

I never expected to write this book.

The main reason I was fascinated by chess composition was that I could think up new problems.

Even if I have solved or have written articles, that was always of minor importance.

And what I could not understand at all was a person who had collected thousands of problems for years.

In the summer of 1989, at the Bournemouth congress, I had ten-minute conversations with Jean-Marc Loustau and Branislav Djurašević. Jean-Marc had begun to run a new magazine, Phénix, and, having too much fairy material, he asked me to write an article about modern orthodox twomovers.

From that moment I started to collect cyclic problems.

Now, ten years later, you can see them here.

THREE WHITE MOVES: CYCLONE

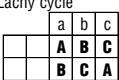
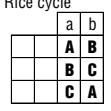
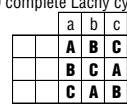
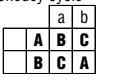
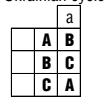
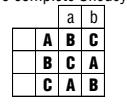
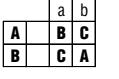
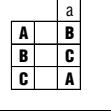
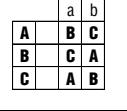
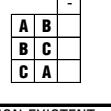
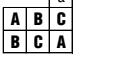
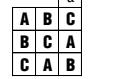
SOLUTION

Let's imagine a multiphase twomover.

Each phase has at least some of the following white elements: key (which is missing in the set play), threat (missing in a waiting problem), mates in variations (may also be missing sometimes).

The solution of such a problem can be easily written into a table.

		defence 1	defence 2	defence 3
1st phase	KEY	THREAT	MATE	MATE
2nd phase	KEY	THREAT	MATE	MATE
3rd phase	KEY	THREAT	MATE	MATE

3-FOLD CYCLONE	HORIZONTAL TYPE	VERTICAL TYPE	COMPLETE TYPE
MATES	1 Lačný cycle 	5 Rice cycle 	9 complete Lačný cycle 
THREATS & MATES	2 Shedey cycle 	6 Ukrainian cycle 	10 complete Shedey cycle 
KEYS & MATES	3 Kiss cycle 	7 Ceriani cycle 	11 complete Kiss cycle 
KEYS & THREATS	NON-EXISTENT	8 Reeves cycle 	NON-EXISTENT
KEYS & THREATS & MATES	4 Djurašević cycle 	NON-EXISTENT	12 complete Djurašević cycle 

WHITE MOVES CYCLE

The moves of White will be given as capital letters A, B, C, ... and the moves of Black as small letters a, b, c, ...

Then the cyclic change of three white elements is the shift of white moves ABC to BCA, while the black moves remain constant in all phases.

It is precisely this cycle of three or more white elements that is the subject of this book.

Furthermore, if we analyse how keys, threats and mates may be combined, we simply come to the system that I discovered when preparing the article for Phénix.

Again, the CYCLONE can be shown in a table.

FIVE AND MORE WHITE MOVES: CYCLONE AND HURRICANE

If we have at least five White elements, new and mostly interesting questions arise. Some of them are not yet answered, and present-day knowledge in this field of combinations cannot give satisfactory answers to many of them.

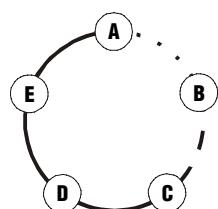
What is going on.

2-PHASE CYCLES

Let us first imagine two-row (or two-column) cycles only. That means cycles 1 to 8.

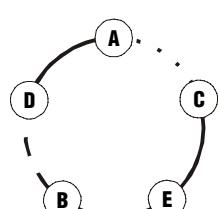
It is very simple to spread the three- or four-fold cycle into a larger one. And non-cycles could be excluded simply, too. Besides, for example a six-fold table could be made of two three-fold cycles. That would be cyclic of course, but it belongs to three-fold cycles, not to six-fold ones.

A slight but solvable anomaly begins with the Djurašević cycle, where the number of cyclic possibilities grows with the increasing number of white moves. This is due to the different DISTANCE BETWEEN KEY AND THREAT. (Also the number of non-cyclic tables increases, but that is of no importance here.)



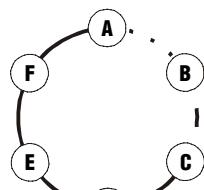
5-fold cycle / distance 1

a	b	c
A	B	C
B	C	D



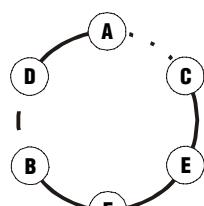
5-fold cycle / distance 2

a	b	c
A	B	C
C	D	E



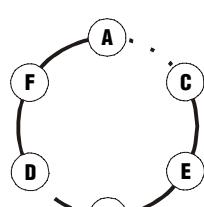
6-fold cycle / distance 1

a	b	c	d
A	B	C	D
B	C	D	E



6-fold cycle / distance 2

a	b	c	d
A	B	C	D
C	D	E	F



6-fold cycle / distance 3

a	b	c	d
A	B	C	D
C	D	E	F

The number of cyclic possibilities can also be calculated very simply.

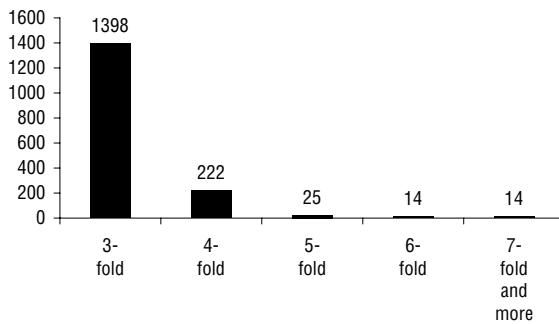
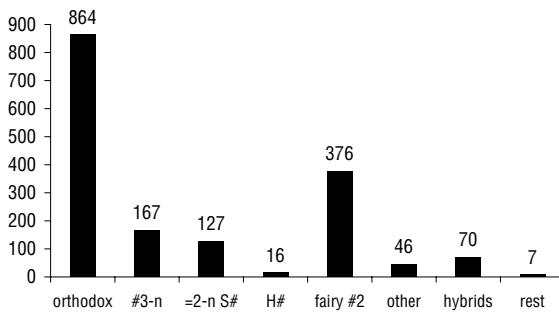
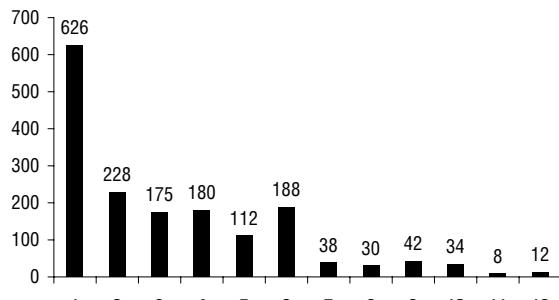
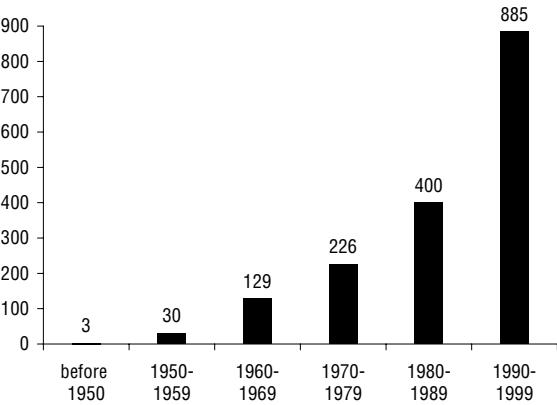
With an increase in the distance between key and threat, the maximum distance is in half a circle (in the axis of symmetry). So it is simple to generalize the number of cyclic possibilities (c) depending on the number of white elements (n):

$$c = \lfloor n/2 \rfloor$$

- if $n=3$, then $c=1$
- if $n=4$, then $c=2$
- if $n=5$, then $c=2$
- if $n=6$, then $c=3$
- if $n=7$, then $c=3$
- if $n=8$, then $c=4$
- etc.

STATISTICS

	before 1950	1950- 1959	1960- 1969	1970- 1979	1980- 1989	1990- 1999	total
1 Lačný cycle	1	30	98	156	161	180	626
2 Shedey cycle	0	0	3	12	23	190	228
3 Kiss cycle	0	0	0	1	58	116	175
4 Djurašević cycle	0	0	0	0	28	152	180
5 Rice cycle	0	0	21	33	12	46	112
6 Ukrainian cycle	0	0	3	20	81	84	188
7 Ceriani cycle	2	0	0	2	5	29	38
8 Reeves cycle	0	0	1	0	3	26	30
9 complete Lačný cycle	0	0	2	2	23	15	42
10 complete Shedey cycle	0	0	1	0	5	28	34
11 complete Kiss cycle	0	0	0	0	1	7	8
12 complete Djurašević cycle	0	0	0	0	0	12	12
total	3	30	129	226	400	885	1673



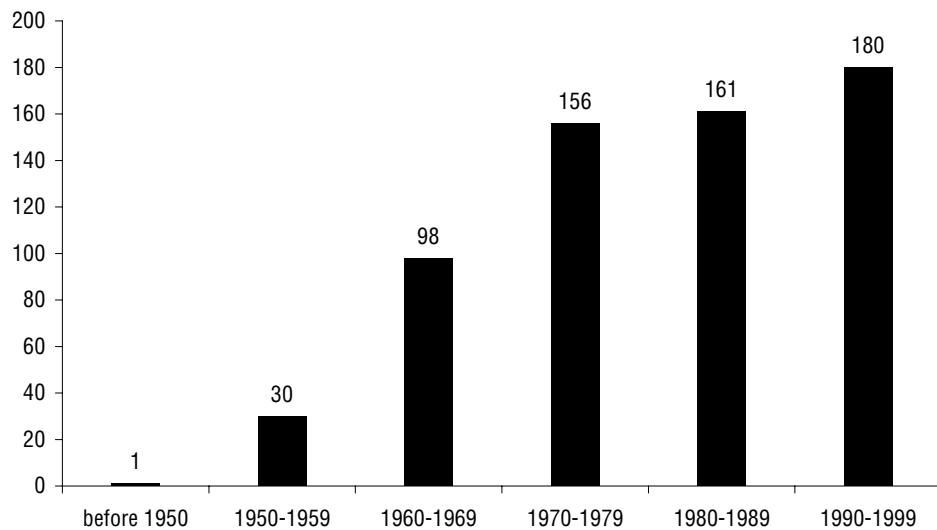
1 Lačný cycle

"For me as a composer, love of my life is the Lačný theme."

(Milan Velimirović: "Shift if Shift Can", A Comprehensive Overview of Lačný theme, Mat Plus summer-autumn 1995)

a	b	c
A	B	C
B	C	A

	Pioneer problem	Pioneer orhtodox twomover without twins
3-fold	1 L. LAČNÝ 1949	1 L. LAČNÝ 1949
4-fold	530 L. LAČNÝ 1955	530 L. LAČNÝ 1955
5-fold	620 M. VELIMIROVIĆ 1969	610 P. GVOZDJÁK 1999
6-fold	624 J. VALUŠKA 1969	x
7-fold and more	625 N. SHANKAR RAM 1986	x



2 Shedey cycle

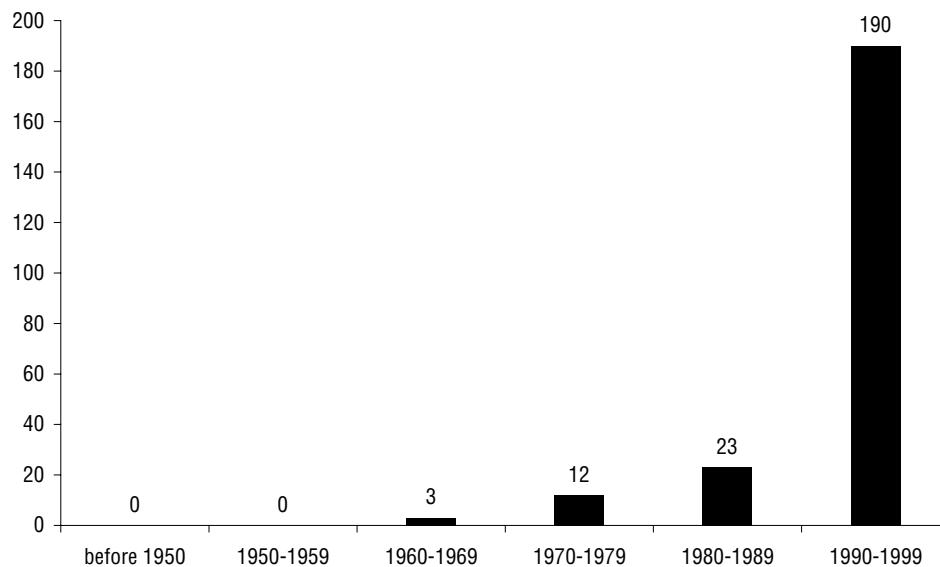
"It is not usual to hold a composing tourney at the age of 30. But let me break the rule and show you one of my favourite themes that is not much older than myself."

(Peter Gvozdják, lecture about Shedey cycle (and announcing the theme tourney), at the Belfort congress, summer 1994)

	a	b
A	B	C
B	C	A

2

	Pioneer problem	Pioneer orhtodox twomover without twins
3-fold	709 S. SHEDEY 1964	709 S. SHEDEY 1964
4-fold	844 N. SHANKAR RAM 1986	821 Š. SOVÍK 1993
5-fold	850 P. GOVZDJÁK 1994	849 P. GOVZDJÁK 1995
6-fold	853 P. GOVZDJÁK 1995	x
7-fold and more	x	x



4 Djurašević cycle

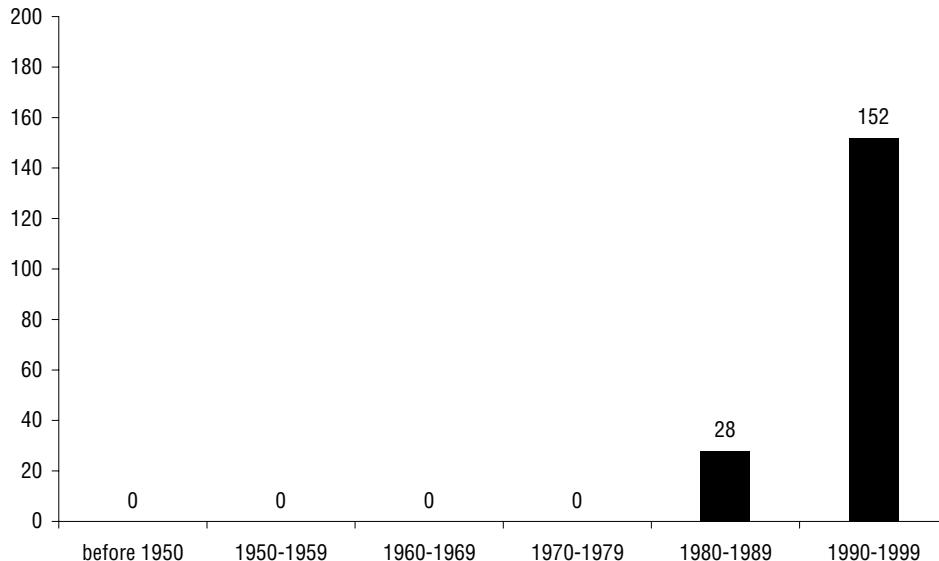
"B. Formánek had prepared a lecture on this theme for Budapest, thinking he would show the first examples. But discussions showed that the Yugoslav composer Branislav Djurašević had been interested in it for some years."

(Michel Caillaud, Jean-Marc Loustau, Jacques Rotenberg: "The Djurašević Theme", Phénix, 10.1988)

		a
A	B	C
B	C	A

4

	Pioneer problem	Pioneer orhtodox twomover without twins
3-fold	1113 B. DJURAŠEVĆ 1981	1030 J. ROTENBERG, J.-M. LOUSTAU, M. CAILLAUD 1988
4-fold / distance 1	1167 F. SABOL 1990	x
4-fold / distance 2	1171 L. LAČNÝ 1988	1171 L. LAČNÝ 1988
5-fold / distance 1	1201 J. LÖRINC 1993	x
5-fold / distance 2	1202 R. ASCHWANDEN, P. GVOZDJÁK 1999	x
6-fold / distance 1	1204 D. PAPACK 1995	x
6-fold / distance 2	1205 R. ASCHWANDEN 1999	x
6-fold / distance 3	1207 R. ASCHWANDEN 1999	
7-fold / distance 1	1208 N. N. 1998	x
7-fold / distance 2	x	x
7-fold / distance 3	x	x
8-fold and more	1209 P. GVOZDJÁK 1997	x



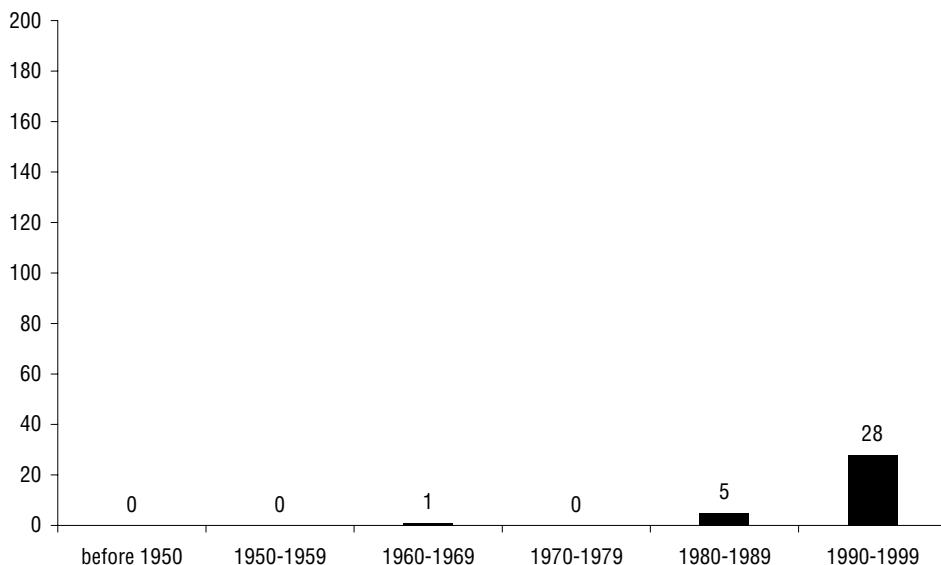
10 complete Shedey cycle

"I have got the matrix, but it seems impossible to finish it..."

(Ludovít Lačný, showing me his idea with promoted force, about autumn 1992)

	a	b
A	B	C
B	C	A
C	A	B

	Pioneer problem	Pioneer orhtodox twomover without twins
3-fold	1624 L. LAČNÝ 1969	1620 L. LAČNÝ, P. GVOZDJÁK 1993
4-fold	1648 N. SHANKAR RAM 1987	x
5-fold	1651 L. LAČNÝ 1999	x
6-fold	x	x
7-fold and more	1652 N. SHANKAR RAM 1995	x



2 Shedey cycle

.....115

- > 2. Shedey cycle **627-854**
- >> 3-fold **627-818**
 - >>> orthodox #2 627-744
 - >>> no twin 627-722
 - >>>> no bK defence 627-684
 - >>>>> one b unit plays 627-647
 - >>>>> two b units play 648-671
 - >>>>> b correction 672-684
 - >>>> one bK defence 685-700
 - >>>> two bK defences 701-722
 - >>>>> no w battery 701-708
 - >>>>> one w battery 709-716
 - >>>>> more w batteries 717-722
 - >>>> twins 723-744
 - >>>> no bK defence 723-734
 - >>>> one bK defence 735
 - >>>> two bK defences 736-744
 - >>> #3-n 745-771
 - >>> no twin 745-765
 - >>> no bK defence 745-764
 - >>>> one w battery 745-748
 - >>>> other mechanisms 749-760
 - >>>> b correction 761
 - >>>> special mechanisms 762-764
 - >>>> two bK defences 765
 - >>>> twins 766
 - >>>> variations 767-770
 - >>> hocus 771
 - >> S# 772-777
 - >> R# 778-780
 - >> fairy #2 - conditions 781-796
 - >> fairy #2 - units 797-807
 - >> fairy #2 - all 808-813
 - >> other fairies 814-815
 - >> hybrids 816
 - >> rest 817-818
 - >> 4-fold **819-848**
 - >>> orthodox #2 819-837
 - >>> no twin 819-831
 - >>>> no bK defence 819-820
 - >>>> two bK defences 821-829
 - >>>> three bK defences 830-831
 - >>>> twins 832-836
 - >>>> hocus 837
 - >>> #3-n 838-840
 - >>> fairy #2 841-846
 - >>> other fairies 847
 - >>> hybrids 848
 - >> 5-fold **849-852**
 - >>> orthodox #2 849-850
 - >>> fairy #2 851-852
 - >>> 6-fold **853-854**

3 Kiss cycle

.....149

- > 3. Kiss cycle **855-1029**
 - >> 3-fold **855-1012**
 - >>> orthodox #2 855-925
 - >>> no twin 855-909
 - >>>> no bK defence 855-907
 - >>>>> Kiss' mechanism 855-865
 - >>>>> two w hidden lines 866-875
 - >>>>> w half-battery 876-896
 - >>>>> other mechanisms 897-902
 - >>>>> b correction 903
 - >>>>> Fleck 904
 - >>>>> special mechanisms 905-907
 - >>>>> two bK defences 908-909
 - >>>>> twins 910-925
 - >>>>> no bK defence 910-916
 - >>>>> one bK defence 917
 - >>>>> two bK defences 918-925
 - >>>> #3-n 926-935
 - >>>> no twin 926-931
 - >>>> twins 932
 - >>>> variations 933-935
 - >>>> =2-n 936-945
 - >>>> S# 946-970
 - >>>> no twin 946-968
 - >>>> no bK defence 946-961
 - >>>> two bK defences 962-968
 - >>>> twins 969-970
 - >>>> R# 971
 - >>>> H# 972-975
 - >>>> fairy #2 - conditions 976-991
 - >>>> fairy #2 - units 992-998
 - >>>> fairy #2 - all 999-1005
 - >>>> other fairies 1006-1010
 - >>>> hybrids 1011-1012
 - >> 4-fold **1013-1027**
 - >>> orthodox #2 1013-1015
 - >>> =2-n 1016-1018
 - >>> S# 1019-1020
 - >>> fairy #2 1021-1024
 - >>> other fairies 1025-1027
 - >> 5-fold **1028**
 - >> n-fold **1029**

4 Djurašević cycle

.....175

- > 4. Djurašević cycle **1030-1209**
 - >> 3-fold **1030-1149**
 - >>> orthodox #2 1030-1062
 - >>> no twin 1030-1032
 - >>> twins 1033-1062
 - >>>> no bK defence 1033-1059
 - >>>> various mechanisms 1033-1052
 - >>>> bK transportation 1053-1059
 - >>>> one bK defence 1060-1062

5 Rice cycle

.....203

- > 5. Rice cycle **1210-1321**
- >> 3-fold **1210-1314**
 - >>> orthodox #2 1210-1277
 - >>> no twin 1210-1246
 - >>>> no bK defence 1210-1227
 - >>>> one b unit plays 1210-1217
 - >>>> two b units play 1218-1225
 - >>>> b correction 1226-1227
 - >>>> one bK defence 1228-1234
 - >>>> two bK defences 1235-1246
 - >>>> twins 1247-1275
 - >>>> no bK defence 1247-1257
 - >>>> one b unit plays 1247-1248
 - >>>> two b units play 1249-1254
 - >>>> plus other cycle 1255-1257

