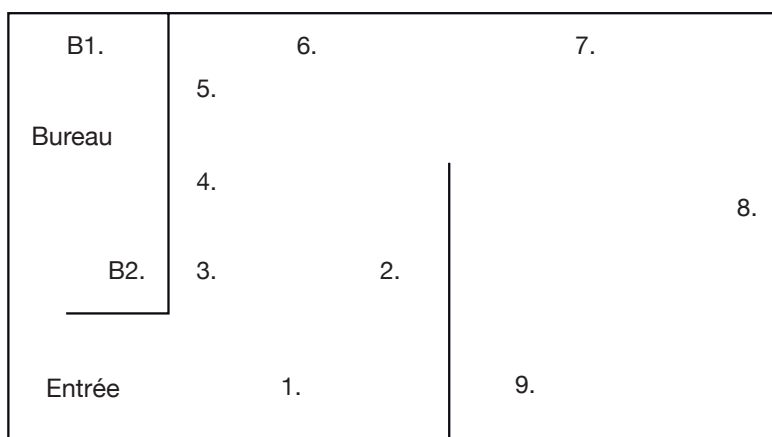# TOM JOHNSON

Les dames du Révérend Kirkman et autres jeux

Une proposition de Curtat Tunnel

Exposition du 7 septembre au 3 novembre 2012
Vernissage le vendredi 7 septembre 2012 à 18h00

Horaire: je-ve-sa de 14h à 18h et sur rendez-vous

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┌──────────────┬──────────────────────────────────────────┐
│  B1.         │        6.                    7.          │
│              │  5.                                      │
│  Bureau      │                                          │
│              │  4.              ┌───────────────────────┤
│              │                  │                    8. │
│        B2.   │  3.        2.    │                       │
│  ┌───────────┤                  │                       │
│  Entrée      │     1.           │       9.              │
└──────────────┴──────────────────┴───────────────────────┘
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1. PERMUTATIONS of 1,2,3,4 serie, 2012
encre sur papier, 29,7 x 42 cm

de gauche à droite, de haut en bas:
- *24 permutations of (1,2,3,4) connected*
  by transpositions (12), (13), (14)
- *24 permutations connected by transpositions (12),*
  (13), and (14)
- *24 permutations of (1,2,3,4) transformed by 2 (431)*
  and 3 (421)
- *24 permutations of (1,2,3,4) connected by permutations (123)*
  and (234)
- *24 permutations of (1,2,3,4) transformed by (1234)*
  in solid lines and (1342) in dotted lines
- *24 permutations of (1234) connected horizontally*
  by (12) transpositions, vertically by (34) and diagonaly by (23)
- *The 24 permutations of 1,2,3,4*
- *The 24 permutations of 1,2,3,4*
- *The 24 permutations of 1,2,3,4*

2. BLOCK DESIGNS serie, 2012
encre sur papier, 50 x 70 cm

de gauche à droite:
- (11,4,6) The 55 blocks connected when 3 elements are
  common, the white triangles contain six elements and
  the gray triangles contain five

- (12,3,2) The 44 blocks connected when they have no common
  elements, forming groups of 4 blocks with 12 elements
- The 55 blocks of (11,4,6) connected when they have
  no common elements
- (13,5,5)
- (12,4,3) The 66 pairs connected when they form one of
  the 33 blocks. Each block shown 3 times
- (10,4,2) showing all three occurrences of 6 of the 15 blocks
  and the surrounding formations by connection of pairs
- (13,5,5) The 39 blocks in a special formation
- (12,3,2) The 44 blocks connected when they have 2 common
  elements
- (11,5,6) 99 blocks connected when they have no elements
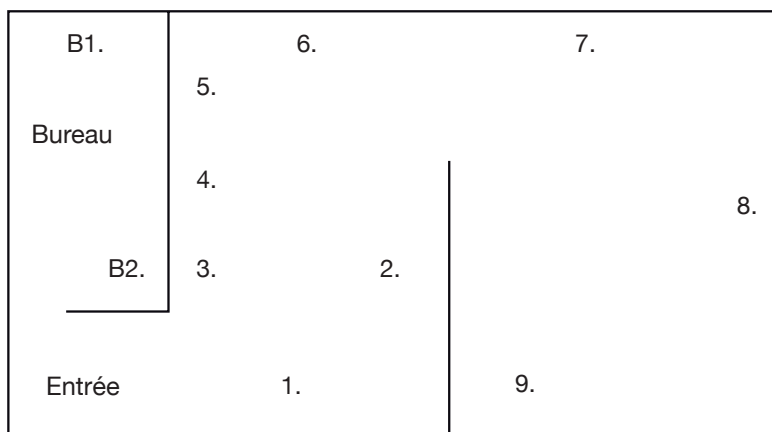 in common

3. JUGGLING PATTERNS serie, 2012
encre sur papier, 29,7 x 42 cm

de gauche à droite, de haut en bas:
- Perfect juggles with 3 balls in a cycle of 7 beats
- *Braiding patterns to juggle*
- *Two jugglers, five balls, 20-beat cycles*
- *Juggling three balls with patterns 441*

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┌─────────┬────────────────────┬──────────────────────┐
│  B1.    │         6.         │          7.          │
│         │   5.               │                      │
│ Bureau  │                    │                      │
│         │   4.               │              ┌───────┤
│         │                    │              │   8.  │
│  B2.    │   3.          2.   │              │       │
│         ├─────────┐          │              │       │
│         │         │          │              │       │
│ Entrée  │    1.   │          │      9.      │       │
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4. RHYTHMIC CANONS serie, 2012
encre sur papier, 29,7 x 42 cm

de gauche à droite, de haut en bas:
- *Kientzy loops*
- *Tilework for bass*
- *6 note rhythm in 4 voices*
- *Rationnal melody number 15*
- *Loops for orchestra*
- *Tile works for bass*
- *Rhythm 10011001 in six voices*
- *Rhythmic canons in 5 voices*
- *More canons*
- *More canons*
- *Tilework for bass*

5. SUBSETS serie, 2012
encre sur papier, 29,7 x 42 cm

de gauche à droite, de haut en bas:
- *Sums of 3 to 17*
- *Six-choose-three subsets and five-choose-three subsets*
- *Triplets with sums of 22, connected by minimal differences*
- *Sum of 17 and 18*
- *10 triplets 0 to 4 connected by minimal differences
  on the loop / 20 triplets 0 to 5, connected by minimal
  differences on the loop*
- *Single numbers contained in pairs of numbers*

6. BLOCK DESIGNS serie, 2012
encre sur papier, 21 x 29,7 cm

de gauche à droite, de haut en bas:
- *One solution for (9, 4, 3), the 14 blocks split in pairs
  of elements*
- *(9,4,3)*
- *(9,4,3)*
- *(9,4,3)*
- *(9 4 3)*
- *(11,4,6)*

- *Two views of (7, 3, 2)*
- *One solution for (9, 4, 3), the 14 blocks split in pairs
  of elements*
- *Two views of (6, 3, 2), the smallest of all block design*

7. 55 CHORDS serie, 2009
encre sur papier, 21 x 29,7 cm
encadrés

Chaque dessin contient 10 éléments avec 6 connections et 10
éléments avec 2 connections.

- *11 subgroups of 55 Chords*

8. BLOCK DESIGNS serie, 2012
category CLARINET TRIO
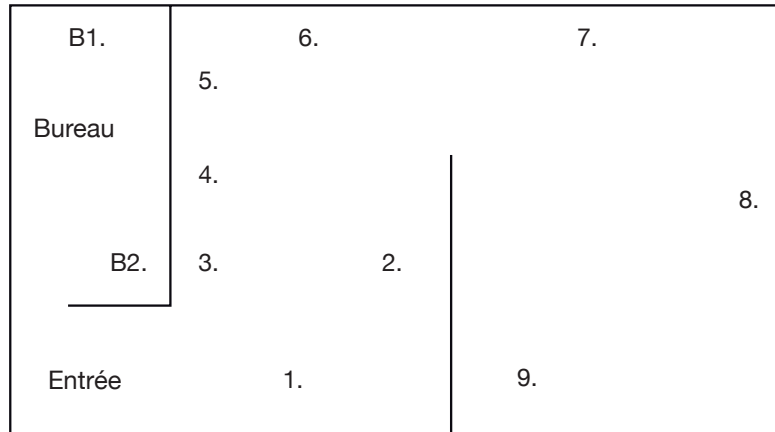encre sur papier, 50 x 70 cm,
dessins prêtés par le FRAC Franche-Compté)

de gauche à droite :
- *The 44 blocks of (12,3,2), connected by common elements
  in rectangle of four blocks*
- *The 44 blocks of (12,3,2) connected when four blocks contain
  all 12 elements*
- *The 44 blocks of (12,3,2) connected when they have
  two elements in common*
- *The 44 blocks of (12,3,2) separated into those containing
  one circled element, connected when blocks have
  two common elements*
- *The 44 blocks of (12,3,2) connected when they have
  two common elements*
- *Adjacent boxes of one and two elements each define
  one of the blocks of (12,3,2)*
- *11 « Pasch » configurations from (12,3,2). Four blocks
  from six elements, each element in two blocks*

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┌─────────┬──────────────────┬──────────────────────┐
│  B1.    │        6.        │         7.           │
│         │  5.                                      │
│ Bureau  │                                          │
│         │  4.              ┌───────────────────────│
│         │                  │                  8.   │
│  B2.    │  3.        2.     │                       │
│   ──────┤                  │                       │
│         │                  │                       │
│ Entrée        1.          │      9.               │
└─────────┴──────────────────┴───────────────────────┘
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9. KIRKMAN LADIES serie, 2009
encre sur papier, 50 x 70 cm

Parmi les 80 manières de construire un (15, 3, 1) Block Design,
comme l'a fait le révérend Kirkman en 1847, ces solutions
permettent aux 15 femmes de marcher ensemble 5 par 3.

de gauche à droite :
- *#1*
- *#2*
- *#4*
- *#5*
- *#6*
- *#7*
- *#10*
- *#15*
- *#17*
- *#19*
- *#31*
- *#37*
- *#38*
- *#57*
- *#61*
- *#63*
- *#67*
- *#69*
- *#72*
- *#75*
- *#79*
- *#80*