

台大杜鵑花節錯覺展：科學的藝術與藝術的科學

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**Close Encounter – Illusions where science meets art**

Shinsuke Shimojo's work in collaboration with National Taiwan University

## 傾斜的漢字

## (UN)TILTED CHARACTERS

### 要做什麼？

看看圖案的對齊程度，它們是平行的嗎？

然後，仔細地審視每一個字，看看它們是否真的傾斜。

【本作品由下條信輔設計於本展覽首展】

### What to do?

Just get the first impression on alignment, i.e. are they all parallel?

And then, scrutinize each character to see if they are actually tilted or not.

(This pattern was created for this exhibition by Shinsuke Shimojo.)

### 發生了什麼事？

你可能難以否認它是傾斜的，但是仔細地檢驗後，會發現幾乎沒有一條水平或垂直線是傾斜的。當科學家檢驗空間知覺時，他們會區分粗略（低空間頻率）和精細（高空間頻率）兩種不同的空間尺度。這傾斜的感覺事實上存在於低空間頻率的訊號中，但是不存在於精細尺度的水平或垂直線，因此讓人產生不一致的感覺。

### 更多嘗試與體驗

- \* 如果你戴著眼鏡，請把它們摘下來；如果你沒有戴眼鏡，請跟你的朋友借一副來戴上，看看這些由文字排成的圖形。拿掉眼鏡會使高空間頻率的成份從圖形中移除，留下低空間頻率的成份。傾斜的效果增加了嗎？

### What's going on?

One may not resist an impression of tilt. But careful examination would reveal that there is hardly any line segment actually tilted. When scientists examine spatial perception, they separate crude scales (low spatial frequencies) and fine scales (high frequencies). The tilt actually exists in low spatial frequencies, but not in the fine-scale segments of horizontal or vertical, thus giving inconsistent impressions.

### Other things to try

- \* Remove glasses from your eyes if you wear them. And borrow a pair from your friend and wear if you don't, to watch the letter arrays. This will remove high spatial-frequency components, thus leave with low frequency components. Isn't the tilt effect enhanced?