Escher on Escher
Four Hobbies
& Other Themes
Escher had many “themes” in his work.
He described the following as his “four Hobbies”.

1. Regular Division of the Plane
2. Approaches to Infinity
3. Perspective
4. The Impossible
Regular Divisions of the Plane

• “A Plane which should be considered limitless on all sides, can be filled with or divided into similar geometric figures that border each other on all sides without leaving any ‘empty space’.

• This can be carried to infinity according to a limited number of systems.”

Ref: Colored Symmetry, H.S.M. Coxeter, 1986, in M.C. Escher : Art and Science
• Regular Division
• Of the
• Plane
• 1
• Regular Division of the Plane II
• 1957-1958
• 34.1 x 25.4 cm
• Woodcut
• Black on wove paper
• Regular Division of the Plane III
• Regular Division of the Plane IV
• Regular Division of the Plane V
Translation

• The “Interlocking Figures” can be Translated to cover the entire infinite Plane.

• There are Two Directions to translate -- and then repeat the translations.
• No. 105
• Winged horses.
• 2 - Colors
• Each Horse
  • Translates
  • Up
  • Right
• to another horse. (changing color)
- 106
- Birds
- 2 Colors
- Moves
- Up/Right
No. 97
Dogs
2 Colors

- Alternate Rows - face opposite directions.
- Translate Right.
- Translate up 2 rows.

• Symmetry #78

• Columns change direction
- Symmetry Work #91
- Translations
  - up/down
  - Diagonally
• Symmetry work #73
• Translations -- Up/down and Diagonally
Two Shapes

Fish
Horses

• Translate Right  -- Translate Left
Heads
• Symmetry 85

• 3 Motiefs

• 3 Colors

• Rotation 120°
  in addition to Translations
• URL:
  http://euler.slu.edu/escher/index.php/Regular_Division_of_the_Plane_Drawings