hologram can produce the best spatial sense and it also conforms to the Surrealistic style of “overlapped interlace image”.

(5) The study results prove that the spatial sense and Surrealistic style of hologram are better than those of graphic image.

**Key words:** Hologram, Representation of Surrealism, Visual Spatial