Tree of 2-Interval Chain-Patterns
(After Fibonacci's Adult/baby Rabbit Sequence)
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Sheet 1 of 3

A ¹ ②

b° ①

bA ¹ ③

→ AAb ² ⑤

bbA ¹ ④

AbAbb ³ ⑦

b A bAA ³ ⑧

→ AbbAbbb ⁴ ⑨
bAAbAAA ⁵ ⑫

→ AAbAAbAb ⁵ ⑬
bbAbbAbA ⁴ ⑪

→ AbbAbbbb — ⁵ ⑪
bAAAbAAAA ⁷ ⑯

AAbAbAAbAbAb ⁸ ⑲
bbAbAbbAbAbA ⁷ ⑰

AbAbbAbAbbAbb ⁷ ⑱
bAbAAbAbAbAAbAA ⁸ ㉑

AAAbAAAbAAb — ⁷ ⑲
bbbAbbbAbbA — ⁵ ⑭

CONTINUED ON SHEET 3

→ AAAb ² ⑦

bbbA ¹ ⑤

AbAbAbb ³ ⑩

bAbAbAA ³ ⑪

AAAAb ² ⑨

bbbbA ¹ ⑥

→ AbbAbbAbbb — ⁴ ⑬
bAAbAAbAAA — ⁵ ⑰

AAbAAbAAbAb — ⁵ ⑱
bbAbbAbbAbA — ⁴ ⑮

AbAbAbAbb — ³ ⑬
bAbAbAbAA — ³ ⑭

AAAAAb — ² ⑪
bbbbbA — ¹ ⑦

CONTINUED ON SHEET 2

Left tree (generators):

→ AbbbAbbbAbbbb
4 (13)
← bAAAbAAAbAAAA
3 (10)
→ AAbAbAAbAbAAbAbAb
5 (17)
← bbAbAbbAbAbbAbAbA

→ AbAbbAbAbbAbAbbAbb
5 (18)
← bAbAAbAbAAbAbAAbAA
3 (11)
→ AAAbAAAbAAAbAAb
4 (15)
← bbbAbbbAbbbAbbA

→ AbbAbbAbbAbbb
3 (13)
← bAAbAAbAAbAAA
2 (9)
→ AAbAAbAAbAAbAb
3 (14)
← bbAbbAbbAbbAbA

→ AbAbAbAbAbb
2 (11)
← bAbAbAbAbAA
1 (6)
→ AAAAAAb
1 (7)
← bbbbbbA

Middle sequences:

5 (16)
→ Abb bbAb bbbAbb bbb
← bAAAAbAAAAbAAAAA

7 (23)
→ AAbAbAbAAbAbAbAAbAbAbAb
← bbAbAbAbbAbAbAbAbbAbAbAbA

8 (27)
→ AbAbbAbbAbAbbAbbAbAbbAbbAbb
← bAbAAbAAbAbAAbAAbAAbAAbAA

7 (24)
→ AAAbAAAbAAAbAAAbAAbAAb
← bbbAbbbAbbbAbbbAbbAbbA

7 (25)
→ AbbAbbbAbbAbbAbbbAbbAbbb
← bAAbAAAbAAbAAAbAAbAAAbAAA

8 (29)
→ AAbAAAbAbAAbAAbAbAAbAAbAbAAbAb
← bbAbbAbAbbAbbAbAbbAbbAbAbbAbA

7 (26)
→ AbAbAbbAbAbAbbAbAbAbAbbAbAbb
← bAbAbAAbAbAbAAbAAbAbAAbAbAA

5 (19)
→ AAAAbAAAAbAAAAbAAAb
← bbbbAbbbbAbbbbAbbbA

4 (17)
→ AbbbAbbbAbbbAbbbb
← bAAAbAAAbAAAbAAAA

5 (22)
→ AAbAbAAbAbAAbAbAAbAbAb
← bbAbAbbAbAbbAbAbbAbAbA

5 (23)
→ AbAbbAbAbbAbAbbAbAbbAbb
← bAbAAbAbAAbAbAAbAbAAbAA

4 (19)
→ AAAbAAAbAAAbAAAbAAb
← bbbAbbbAbbbAbbbAbbA

3 (16)
→ AbbAbbAbbAbbAbbb
← bAAbAAbAAbAAbAAA

3 (17)
→ AAbAAbAAbAAbAAbAb
← bbAbbAbbAbbAbbAbA

2 (13)
→ AbAbAbAbAbAbb
← bAbAbAbAbAbAA

1 (8)
→ AAAAAAAb
← bbbbbbbA

Right column (index / value):

weight	(n)	value
6	(19)	.3146634874
9	(29)	.3108928429
11	(36)	.3052136719
10	(33)	.3034269649
11	(37)	.2969861671
13	(44)	.2956859994
12	(41)	.2924129422
9	(31)	.2907575655
9	(32)	.2808429775
12	(43)	.2793156644
13	(47)	.2763932023
11	(40)	.2752667482
10	(37)	.2699555167
11	(41)	.2685568199
9	(34)	.2643084967
6	(23)	.2616429963
5	(21)	.2371611414
7	(30)	.2338419207
8	(35)	.2282080686
7	(31)	.2262534927
7	(32)	.2183320912
8	(37)	.2165423647
7	(33)	.2117026338
5	(24)	.2090538009
4	(21)	.1895234039
5	(27)	.1858057070
5	(28)	.1779982111
4	(23)	.1747150067
3	(19)	.1566915271
3	(20)	.1511022763
2	(15)	.1312674637
1	(9)	.1160357457

Golden Generators

Left column (with branch numbers and circled node labels):

```
      → AbbbbAbbbbb
   5 ⑪
   4 ⑨
      ← bAAAAbAAAAA

      → AAbAbAbAAbAbAbAb
   7 ⑯
      ← bbAbAbAbbAbAbAbA

      → AbAbbAbbAbAbbAbbAbb
   8 ⑲
   5 ⑫
      ← bAbAAbAAbAbAAbAAbAA

      → AAAbAAbAAAbAAbAAb
   7 ⑰
      ← bbbAbbAbbAbbAbbA

      → AbbAbbAbbAbbbAbbb
   7 ⑱
   5 ⑬
      ← bAAbAAAbAAbAAAbAAA

      → AAbAAbAbAAbAAbAbAAbAb
   8 ㉑
      ← bbAbbAbAbbAbbAbAbbAbA

      → AbAbAbbAbAbAbbAbAbb
   7 ⑲
   4 ⑪
      ← bAbAbAAbAbAbAbAAbAbAA

      → AAAAbAAAAbAAAb
   5 ⑭
      ← bbbbAbbbbAbbbA
```

Middle column (branch numbers, circled node labels, sequences):

```
 6 ⑬  → Abb bbbAbbbbbb
       ← bAA AAAbAAAAAA
 9 ⑳  → AAbAbAbAbAAbAbAbAbAb
       ← bbAbAbAbAbbAbAbAbAbA
11 ㉕  → AbAbbAbbAbbAbAbbAbbAbbAbb
       ← bAbAAbAAbAAbAAbAAbAAbAA
10 ㉓  → AAAbAAbAAb AAAbAAbAAbAAb
       ← bbAbbAbbAbbAbbAbbAbbA
11 ㉖  → AbbAbbAbbAbAbAbbAbbbAbbb
       ← bAAbAAAbAAAbAAbAAAbAAAbAAA
13 ㉛  → AAbAAbAbAAbAbAAbAAbAAbAAbAAbAb
       ← bbAbbAbAbbAbAbbAbAbbAbAbbAbAbA
12 ㉙  → AbAbAbbAbAbAbbAbAbAbbAbAbbAbAbb
       ← bAbAbAAbAbAAbAbAbAbAAbAbAAbAA
 9 ㉒  → AAAAbAAAbAAAAbAAAbAAAb
       ← bbbbAbbbAbbbbAbbbAbbbA
 9 ㉓  → AbbbAbbbbAbbbbAbbbbAbbbb
       ← bAAAbAAAAbAAAbAAAAbAAAA
12 ㉛  → AAbAbAAbAbAbAAbAbAAbAbAbAAbAbAb
       ← bbAbAbbAbAbAbbAbAbbAbAbAbbAbAbA
13 �34 → AbAbbAbAbbAbbAbAbbAbAbbAbbAbAbAbbAbb
       ← bAbAAbAbAAbAAbAAbAAAbAbAAbAAbAbAAbAA
11 ㉙  → AAAbAAAbAAbAAAbAAAbAAbAAAbAAb
       ← bbbAbbbAbbAbbbAbbbAbbAbbbAbbA
10 ㉗  → AbbAbbAbbbAbbAbbAbbbAbbAbbb
       ← bAAbAAbAAAbAAbAAbAAAbAAbAAA
11 ㉚  → AAbAAAbAAbAbAAbAAbAAbAbAAbAAbAb
       ← bbAbbbAbbAbAbbAbbAbbAbAbbAbbAbA
 9 ㉕  → AbAbAbAbbAbAbAbAbbAbAbAbb
       ← bAbAbAbAAbAbAbAbAAbAbAbAA
 6 ⑰  → AAAAAbAAAAAbAAAAb
       ← bbbbbAbbbbbbAbbbbbA
```

Right column (branch number, circled node label, value):

7	⑮	.4648779424
11	㉔	.4591371999
14	㉛	.4511531185
13	㉙	.4487911224
15	㉞	.4408088840
18	㊶	.4392914190
17	㊴	.4355996422
13	㉚	.4337992665
14	㉝	.4238607505
19	㊺	.4224471173
21	㊿	.4198212717
18	㊸	.4188358787
17	㊶	.4143783209
19	㊻	.4132536612
16	㊴	.4099551174
11	㉗	.4079712493
11	㉘	.3923342776
16	㊶	.3905169090
19	㊾	.3875700505
17	㊹	.3865860309
18	㊼	.3827853835
21	55	.3819660113
19	㊿	.3798180192
14	㊲	.3786825064
13	㉟	.3710869354
17	㊻	.3697795447
18	㊾	.3671601939
15	㊶	.3661068285
13	㊱	.3607774410
14	㊴	.3592653925
11	㉛	.3543583863
7	⑳	.3510129520

2-Rabbit-Pattern Tree (after Fibonacci)

A ②

b ①

Fibonacci →

Lucas →

Kornerup/Yasser →

"Golden Pelog" →

Ab ③

AbA

bAb

AAbA

bbAb ④

bAbbA ⑤

AbAAb ⑧

bAbAbbA ⑩

AbAbAAb ⑪

ÁAAbA ⑨

bbbAb ⑥

bbAbbbA ⑨

AAbAAAb ⑫

AbAAbAbA ⑬

bAbbAbAb ⑪

bbAbbAbbbA ⑬

AAbAAbAAAb ⑰

AbAAbAAbAbA ⑱

bAbbAbbAbAb ⑮

bAbAbAbbA ⑬

AbAbAbAAb ⑭

AAAAbA ⑪

bbbbAb ⑦

bbbAbbbbA ⑪

AAAbAAAAb ⑯

AbAbAAbAbAbA ⑲

bAbAbbAbAbAb ⑰

bAbbAbAbbAbbA ⑱

AbAAbAbAAbAAb ㉑

AAbAAAbAAbA ⑲

bbAbbbAbbAb ⑭

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

(b)

(1)

A		1

baby ← Adult — 2

A · A → b — 3

b ← A · b ← A · A — 5

A · A → b · A · A → b · A · A → b — 8

b ← A · b ← A · A · b ← A · b ← A · A · b ← A · A — 13

A · A → b · A · A → b · A → b · A · A → b · A · A → b · A · A → b · A → b · A · A → b · A → b — 21

0 (left alignment)

8 16 3 11 19 6 14 1 9 17 4 12 20 7 15 2 10 18 5 13 0

↑ generating interval

0 (octave)

(unrolled)

The 2-interval Horograms are shown with the generating chains "left-aligned".
The 2-rabbit pattern is placed in its corresponding position — the baby rabbits
take their position, on succesive months, alternately on the left and on the
right of their Adult parents. (Von Baeyer positions the baby on the right of the adult,

<u>Juxtaposition of the Fibonacci 2-rabbit patterns, with the 2-Interval Horogram</u>
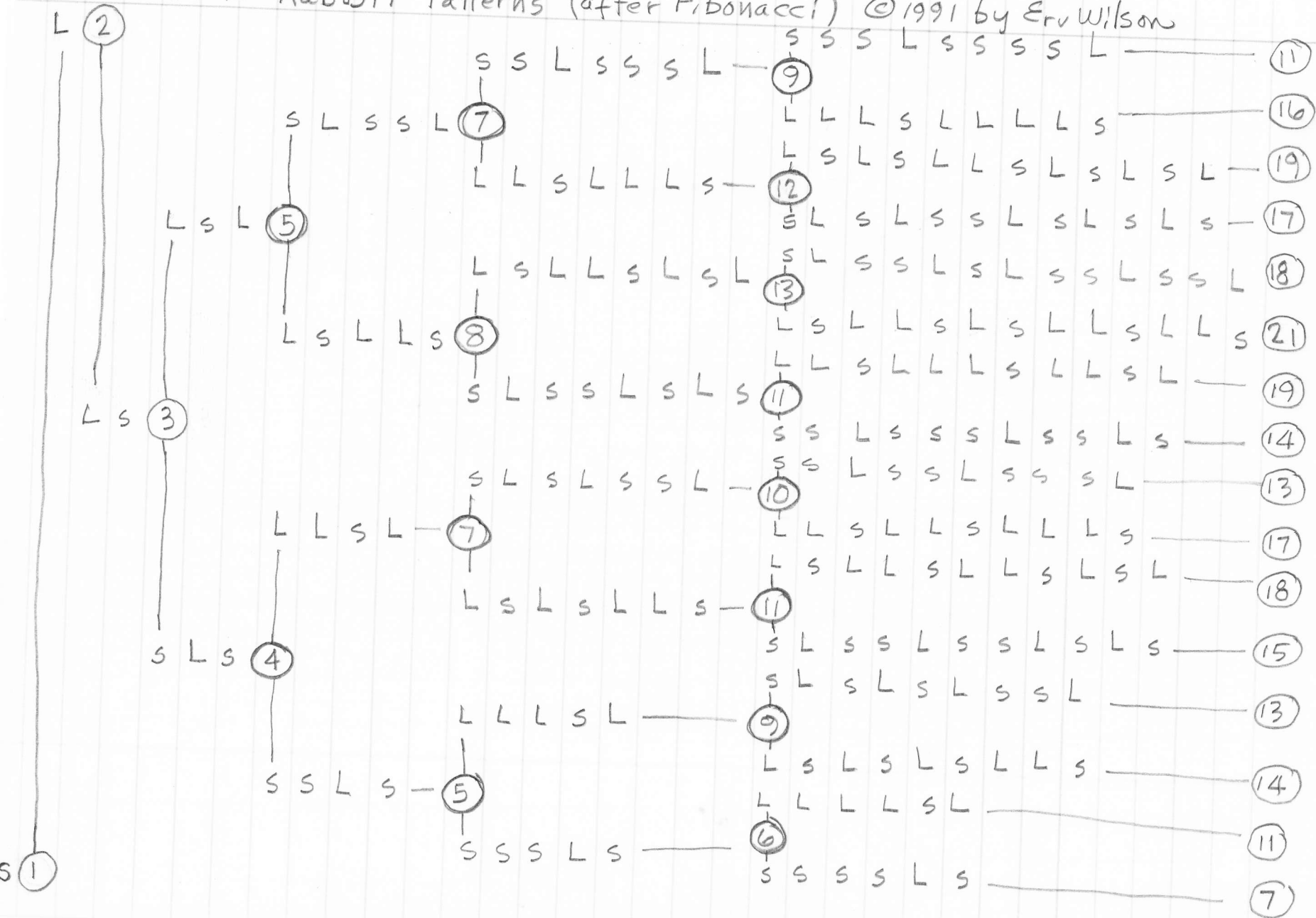(13/34 is taken as the generator) © E.W. 1991
for drafting convenience.

etc

0. 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34

1
1
2
3
5
8
13
21
34
55
89
144
233
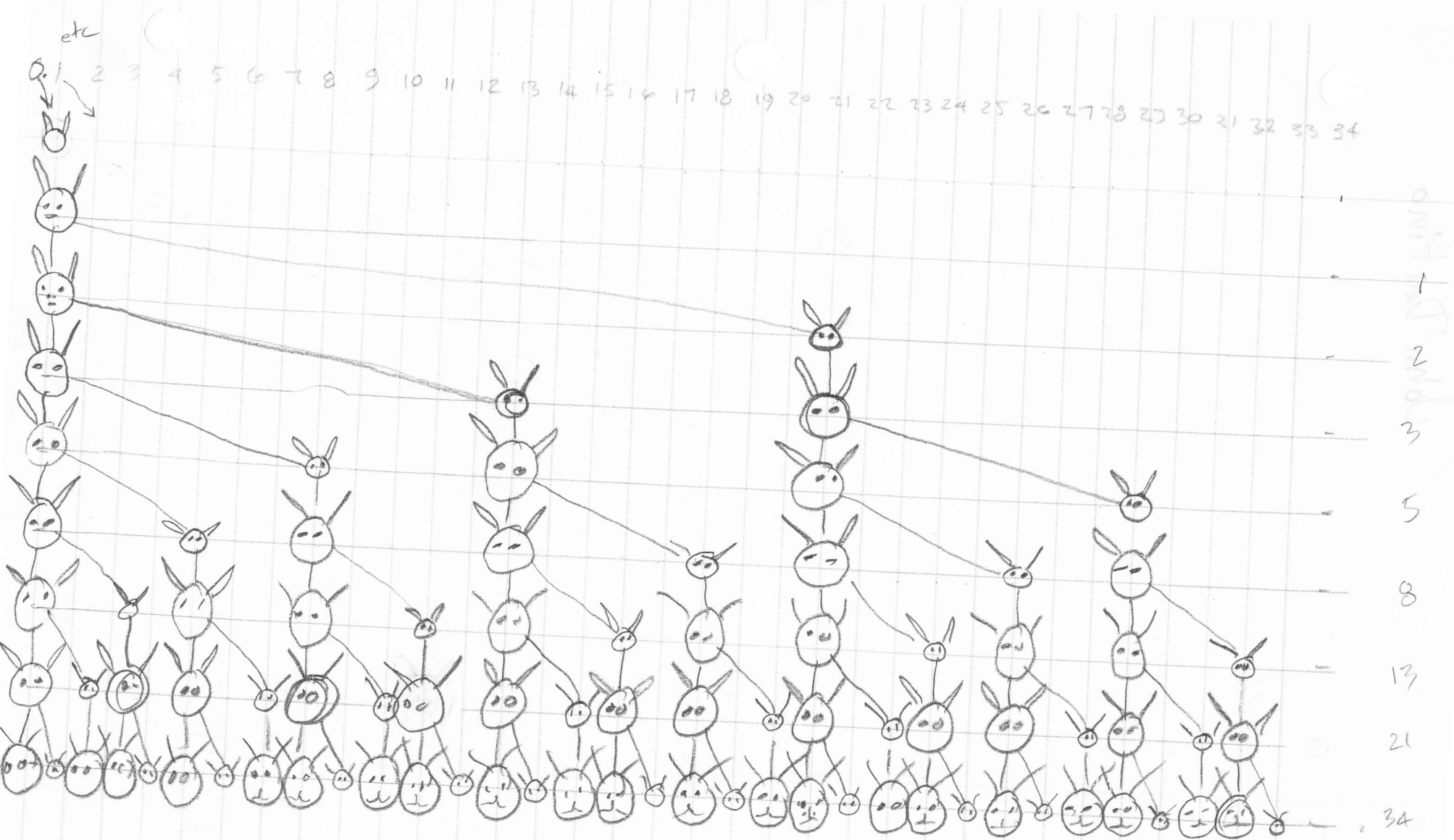
Derivation of the 2-rabbit patterns, (after Fibonacci?)

= baby rabbit (b)

= Adult rabbit (A)

Erv Wilson

The 2-Rabbit Patterns (after Fibonacci)   ©1991 by Erv Wilson

L ②

s s L s s s L — ⑨   s s s L s s s s L ——— ⑪

s L s s L ⑦   L L L s L L L L s —— ⑯

L L s L L L s — ⑫   L s L s L L s L s L s L — ⑲

L s L ⑤   s L s L s s L s L s L s — ⑰

L s L L s L s L ⑬   s L s s L s L s s L s s L ⑱

L s L L s ⑧   L s L L s L s L L s L L s ㉑

L s ③   s L s s L s L s ⑪   L L s L L L s L L s L —— ⑲

s s L s s L s s L s — ⑭

s L s L s s L — ⑩   s s L s s L s s s L ⑬

L L s L — ⑦   L L s L L s L L L s — ⑰

L s L s L L s — ⑪   L s L L s L L s L s L — ⑱

s L s ④   s L s s L s s L s L s — ⑮

s L s L s L s s L — ⑬

L L L s L ——— ⑨   L s L s L s L L s — ⑭

s s L s — ⑤   L L L L s L —— ⑪

s s s L s —— ⑥   s s s s L s ———— ⑦

s ①

Fibonacci Rabbit Patterns

The Scale/Rythm Tree © Erv Wilson 1991

L ②

L s ③

S ① ?

S L s ④

L s L ⑤

S L S S S L ⑦

L s L L s ⑧

S L S L S S L ⑦

L L S L ⑨

S S L S ⑤

S S L S S S L ⑨ ━━━ 11

S S L S S S L ⑦

L L S L L L S ━━━ 16

L S L L S L S L S L ━━━ 19
⑫
S L S L S S L S L S ━━━ 17

S L S S L S L S S L ━━━ 18
⑬
L S L L S L S L L S L L S ━━━ 21

L L S L L L S L L S L ━━━ 19
⑪
S S L S S S L S S L S ━━━ 14

S S L S S L S S S L ━━━ 13
⑩
L L S L L L S L L L S ━━━ 17

L S L L S L L S L S L ━━━ 18
⑪
S L S S L S S L S L S ━━━ 15

S L S L S L S S L ━━━ 13
⑨
L S L S L S L L S ━━━ 14

L L L L S L ━━━ 11
⑥
S S S S L S ━━━ 7
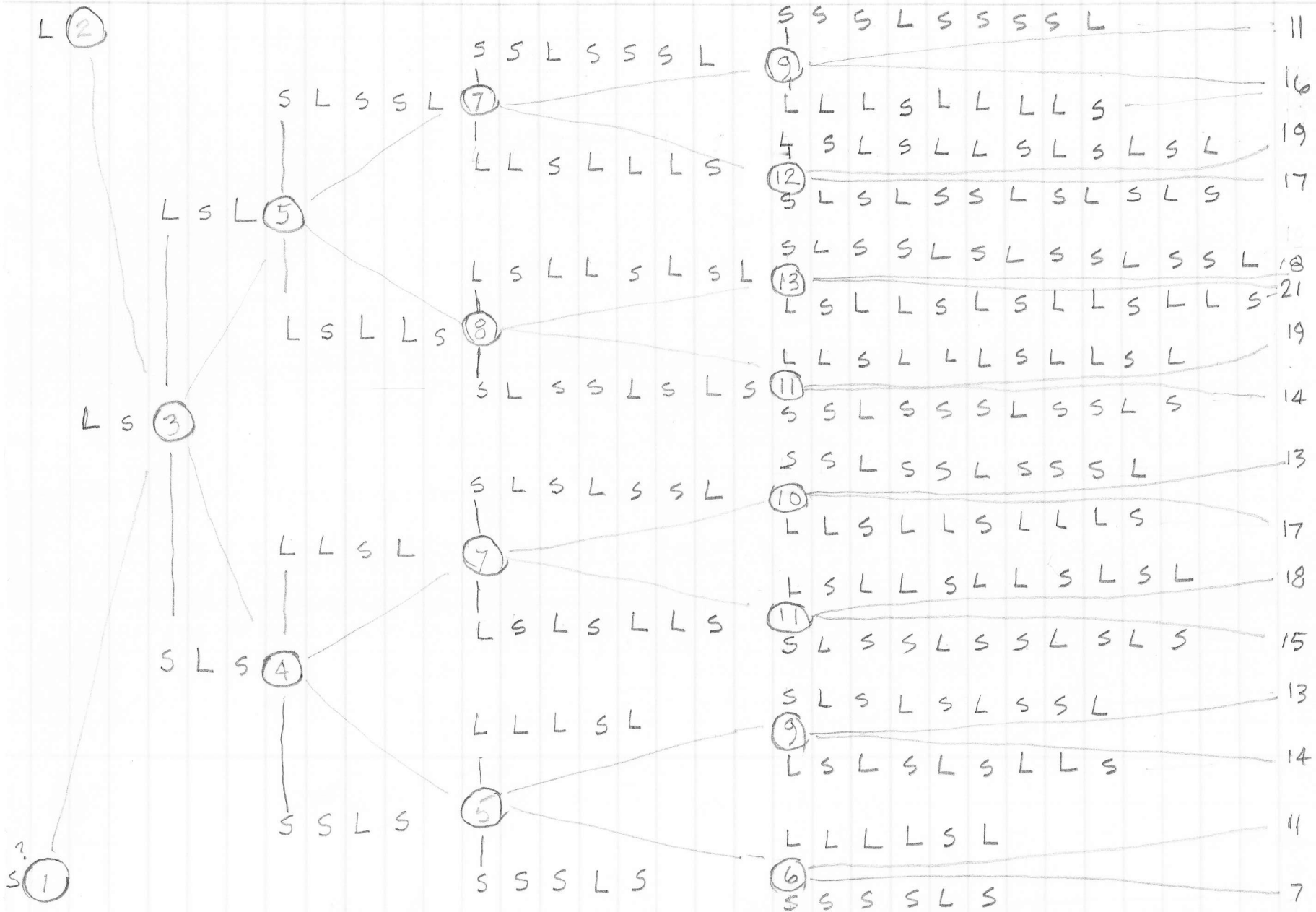
(11) {
S S S S L S S S S S L — (13)
L L L L S L L L L S — (20)

(16) {
L S L S L S L L S L S L S L S L — (25)
S L S L S L S S L S L S L S L S — (23)

(19) {
S L S S L S S L S L S S L S S L S S L — (26)
L S L L S L L S L S L S L L S L L L S L L L S — (31)

(17) {
L L S L L L S L L L L L S L L L S L L L S — (29)
S S L S S L S S S S L S S S L S S L — (22)

(18) {
S S L S S S L S S S L S S S L S S S L — (23)
L L S L L L S L L L S L L L L L S L L L L S — (31)

(21) {
L S L L S L S L L L S L L L S L S L L L S L S L — (34)
S L S S L S L S S L S S L S L S L S S L S L S — (29)

(10) {
S L S L S S L S L S L S S L S L S L S S L — (27)
L S L S L L S L S L S L S L L S L S L L S — (30)

(14) {
L L L S L L L L S L L L S L — (25)
S S S L S S S S L S S S L S — (17)

S S S L S S S L S S S S L ——————————— ⑯
L L L S L L L S L L L L S ——————— ㉓
L S L S L L S L S L L S L S L S L ——— ㉗
S L S L S S L S L S S L S L S L S ——— ㉔
S L S S L S L S S L S L S S L S S L —— ㉕
L S L L S L S L L S L S L L S L L S —— ㉙
L L S L L L S L L L S L L S L —————— ㉖
S S L S S L S S S L S S L S ——————— ⑲
S S L S S L S S L S S S L —————————— ⑰
L L S L L S L L S L L L S ——————————— ㉒
L S L L S L L S L L S L S L ——————— ㉓
S L S S L S S L S S L S S L ——————— ⑲
S L S L S L S L S S L ——————————— ⑯
L S L S L S L S L L S ——————————— ⑰
L L L L L S L ——————————————————— ⑬
S S S S S L S ——————————————————— ⑧

Notes on Yasser / Kornerup
Erv Wilson 1993

C   (2.618)   F   (1)   G   (2.618)   C

a

(1.618)   Eb   (1)   (1)   (1.618)   Bb   (1)

a   b   b   a   b

(1.618)   D   (1)   (1.618)   (1.618)   (1.618)   A   (1)   (1.618)

a   b   a   a   a   b   a

(1.618)   Db   (1)   Fb   Gb   Ab   Cb

a   b   a   a   b   a   b   a   b   a   a   b

(1.618) C# (1)   D#   E   F#   G#   A#   B

a   b   a   a   b   a   b   a   a   b   a   a   b   a   a   b   a   b   a

Dbb   Ebbb   Ebb   Fbb   Gbbb   Gbb   Abb   Abb   Bbbb   Bbb   Cbb   Dbbb

1.618   1

a b   a   a b   a b   a   a b   a   a b   a b   a   a b   a b   a   a b   a b   a   a b

.000000
.037855
.061251
.099106
.136962
.160357
.198213
.221609
.259464
.297319
.320715
.358570
.396425
.419821
.457677
.481072
.518928
.556783
.580179
.618034
.641430
.679285
.717140
.740536
.778391
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.839643
.877498
.900894
.938749
.976604
1.000000
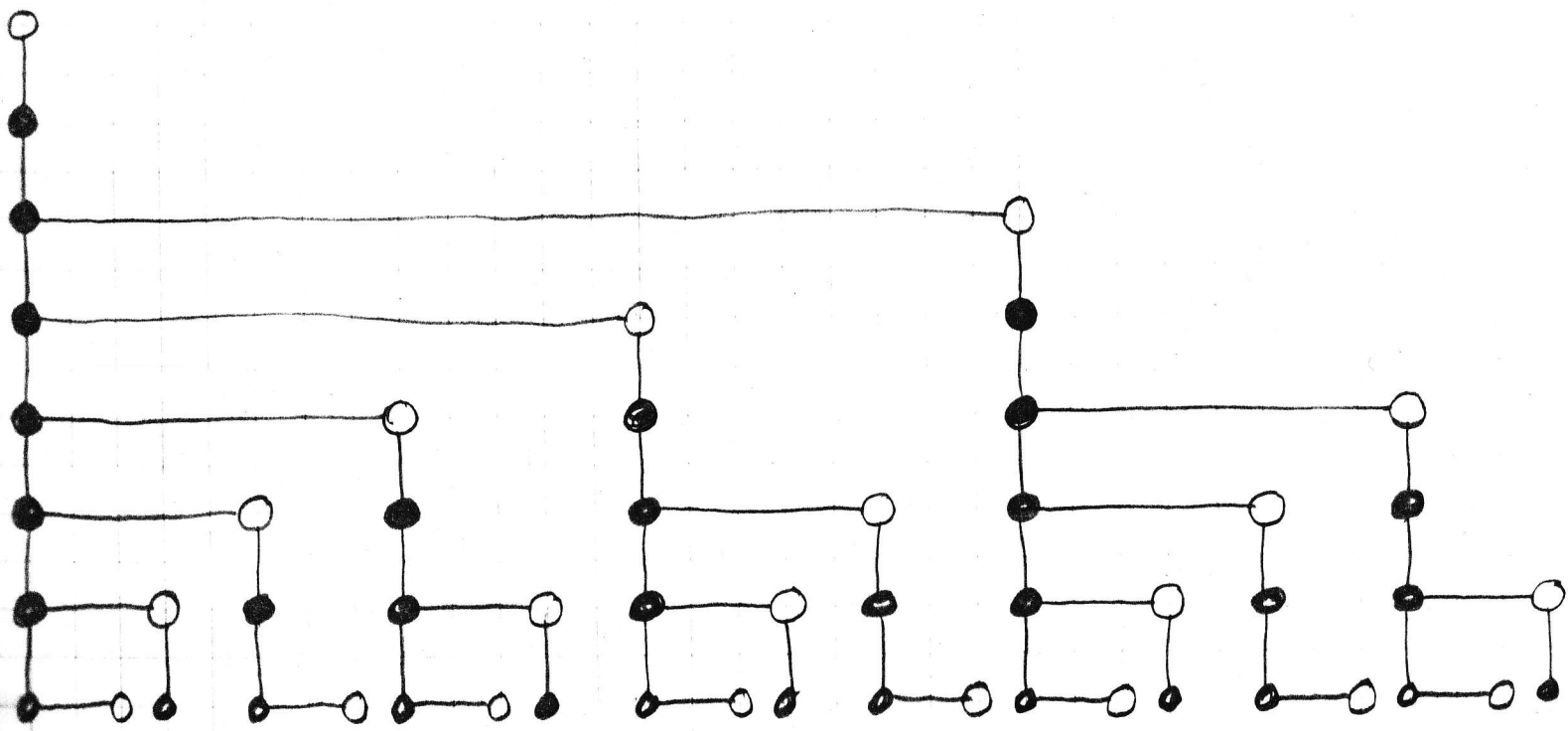
$$\frac{A}{} \quad \frac{B}{}$$

$$0 \;/\; 1$$

$$1 \;/\; 0$$

$$1 \;/\; 1$$

$$2 \;/\; 1$$

$$3 \;/\; 2$$

$$5 \;/\; 3$$

$$8 \;/\; 5$$

$$13 \;/\; 8$$

$$\frac{0}{1}$$

$$\frac{1}{0}$$

$$\frac{1}{1}$$

$$\frac{2}{1}$$

$$\frac{3}{2}$$

$$\frac{5}{3}$$

$$\frac{8}{5}$$

$$\frac{13}{8}$$

That such an idiotic procedure would
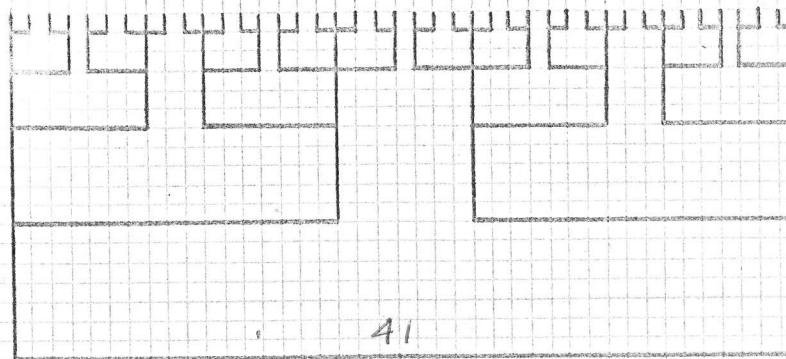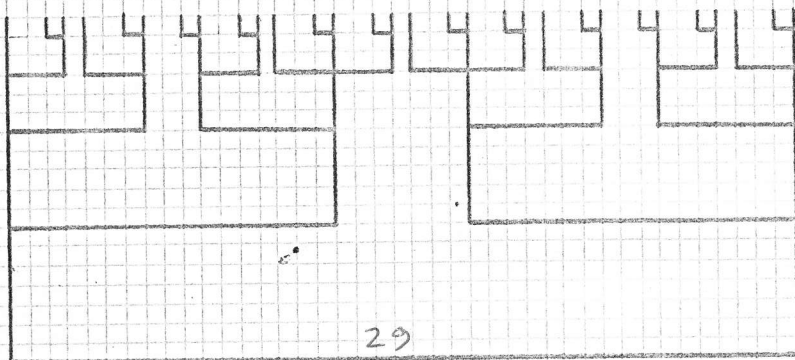yield such a bonus of epimores is of
course tantalizing

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55

Fibonacci

	A	B	T
0.	0	+ 1	= 1
1.	1	+ 0	= 1
2.	1	+ 1	= 2
3.	2	+ 1	= 3
4.	3	+ 2	= 5
5.	5	+ 3	= 8
6.	8	+ 5	= 13

2

3

5

7

12

17

29

41

Top diagram

1   2

3

4   5

5   7   8   7

6   9   11   10   11   13   12   9

7   11   14   13   15   18   17   13   14   19   21   18   17   19   16   11

8 13 17 16 19 23 22 17 19 26 29 25 24 27 23 16 17 25 30 27 29 34 31 23 22 29 31 26 23 25 20 13
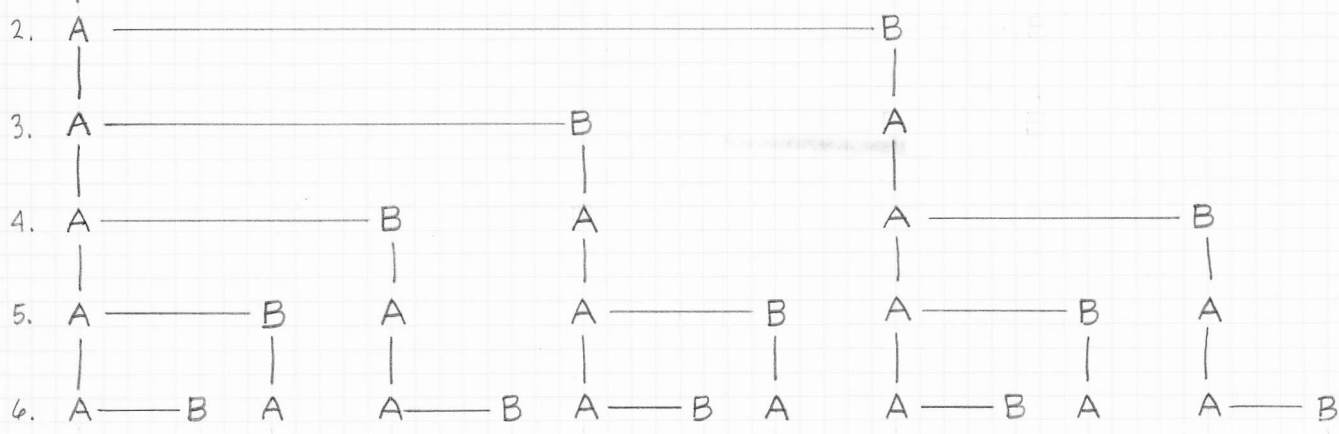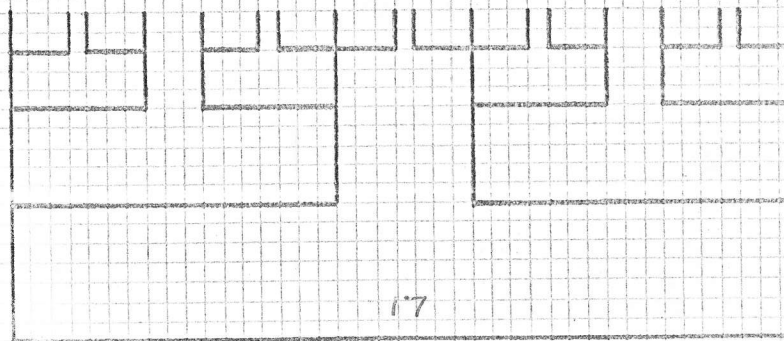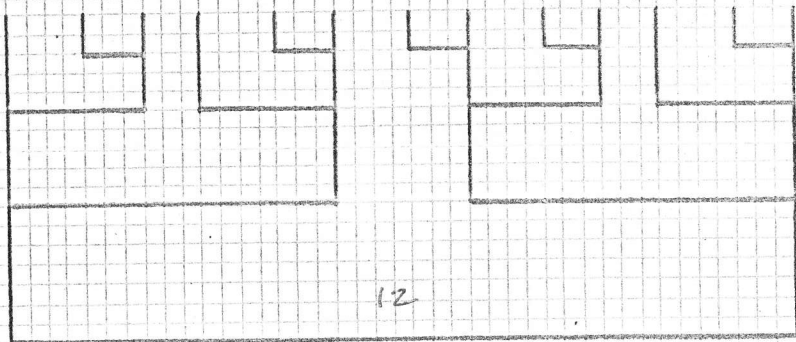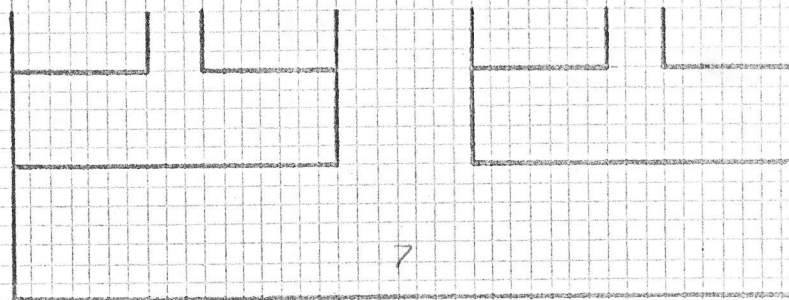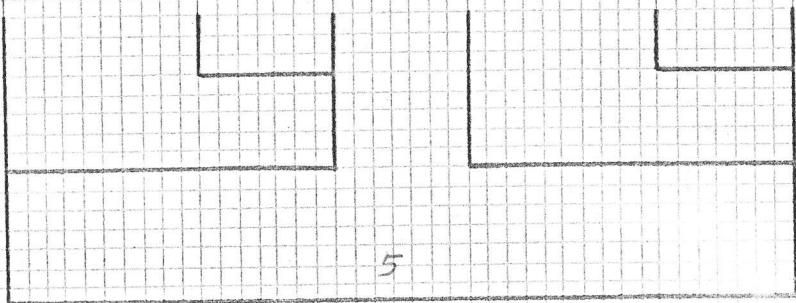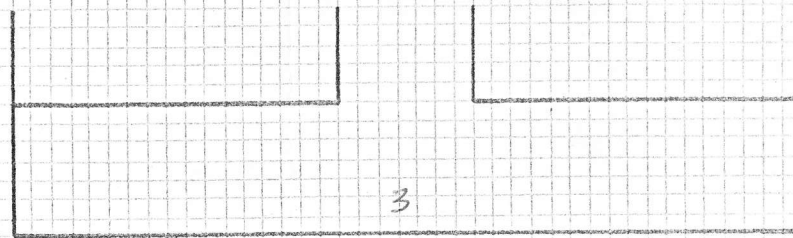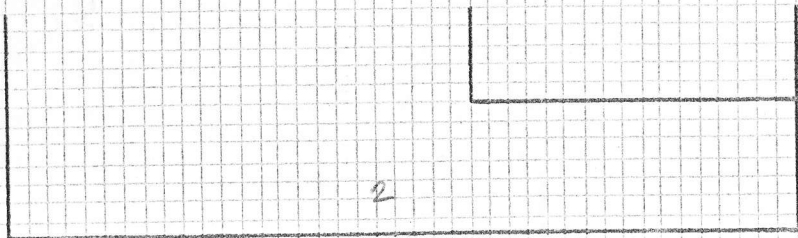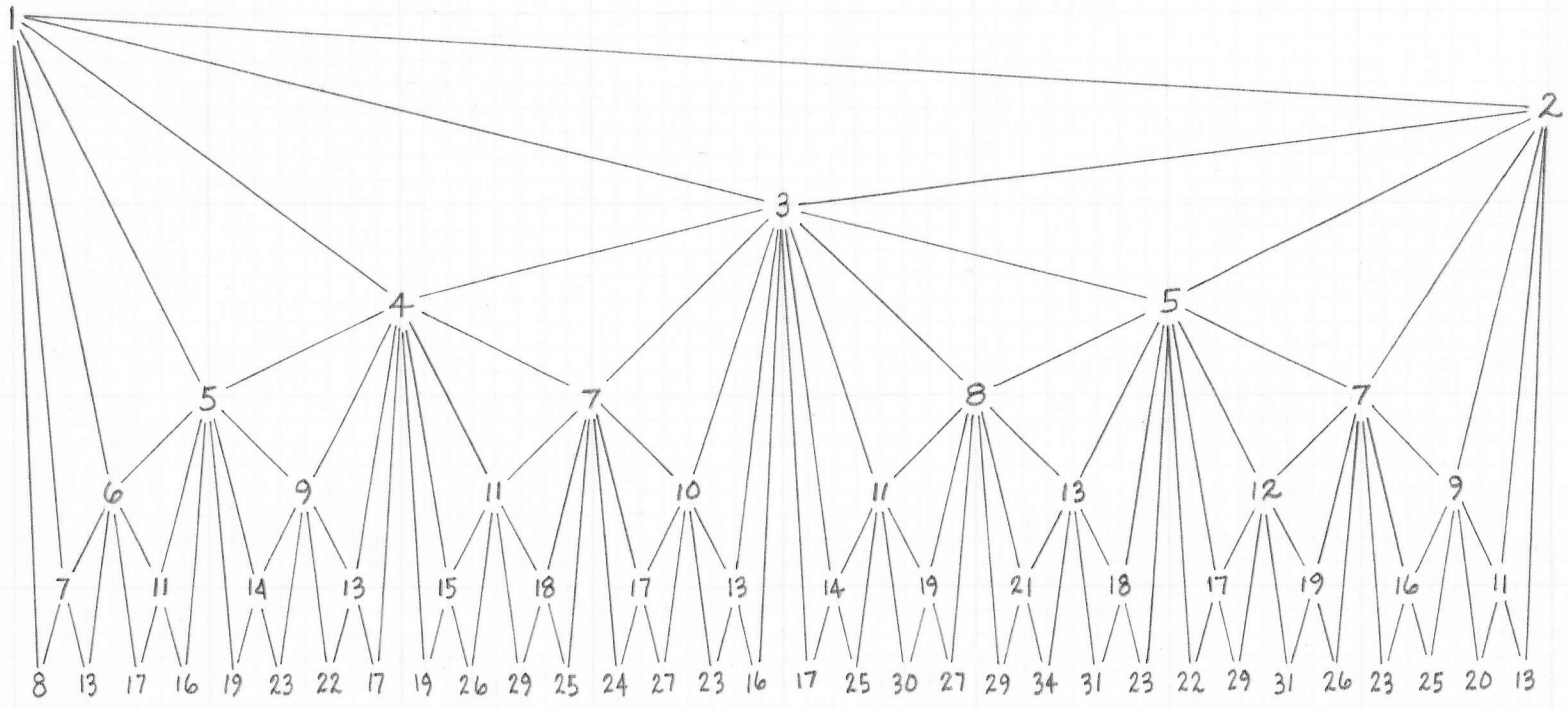
9   1 2 1 2 2 2 2 2 3 3 3 3 3 2
    7 0 9 3 8 7 1 4 3 7 2 1 5 0 1

Bottom diagram

1   1

2

3   3

4   5   5   4

5   7   8   7   7   8   7   5

6   9   11   10   11   13   12   9   9   12   13   11   10   11   9   6

7 11 14 13 15 18 17 13 14 19 21 18 17 19 16 11 11 16 19 17 18 21 19 14 13 17 18 15 13 14 11 7