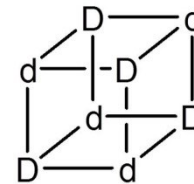
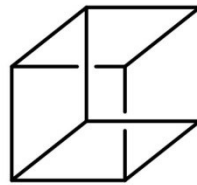
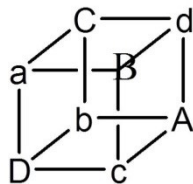


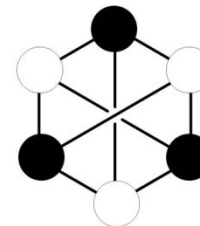
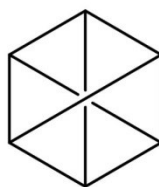
# Perception of Colours, Black, and White

Our perception of colours - including black and white - is a construct of the brain, formed by the way our visual system draws distinctions.

Each colour - including black and white - can be interpreted as a relational object arising from the mirror symmetry of Order 4.



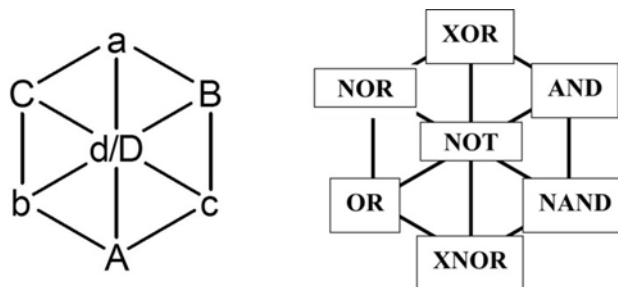
Order 4 and Colour, Black and White.  
Colour, Black and White are Relational Objects that Emerge In Order 4  
from Drawing Distinctions Mirror Symmetrically.



## Oppositional Pairs in Perception

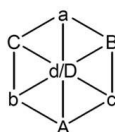
- **Black and white** form an **oppositional pair**, as do the three **primary additive and subtractive colours** (e.g., yellow and blue).
- Each pair member is perceived as an **alternative** to the other, but both are necessary for the visual system to function.
- If no distinction is drawn - such as in blindness - neither member of the pair can be perceived.

The three relational pairings that give rise to the additive and subtractive colour pairs, along with the single pairing of black and white, map to the three relational pairs of logic gates in chiralkine counting. These mirror-opposite gates operate in dual symmetry, just like the dual NOT function, which inverts between what a thing is and what it is not.

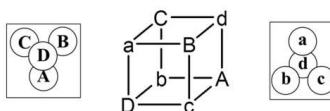


**ORDER 4 and the Logic Gates**  
The six logic gates and the not operation are constituted in the symmetry Order 4

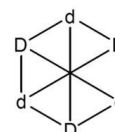
Together, they also reflect the same structure found in the triplet and singlet states of ortho and para hydrogen - each a relational object defined by symmetrical oppositions.



**ORDER 4**  
One distinction (that between d and D) is lost when four different objects are constrained to be ordered in rings.



**ORDER 4**  
Two interpenetrating enantiomers of a chiral tetrahedron:  
(a, b, c and d) and (A, B, C, D).



**ORDER 4**  
The lost distinction between d and D can only be recovered at the expense of losing the distinctions defining a, A, a; B, b and c, C.

Interpenetrating XOR and XNOR Truth Tables Oscillation of meanings of 1 and 0					
Triplet state	0	1	0	1	
	1	1	0	0	
	1	0	0	1	
	1	0	1	0	
	0	0	1	1	
	0	1	1	0	

## Chiralkine Construction of The Ortho and Para Relational States of Hydrogen

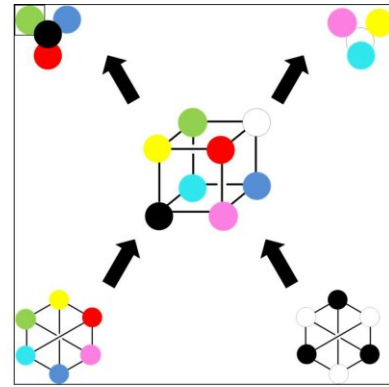
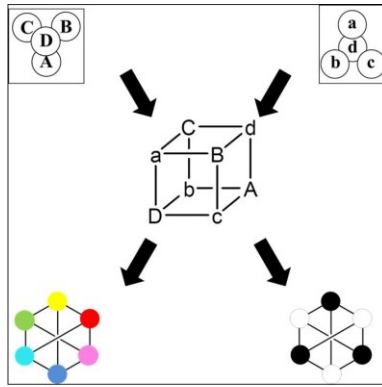
Interpenetrating XOR and XNOR Truth Tables Oscillation of meanings of 1 and 0					
Singlet state	0	1	0	1	
	1	0	1	0	
	0	1	0	1	
	1	0	1	0	
	0	1	0	1	
	1	0	1	0	

$$\begin{array}{c} (\downarrow\downarrow) \\ (\uparrow\downarrow) - (\downarrow\uparrow) \\ (\uparrow\uparrow) \end{array}$$

$$(\uparrow\downarrow) + (\downarrow\uparrow)$$

### Summary

The additive and subtractive colours emerge as relational objects in Order 4.



**ORDER 4**  
**Emergence of the Additive and Subtractive**  
**Colours as Relational Objects**