

Capped Pawn

Notes by Dr. George Soules
(2 versions)

Cappy is a game played at IDA/CCR Princeton since 1982. It is played between a gang of kibitzers, who maneuver the Black pieces, and a masochist who must mate with a certain pawn called the cappy. We use uppercase for the White men only [KQBNRPC] with C for the cappy.

*** The Rules of Cappy ***

Usually the cappy starts at g2, but f2,b2 have also been tried. To compensate for the exposed cappy, White starts with two moves. To win on the board White must deliver mate with the cappy. In return, White loses if mated, or if the cappy is captured or promoted, or if Black is mated with a different piece or pawn. Otherwise the rules of chess are followed. Some consequences:

- i) The cappy is not treated like a king; an attack on the cappy can be ignored if White checks the Black king. In the heat of battle a single-move capture of the cappy is occasionally overlooked, and the game continues without material consequence.
- ii) A discovered mate delivered with another piece by moving the cappy is not mate, but a loss for White. However, a double-checkmate by moving the cappy is possible.

Miscellany

- a) Our clock rules are designed in the interest of the game, rather than to terminate the game. An illegal move, when detected, is retracted with the offending player losing some ticks off the clock, while the other player gains some ticks. If a flag falls in a lost position, the other player usually prolongs the pain by feigning ignorance. Even when one player makes a very poor move, the other player often treats it as an illegal move, with the consequent clock adjustments.
- b) A cappy player of Master speed-chess rank can usually play a novice (a player who has never played tournament chess) roughly even with five minutes apiece on the clock. (The relative times may need some adjustment, but seven to three for either side is rare.) This is quite different than time-handicaps, where often the only question is whether the better player mates before forfeiting.
- c) Cappy is played in the presence of a random element (RE), which is the relative strength of the Black moves. Whereas chess is played and analyzed in a deterministic (perfect information, no RE) scenario, other popular games like bridge, backgammon, and poker have RE's.
- d) There is no "best" move in general, for either player! This is a consequence of the RE. With Black a "good" player, best could be defined as the quickest win (usually of the cappy), which would suggest sharp tactics. Or for a lesser player it could be to make the safest move now, that will eventually lead to a win most surely; this would suggest long-term strategic play. But in either case, with White the better player, Black runs the risk of being outplayed.

What should White's strategy be? Should it be to prolong the safety of the cappy, or create holes in the Black defense at all costs, or ...? Since White starts with a lost game, the only hope is to take risks to improve the White position. *In other words, White must occasionally "bluff"*

- e) The openings that have evolved are not in the chess books. The suggestion to "just play chess" as Black doesn't seem to work well with players of suitable relative strengths.

Why Play Cappy?

- 1) Cappy is a fair game between two players of disparate talents, in which either side can take time to think.
- 2) There are fascinating endgames which can test the best of analysts.
- 3) There are amusing sequences which only occur in Cappy, such as the mop, the swinging rook, the chase, the mate defense, and the punching bag.
- 4) Since White starts with a dead lost position and has no best move, it turns out that Cappy, unlike chess, is a game in which White must bluff. The "Cappy players" (a.k.a. the kibitzers, one of whom plays the Black pieces) did not appreciate this element of the game for several years.
- 5) One of the consequences of the RE is the role of the kibitzers. The kibitzing element is abhorrent to chess players, where the best move is best and pointing out a single move can be fatal. But for games with a RE, kibitzing in moderation can lend a social element which is beneficial to the game. (The backgammon chouette provides a natural cadre of kibitzers.)

What constitutes a good strategy for White is most dependent upon the style of the Black player. It is here that the kibitzers can wield their greatest leverage, by causing Black to alter his repertoire during the game.

- 6) Cappy is more fun than chess -- you don't have to win to have a good time. This is partly because it is a fair game which is nonetheless massively out of balance, and which enjoys (suffers?) large swings of fate. Nearly always, someone has a lost position.

Some Endgame Puzzles (Thanks to Paul Lemke for corrections/confirmations)

Black has a lone king. For the first four puzzles, White has no pawns. By symmetry, we may assume C lies inside the rectangle e2-e6-h6-h2-e2. Thus Ch means the cappy is on the h-file, one of Ch2, Ch3, Ch4, Ch5, Ch6.

- P1. Show that with Ce + Q, or Ce6 + Be1 + R, or Cg6 + Bg1 + R, White can mate, but only if Black cooperates.
- P2. Show that White cannot mate with Ch6 + R + R, or Ch6 + Bh1 + R, or Ch + Bh1 + N.
- P3. Show that, except for P1-P2, White mates by force in all cases with either C + Q, or C + any two of the pieces R-R-N-N-Bg1-Bh1.
- P4. One-piece mates. With C + one piece [R,B,N] there is no forced mate without a favorable position. Find all C positions so that White can mate with Black to move from Bb2, Kf6, C?, kh8. [f2, f3, f5, g2, g3, g4, g5]
- P5. No-piece mates. With Kb7, C?, kd7 how many pawns, none beyond rank 4, does White, to move, need to mate by force without promoting a pawn? [Answer: With one pawn, mate is possible but requires Black's help. But with Pe4, Pf4, Cg4 White mates starting with e5. The final position is Kh6, kh8, Pe7, Pf7, Cg7.]
- P6. White has C + P, on the same rank and on adjacent files, defended from behind by the king. Show that with the best possible Black king position, White mates by force only in cases (a) and (b).
 - (a) P, C are on files e, f or f, g or g, f respectively.
 - (b) P, C are on g2, h2 or g3, h3 or g4, h4 respectively.Most interesting is Pg5, Ch4, Kg4, kg7, which Black draws if Ch5 instead, or if White fails to move sideways to or from f3.

With Pg5, Ch4 Black draws if he can move his King to square (x) for each White K square: Ke5/e4/g4(g6), Ke3/f3/f5/g3(g7), Kf4/h3(f7), Ke12/f12/g12/h12(f8,g8). So if White doesn't move sideways to or from f3, Black can draw.

The Swinging Rook and the Mop

It's not hard to guess why these maneuvers are so-named. Starting from the initial position, Black has just captured at g4. All Black's pieces, save two pawns, are defended, and Black has a big attack on the cappy file. Since White loses by mating with a rook or queen, the continuation Bb7 kb8, Ba6 ka7, Rb7 ka6, Qc6 ka5 is a win for Black. But, beware the swinging rook:

1 Qc6! kb8 Rb7 ka8 Rd7 kb8 Rb7 ka8 Re7 kb8							
k r n	k r n	k r n	k r n	k r n	k r n	k r n	You get the idea.
p nbbpp	p nbbpp	R nbbpp	Rbbpp	R bbpp	Rbpp		The rook swings
B	B Q	B Q	B Q	B Q	B Q		back and forth
q	q	q	q	q	q		from b7, clearing
p r	p r	p r	p r	p r	p r		the seventh rank.
P Q P	P P	P P	P P	P P	P P		Seven moves later
P CP	P CP	P CP	P CP	P CP	P CP		we come to the
R RK	R RK	RK	RK	RK	RK		eighth-rank "mop":

12	Rb7 ka8	Rd7 kb8	Rd8 ka7	Rd7 kb8	Rb7 ka8	Rg7 kb8	Rg8 ka7	Rg7 kb8
	k r n	k r n	R n	k n	k n	k n	R	k
	R	R	k	R	R	R	k	R
	B Q	B Q	B Q	B Q	B Q	B Q	B Q	B Q
	q	q	q	q	q	q	q	q
	p r	p r	p r	p r	p r	p r	p r	p r
	P P	P P	P P	P P	P P	P P	P P	P P
	P CP	P CP	P CP	P CP	P CP	P CP	P CP	P CP
	RK	RK	RK	RK	RK	RK	RK	RK

How to part Black from his last two pieces? Another form of the mop:

20	Rb1	qb5	Rb7!	ka8	R7b5	ka7	Rb7	kb8	Ra7!	ka7	Rb7	ka8	Rf7	kb8	Rf4	1-0	
	k		k		k		k		k		k		k		k		
		R		R		k		R		k		R		R			
	B	Q		B	Q		B	Q		B	Q		B	Q		B	Q
	q		q		R												
	p	r		p	r		p	r		p	r		p	r		p	R
	P		P		P		P		P		P		P		P		P
	P	CP		P	CP		P	CP		P	CP		P	CP		P	CP
	R	K		R	K		R	K		R	K			K			K

White checked the Black king for 26 consecutive moves! The end comes three moves sooner if Black either interposes qf7 or captures qb7 when he might have. For example, 18 ... qf7 19 Rf7 rf7 20 Qc5 kb8 21 Qe5 ka7 22 Qe3 any, then 23 Qe6 or Qe8 followed by 24 Qf7. With the clock, the extra moves can make the difference.

The Chase

On an open board, "the chase" is shown starting with Cf2:

... nh3 f3 ng1 f4 ne2 f5 ng3 f6 ne4 f7 ng5 promotes 0-1

					C	
				C		n
	n	C	C	n	n	
C		n				

It also takes a slightly less elegant form ("the come-on"?)

... nh3 f3 ng5 f4 ne6 f5 ng7 f6 ne8 f7 nd6 promotes 0-1

				n		C
		n	n	C	C	n
	n	C	C			
C						

The Mate Defense

This ploy can be most annoying to White.
 On the left, White would gladly swap
 both pieces for the rook, but after Qf7,
 Black wins with Rf8.
 We show how it can take a huge material
 loss to (almost) thwart the mate defense.
 1. ... kh8 (right) loses quickly for Black:

r	k
p	pp
	P C
Q	
PN	nPBPP
KR	R

2 Nd3 nb1 Rb1 rf8 Rb8 rb8 Ne5 d6 Qd6 1-0 Ng6 looms.

r	k	r	k	r	k	r	k
p	pp	p	pp	p	pp		pp
				p		Q	
				N		N	
P C		P C		P C		P C	
Q N		Q N		Q			
P	PBPP	P	PBPP	P	PBPP	P	PBPP
Kn	R	KR		K		K	

A direct assault on the cappy by 1. ... g5 2. f5 rb5 loses to Qc5.
But after 1 ... nb3!, White cannot play ab as the Rb8 deflection
vanishes. So ...

2 Qb3 kh8! Nd3 rf8 Qb8 rb8 Ne5 rf8 Rb8 rb8 Nd7 rd8

r	k	r	k	r	k	r	k	r	k	7... re8 loses
p	pp	p	pp	p	pp	p	pp	p	pp	to Rb1 then Rb8.
										It begins to get
P	C	P	C	P	C	P	C	P	C	interesting, and
Q		Q	N	N		N		N		White is lost.
PN	PBPP	P	PBPP	P	PBPP	P	PBPP	P	PBPP	The White tries
KR	R	KR	R	KR	R	KR	R	KR	R	are Rb1 and Nf6.
										Rb1 loses quickly:

8 Rb1 rd7 d5 h6 Rb8 kh7 Rf8 rd5 Kb2 rd1

	k		k	R		R		R		9. d5 threatened
r	pp	r	p	r	pk		pk		pk	Rb8 then Ba7.
			p		p		p		p	So Black had to
P	C		C	P	C	r	C		C	abandon the mate
P	PBPP	P	PBPP	P	PBPP	P	PBPP	PK	PBPP	defense. On the
KR		KR		K		K		r		left, Black wins
										with ... rfl next.
										The other try:

8 Nf6 gf e4 rg8 h3 rg2 Bh4 kg7 a4 re2 Re1 rh2 Re3 kf7

r	k	rk		k						
p		p		p		kp		kp		kp
						p		p		p
P	C	PPC		PPC		PPC B	P	PPC B	P	PPC B
P	PBPP	P	BPP	P	Br	P	r	r		R P
K	R	K	R	K	R	K	R	K	R	K

[The last move, kf7, was to avoid Rg1 or Rg3 at the wrong moment]
In this position either 15 Be1 rh1 or 15 d5 rh1, Re1 rh3 win for Black.
No better was 11 Rf1 rh2, h4 rh3, Be1 re3, f5 re4, Bc3 rh4 0-1.

The only other try seems to be 15 e5:

15 e5 fe fe ke6 a5 rd2 Re4 rd4 0-1.

	k		p		k		p		k		p
			C	P	C	P	C				
P	P	C	B	P	P	B	P	B	r	R	B
	R	P		R	P		R	P			P
		r		r		r					
K			K			K			K		

This position demonstrated
many Cappy strategies --
the mate defense (three
times), deflection (with
the rook pins), masking
the cappy, and finessing
to win the cappy against
superior material.

3/29/84 - GS-DR - Cf2 - 1. Nc3/d4 (= White's two first moves).
The letters u-z are indices to notes on the next page.

9	Qd7	kd7	Be5	de	Ne5	ke8	OOO	rd8	e4	e6	Bb5	ke7	rhel	g6u	Bc6	bh6							
r	b	r	r	b	r	r	kb	r	r	kb	r	r	b	r	r	b	r						
pb	pk	pp	pb	pk	pp	pb	p	pp	pb	p	pp	pb	p	k	pp	pb	p	k	p				
p	p	n	p	p	n	p	p	n	p	p	n	p	p	n	p	p	np	p	B	pn	pb		
P	n		P	p		P	N		P	N		B	P	N	B	P	N	P	N				
B			B			B			P			P			P			P					
P	N	N	P	P	N	N	P	P	N		P	P	N		P	P	N		P	P	N		P
PP	PCP		PP	PCP		PP	PCP		PP	CP		PP	CP		PP	CP		PP	CP		PP	CP	
R	KB	R	R	KB	R	R	KB	R	KR	B	R	KR	B	R	KR		R	KRR		KRR			

[illegible][illegible]

33 Ne6 kf7y Rf1 nf6 Nd8 kg7 Cf6 kh7 Rh8 kh8 Nb7 kh7z

R	nr	R	r	NR	r	NR	r	N	k		
pb	k	pb	k	pb	k	pb	k	pb	k	pN	k
pBpN	pp	pBpNnpp		pBp	npp	pBp	Cpp	pBp	Cpp	pBp	Cpp
P	C	P	C	P	C	P		P		P	
P		P		P		P		P		P	
PP	P	PP	P	PP	P	PP	P	PP	P	PP	P
K	R	K	R	K	R	K	R	K	R	K	R

- u Black has a good idea but should play 16. ... bc6 next.
v A typical exposure maneuver.
w It looks like the cappy is a dead duck,
but Black goes astray with some stock responses.
x king to e7-~~f~~7-g7-h7 still wins.
y Last chance to draw was 33. kh7.
z The cappy was hanging for 16 of 17 moves, 11 in a row, but
the bishop was hanging for 22 straight moves!
It's mate in 13 or so:
39. g4 g5, Be8 h5, Re1 a6, Re7 kh6, Rg7 hg, hg a5,
45. Rg6 kh7, Nd8 b5, Ne6 b4, Ng5 kh8, Ra6 kg8, Ne6 ba, f7.

B 2/25/88 - GS-AR - Cg2 - 1. e4/h4 (= White's two first moves).
This game illustrates the "punching bag", in which the Black king
gets shoved around the board until a piece (or pieces) threatening
the cappy gets caught in the crossfire. Get out an extra chess set.

1 ... g5 hg e5 Qh5 d5 Nc3 d4 Nb1 qd7 Bc4 qg4 Qf7 kd8 Qf8 kd7

rnbqkbnr	rnbqkbnr	rnbqkbnr	rnbqkbnr	rnb	kbnr	rnb	kbnr	rnbk	bnr	rnb	Qnr
pppppp	p	pppp	p	p	ppp	p	p	ppp	q	p	pppk
	p		p	p		pp	PQ		p	PQ	
	P		P			P			p	P	
PPPP	PC	PPPP	PC	PPPP	PC	PPPP	PC	PPPP	PC	PPPP	PC
RNBQKBNR	RNBQKBNR	RNB	KBNR	R	B	KBNR	RNB	KBNR	RNB	K	NR

9 Qf5 qf5 ef ne7 Be6 kd8 Bc8 kc8 f6 ng6 d3 h5 Nf3 h4 Rh3 kd2

rnb	nr	rnb	r	rnbk	r	rnk	r	rnk	r	rnk	r	rn	r
pppk	p	pppk	n	p	ppp	n	p	ppp	p	ppp	p	pppk	p
	pqP		ppP		pPP		pPP		p	P		p	P
	BpP		Bp		p		p		p		p	P	
PPPP	PC	PPPP	PC	PPPP	PC	PPPP	PC	PPPP	PC	PPPP	PC	PPPP	PC
RNB	K	NR	RNB	K	NR	RNB	K	NR	RNB	K	NR	RNB	K

17 Na3 Nc6 Nc4 rag8 a4 nf4 Bf4 ef f7 rf8 g6 rh6 Nh4 f3 Cg3 ne7

r	r	rr	rr	rr	r r	r	r	r
pppk	pppk	pppk	pppk	pppk P	pppk P	pppk P	pppk P	pppk P
n Pn	n Pn	n P	n P	n	n Pr	n Pr	n Pr	n Pr
p P	p P	p P	P	P	P	P	P	P
p p	Np p	P Np n p	P Np p p	P Np p p	P Np p p	P Np p p	P Np N	P Np N
N P N R	P N R	P N R	P N R	P N R	P N R	P N R	P p R	P pCR
PPP PC	PPP PC	PP PC	PP PC	PP PC	PP PC	PP PC	PP PC	PP P
R B K	R B K	R B K	R K	R K	R K	R K	R K	R K

25 g7 nf5x gf=N kc6 Nf5 rh3y Ne7 kc5 Ne6 kb4 Nc6 bc f8=Q c5 c3 kb3z

r	N	N	N		Q	Q	
pppk PP	ppp P	ppp P	ppp NP	ppp NP	p p P	p p	p p
r	k	r	k	N	p N	N	N
n	n	N	k		p	p	
P Np N	P Np N	P Np	P Np	PkNp	PkNp	PkNp	P Np
P pCR	P pCR	P pCr	P pCr	P pCr	P pCr	P pCr	kPP pCr
PP P	PP P	PP P	PP P	PP P	PP P	PP P	P P
R K	R K	R K	R K	R K	R K	R K	R K

kc2 33 Qb8 (c2) Na3 kd3 Nf4 ke4 Nh3 1-0 *one try from x: ... Rf7 Nes Kc6 Nf7 Kf7*

Q	Q	Q	Q	<i>Qc8 Kf5</i>	<i>Kd2 Kg7 Re1 Kg6 Re7</i>
p p	p p	p p	p p	<i>Qa6 Kg5</i>	<i>Rh8 Rg7! Rany Rg4 1-0</i>
N	N			<i>Nh3 Kh5</i>	<i>- x: Rh4 g7 f8, Kc6, Rh4!</i>
p	p	p	p	<i>Qb8 dxc</i>	<i>Nf5, Rh6! Nhc</i>
P Np	P p	P pKN	P pk	<i>Nf4 Kh6</i>	<i>winning move. Re7, Kd2 Rf7</i>
PP pCr	N Pk pCr	N P pCr	N P pCN	<i>Cg4 cb</i>	
Pk P	P P	P P	P P	<i>c5 mate</i>	
R K	R K	R K	R K		

x Black thinks a kill is at hand, but this move loses "quickly".

y If the king were on c8, White could win, as here, with g4:

28 g4 rh1 29 kd2 ra1 30 **Nb3** kb8 [... ra4 31 Nd7!] 31. Nd7 ka8
32 Ncb6 cb 33 Nb6 then 34 f8=Q 1-0.

z 32 ... dc loses to Qc5, Qa3, Ne3, Nf4.

White wins!

8/05/96 - GS-AR - Cg2 - 1. d4/e4 (= White's two first moves).

Black misses a quick win, then falls for a trap, losing two pieces.

1 ... g5 e5 e6 Be2 Nc6 h3 N3e7 Bg5 h5w h4 bh6 Bh5 bg5 hg ng6

rnbqkbnr	rnbqkbnr	r bqkbnr	r bqkbnr	r bqkbnr	r bqk nr	r bqk nr	r bqk nr
pppppp P	pppp P p	pppp P p	ppppnp P	ppppnp	ppppnp	ppppnp	pppp P
	p	n p	p	p	p b	p	p n
p	P p	P p	P p	P Bp	P Bp	P bB	P PB
PP	P	P	P	P	P P	P P	P
			P	P			
PPP PCP	PPP PCP	PPP BCP	PPP BPC	PPP BPC	PPP BPC	PPP PC	PPP PC
RNBQKBNR	RNBQKBNR	RNBQK NR	RNBQK NR	RN QK NR	RN QK NR	RN QK NR	RN QK NR

9 Qg4 nle7 Nc3 b6 Rh3 bb7 Nf3 b5 OOO b4 Ne4 Nd5 Bg6 rh3 Qh3 nf4x

r	bqk	r	r	bqk	r	r	qk	r	r	qk	r	r	qk	r	r	qk	r	r	qk
ppppnp	p	ppnp	pbppnp	pbppnp	pbppnp	pbppnp	pbpp	p	pbpp	p	pbpp	p	pbpp	p	pbpp	p	pbpp	p	pbpp
p	n	p	p	n	p	p	n	p	n	p	n	p	n	p	B	p	B	p	B
P	PB	P	PB	P	PB	p	P	PB	P	PB	n	P	PB	n	P	P	P	P	P
P	Q	P	Q	P	Q	P	Q	p	P	Q	p	PN	Q	p	PN	Q	p	PN	n
		N		N	R	N	N	R	N	N	R	N	R		N	r		N	Q
PPP	PC	PPP	PC	PPP	PC	PPP	PC	PPP	PC	PPP	PC	PPP	PC	PPP	PC	PPP	PC	PPP	PC
RN	K	NR	R	K	NR	R	K	N	R	K		KR		KR		KR		KR	

17 Qh8 ke7 Qf6 ke8 Bf7 kf8 Qf4 qe7 g6 kg7 Rh8 rf8 N3g5 be4 Ne4 rf7y

r	q	Q	r	qk	r	q	k	r	k	r		r		r		r		r	
pbppkp	pbpp	p	pbpp	B	pbppq	B	pbppq	Bk	pbppq	Bk	p	ppq	Bk	p	ppq	rk	p	ppq	rk
p	B		p	QB		p	Q		p		p	P		p	P		p	P	
P	P		P	P		P	P		P		P		P	N		P		P	
p	PNn		p	PNn		p	PNn		p	PNQ		p	PNQ		p	PbQ		p	PNQ
N			N			N			N		N		N						
PPP	PC		PPP	PC		PPP	PC		PPP	PC		PPP	PC		PPP	PC		PPP	PC
KR			KR			KR			KR		K	R		K	R		K	R	

25 Rh7 kf8z Rf7 qf7* gf d6 Qf6 d5 g4 mates

k	k	k	k	k											
p	ppqr	R	p	pp	q	p	p	P	p	p	P	p	p	P	
p	P		p	P		pp		p	Q		p	Q		p	Q
P			P			P		p	P		p	P		p	P
p	PNQ		p	PNQ		p	PNQ		p	PN		p	PN	C	
PPP	PC		PPP	PC		PPP	PC		PPP	PC		PPP	P		
K			K			K			K			K			

- w The kibitzers were pushing for ng6, Bd8 nf4, but with no convincing line put forward, Black settles for a slower assault. The quickest win after g3 seems to be ne7.
- x Falls for the trap. White draws after fg with Qh8.
- y Black thinks White can't mate with about 4 seconds on his clock. Oops.
- z kg6, Qh6 kf5, f6 would have mated even faster.
- * ke7 offhand hope.

8/16/96 - GS-RC - Cg2 - 1. d4/e4 (= White's two first moves).
 White misplays a good position, but Black telegraphs his intentions.

1 ... d6 Bf4 nd7 h4 g7 Nf3 h5 Qd2 Bh6 Ng5 n2f6 Bd3 Qd7 Qe2 Qg4

rnbqkbnr	r	bqkbnr	r	bqkbnr	r	bqkbnr	r	bqk	nr	r	bqk	nr	r	b	k	nr	r	b	k	nr
pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp	pppppppp
p		p		p	p	p	p	p	pb	p	npb	p	npb	p	npb	p	npb	p	npb	p
P		P		P	P	P	P	P	P	P	Np	P	Np	P	Np	P	Np	P	Np	P
PP		PPB		PPB	P	PPB	P	PPB	P	PPB	P	PPB	P	PPB	P	PPB	P	PPB	P	PPB
					N		N				B		B		B		B		B	
PPP	PCP	PPP	PCP	PPP	PC	PPP	PC	PPP	Q	PC	PPP	Q	PC	PPP	Q	PC	PPP	Q	PC	PPP
RNBQKBNR	RN	QKBNR	RN	QKBNR	RN	QKBNR	RN	QKBNR	RN	KB	R	RN	KB	R	RN	KB	R	RN	KB	R

r	k	nr	r	k	nr	r	k	nr	r	k	nr	r	k	nr	r	k	nr	kr	nr	kr	nr		
ppp	pp		ppp	pp		pppnpp			pppnpp			pppnpp			pppnpp			pppnpp			pppnpp		
	p	npb		p	np		p	p		p	p		p	p		p	p		p	p	p	pp	
	Np			bp			Pp			P			P			P			P			P	
	PPBbP			PPBbP			PPBb			PPBbp			PPBP			PPBP			PPBP			PPBP	
	B			B			B	P			B	p			B	C			C			NC	
PPP	PC		PPPN	PC		PPPN	PC		PPPN	C		PPPN	C		PPPN	p		PPPN	p		PPP	p	
RN	K	R	R	K	R	R	K	R	R	K	R	R	K	R	R	K	R	R	KB	R	R	KB	R

kr	nr	kr	r	kr	r	kr		kr		kr		k r		k r	
pppnp		pppnp		pppnp		pppnp		ppp p		ppp p		ppp p		ppp p	
p	p	p	np	p	p	p	p	p	np	p	p	p	p	p	
p		p		p		p		p		pn		pn		pp	
PPBP		PP P		PP n		PP n		PP n		PP n		PP B		PP	
NC		BNC		BBNC		BBNC		BB C		B C		B C		B C	
PPP	R	PPP	R	PPP	R	PPPK	r	PPPK	N	PPPKB	N	PPPK	N	PPPK	N
R	KB	R	KB	R	K	R		R		R		R		R	

k	r	k	r	k	r
ppp p		ppp p		ppp p	
p		p		p	
Bp		B		B	
PP		PP p		PP C	
C		NC		N p	
PPPK N	PPPK		PPPK		
R	R		R		

```

u  A risky move, but White must take chances
v  A big mistake. Kf2-g2 Rh2 was safer.
w  nh2 (kibitzers), but Black sees a win
x  Black announces that nh4 can't be stopped,
    so why slow down the win with nh2?
    [He misses ne4 by sheer momentum.]
y  The rook and Pg5,Ph5 aren't enough to draw
z  White: trade rooks, or promote a pawn.
    Black: keep White busy by opening files.

```

24... Rhs! (A) Cent more Bhs. (B) R-31. R45, N43 not R43, E44 R43, K42 R48 & W has an impossible for
 Black after R43: y4! N44? 95! ~~Q44~~ yet W may R41 Sh, R44 ~~R45~~ ~~Q44~~ win(?) after R45 a3.
 9/06/96 - GS-PL - Cg2 - 1. c4/d4 (= White's two first moves). Big task.
 Black falls behind in development, and falls...
 R43 e4 N45 R47 Kd1 and White's move after ec.

rnbqkbnr	rnb kbnr	rnb kbnr	rnb kbnr	rnb kbnr	rnb kb r	rnb k r	rnb k r
pp ppppp	pp ppppp	pp ppppp	pp ppppp	pp p ppp	pp p ppp	pp p ppp	pp p ppp
			q	q	q n	q n	n
p	q P	q		p	p	Np	q Np
PP	P	P	P P	P P	P P	bP P	bP P
		N	N	N Q	NB Q	B Q	B Q
PP PPCP	PP PPCP	PP PPCP	PP PCP	PP PCP	PP PCP	PP PCP	PP PCP
RNBQKBNR	RNBQKBNR	R BQKBNR	R BQKBNR	R B KBNR	R B K NR	R B K NR	R BK NR

r	b	k	r	r	b	k	r	r	b	k	r	r	b	k	n	r	b	Q	r	b		r	b		r	b			
pp	p	ppp	pp	p	pp	p	ppp	pp	p	pp	p	ppp	pp	p	pp	p	ppp	pp	p	pp	p	ppp	pp	p	pp	p	ppp		
n		n		n		n		n		N	n		n		n		n		kn		kn		kn		kn		kn		
q	Np		q	Np		q	p		q	p		q	p		q	p		q	p		q	p		q	p		q	p	
bP	P		bP	P		bP	P		bP	P		bP	P		bP	P		bP	P		bP	P		bP	P		bP	P	
B	Q		B			B			B			B			B			B			B			B			B	P	
PP	PCP		PP	PCP		PP	PCP		PP	PCP		PP	PCP		PP	PCP		PP	PCP		PP	NPCP		PP	NPCP		PP	NPCP	
R	BK	NR	R	BK	NR	R	BK	NR	R	BK	NR	R	BK	NR	R	BK	NR	R	BK	NR	R	BK	R	R	BK	R	R	BK	R

r b	r b	r b	r b	r b	After 10 Qg7, it may
p Q p	p Q p	p Q p	p Q p	p Q p	already be a win for
k np	k n	kn	n	P	White
qpP p	qpp p	qPp p	kPp p	k p p	
b P	Pb P	b P	b P	b P	
B P	B P	B P	B P	B P	
PP NPC	P NPC	.P NPC	P NPC	P NPC	
R' BK	R BK	R BK	R BK	R BK	

Black uses the mate defense for an (over-)extended period.

1	... h5	h4 g5s	Bg5 f6	Bf4 Nh6	Be2 Ng4	Bg4 hg	Qg4 Nc6	Ne2 b6
rnbqkbnr	rnbqkbnr	rnbqkbnr	rnbqkb r	rnbqkb r	rnbqkb r	r bqkb r	r bqkb r	
pppppppp	ppppppp	pppppp	pppppp	pppppp	pppppp	pppppp	pppppp	p ppp
		p	p n	p	p	n p	pn p	
p	pp	Bp	p	p				
PP	PP P	PP P	PPB P	PPBnP	PPBP	PPBQP	PPBQP	
PPP PCP	PPP PC	PPP PC	PPP PC	PPP BPC	PPP PC	PPP PC	PPP PC	PPP NPC
RNBQKBNR	RNBQKBNR	RN QKBNR	RN QKBNR	RN QK NR	RN QK NR	RN K NR	RN K R	

9	Nd2	ba6	c3	qc8	Qg6	kd8	h5	qb7	h6	bh6	Bh6	rg8	Bg7t	be2	Ke2	qa6								
r	qkb	r	r	q	kb	r	r	qk	b	r	r	k	b	r	r	k	b	r	r	k	b	r		
p	ppp		p	ppp		p	ppp		p	qppp		p	qppp		p	qppp	B		p	ppp	B			
b	pn	p	b	pn	p	b	pn	pQ		b	pn	pQ		b	pn	pQ		p	n	pQ		q	pn	pQ
										P														
		PPBQ			PPBQ			PPB	P			PPB				PP				PP				PP
				P			P			P			P			P			P			P		
	PPPNNPC			PP	NNPC		PP	NNPC			PP	NNPC			PP	NbPC			PP	NKPC				
R	K	R	R	K	R	R	K	R	R	K	R	R	K	R	R	K	R	R				R		R

17	Ke3	qb5	b3	a5	a3	na7	c4	qc6	Rh8u	b5	Rc1	qb6	c5	qc6	d5	qa6		
r	k	r	r	k	r	r	k	r	r	k	rR	r	k	rR	r	k	rR	
p	p	ppp	B		ppp	B	n	ppp	B	n	ppp	B	n	ppp	B	n	ppp	B
pn	pQ	pn	pQ	p	pQ	pq	pQ	q	pQ	q	pQ	q	pQ	q	pQ	q	pQ	
q		pq		pq		p		pp		pp		ppP		ppPP		ppPP		
	PP		PP		PP		PPP		PPP		PPP		PP		P		P	
	P	K		PP	K	PPP	K	PP	K	PP	K	PP	K	PP	K	PP	K	
PP	N	PC	P	N	PC		N	PC		N	PC		N	PC		N	PC	
R		R	R	R		R	R		R	R		R		R		R		

[illegible]

33 Bh8 a4	Qh5 ab	Qe2 qa4	Bb2x qa7	Qc4 qa8	Ra1 qb8	e5 d6y	cd ed
k B	k B	k B	k	q k	q k	q k	q k
ppp	ppp	ppp	q ppp	ppp	ppp	p p	p
Q						p	p
qPP	qPP Q	PP	PP	PP	PP	PPP	PP
pp P	p P	qp P	p P	pQ P	pQ P	pQ	pQ
P K	p K	p K	p K	p K	p K	p K	p K
PC	PC	QPC	B QPC	B PC	B PC	B PC	B PC
R	R	R	R	R	R	R	R

41 e6 ke7 Qh4z 1-0

q	q	s Black overplays opening the kingside.
p k	p k	t The rook is keeping the bishop and queen busy.
pP	pP	u Now the queen is available.
P	P	v Squeezing Black is more satisfying than the rook.
pQ	p Q	w Typical maneuver for stopping the mate defense.
p K	p K	x Ooops. Ra1 won quickly.
B PC	B PC	y At last Black must abandon the mate defense.
R	R	z Black's queen is lost.

G 9/30/97 - GS-AR - Cg2 - 1. Nf3/h4 (= White's two first moves).
Black gets overly frisky with his king, and a swinging knight mops up.

1 ... g5 hg nf6 d3 rg8 Nh4 b6 e4 Bb7 f4 e6 Nd2 h6 g6 fg

rnbqkbnr	rnbqkbnr	rnbqkbnr	rnbqkbnr	rn qkbr	rn qkbr	rn qkbr	rn qkbr
pppppp p	pppppp p	pppppp p	p pppp p	pbpppp p	pbpp p p	pbpp p	pbpp
	n	n	p n	p n	p pn	p pn p	p pnpp
p	P	P	P	P	P	P	P
P			N	P N	PP N	PP N	PP N
N	N	P N	P	P	P	P	P
PPPPPPC	PPPPPPC	PPP PPC	PPP PPC	PPP PC	PPP C	PPPN C	PPPN C
RNBQKB R	RNBQKB R	R BQKB R	R BQKB R	R BQKB R	RNBQKB R	R BQKB R	R BQKB R

9 Be2 g5 Bh5 ke7 Ng6 kd6 Nc4 kc5 a4 kd4 c3 kc5 b4 kc6 Nce5 kd6

rn qkbr	rn q br	rn q br	rn q br	rn q br	rn q br	rn q br	r n q br
pbpp	pbppk	pbpp	pbpp	pbpp	pbpp	pbpp	pbpp
p pn p	p pn p	p kpnNp	p pnNp	p pnNp	p pnNp	pk pnNp	p kpnNp
p	pB	pB	k pB	pB	k pB	pB	N pB
PP N	PP N	PP	N PP	P NkPP	P N PP	PPN PP	PP PP
P	P	P	P	P	PP	PP	PP
PPPNB C	PPPN C	PPPN C	PPP C	PP C	P C	C	C
R BQK R	R BQK R	R BQK R	R BQK R	R BQK R	R BQK R	R BQK R	R BQK R

17 Nf7 kc6 Nd8 kd6 Nb7 kc6 Nd8 kd6 e5 kd5 Qf3 ne4 c4 kd4 Qe4 kc3

rn q br	rn N br	rn br	rn N br	rn N br	rn N br	rn N br	rn N br
pbpp N	pbpp	pNpp	p PP	p PP	p PP	p PP	p PP
pk pnNp	p kpnNp	pk pnNp	p kpnNp	p pnNp	p p Np	p p Np	p p Np
pB	pB	pB	pB	kP pB	kP pB	P pB	P pB
PP PP	PP PP	PP PP	PP PP	PP P	PP nP	PPPknp	PPP QP
PP	PP	PP	PP	PP	PP Q	P Q	kP
C	C	C	C	C	C	C	C
R BQK R	R BQK R	R BQK R	R BQK R	R BQK R	R B K R	R B K R	R B K R

25 Qa8 nc6 Nc6 c6 Qf8 rf8 Nf8 mop

```

| Q N br | Q br | r | N |
| p pp | p p | p p | p p |
| pn p Np | pp p Np | pp p Np | pp p p |
| P pB | P pB | P pB | P pB |
| PPP P | PPP P | PPP P | PPP P |
| kP | kP | kP | kP |
| C | C | C | C |
| R B K R | R B K R | R B K R | R B K R |

```

Black missed a good shot:

9 Be2 g5, 10 Bh5 ke7,
11 Ng6 kf7! after which
the Black king finds
a haven in the corner.

Can White mate quickly?

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| When time is running out, White needs a mate, not a mop.
| p Q | A quick mate follows Qe7 kh6, Nf5: a) kh5, Qh7 kf5, Qh6
| p | or b) kg6, Qg7. If Qe7 kh5, Qf7 a) kh6, Nf5 kg5, Qf6 or
| PP k | b) kh4 or kg5, Qf6 or c) ng6, Qg6.
| b n N |
| P |
| r PCK |
| RR |

```

9/10/99 - GS-AR - Cg2 - 1. f4/h4 (= White's two first moves).
Black is late in opening the g file.

1 ... b6 e4 bb7 d3 g6 Be2 f5 Bf3 nf6 e5 ng4 Bb7 nc6 Ba8 qa8

```

| rnbqkbnr | rn qkbnr | rn qkbr | rn qkbnr | rn qkb r | rn qkb r | r qkb r | q kb r | |
| p pppppp | pbpppppp | pbpppp p | pbppp p | pbppp p | pbppp p | pBppp p | p ppp p |
| p | p | p p | p p | p np | p p | pn p | pn p |
| P P | PP P | PP P | PP P | PP P | PP P | PnP | PnP | PnP |
| P | P | P | P | P B | P B | P | P |
| PPPP C | PPPP C | PPP C | PPP B C | PPP C | PPP C | PPP C | PPP C |
| RNBQKBNR | RNBQKBNR | RNBQKBNR | RNBQKBNR | RNBQK NR | RNBQK NR | RNBQK NR | RNBQK NR |

```

9 Nf3 nd4 Rh3 bg7 c3 nf3 qf3 c6 Ke2 h6 Be3 e6 d4 Ke7 Nd2 g5

```

| q kb r | q k r | q k r | q k r | q k r | q k r | q r | q r |
| p ppp p | p ppp bp | p ppp bp | p pp bp | p pp b | p p b | p pk b | p pk b |
| p p | p p | p p | pp p | pp pp | pp p pp | pp p pp | pp p p |
| Pp | Pp | Pp | Pp | Pp | Pp | Pp | Ppp |
| n PNP | n PNP | PNP | PNP | PNP | PNP | P PNP | P PNP |
| P N | P N R | PP n R | P Q R | PP Q R | PPBQ R | P BQ R | P BQ R |
| PPP C | PPP C | PP C | PPP C | PP K C | PP K C | PP K C | PP NK C |
| RNBQK R | RNBQK | RNBQK | RNB K | RNB | RN | RN | R |

```

17 hg hg fg qg8 Rahl bh6 Qg4 fg Rh6 rh6 Rh6 g3 Nf3 c5 g6 cd

```

| q r | qr | qr | qr | q | q | q | q |
| p pk b | p pk b | p pk | p pk | p pk | p pk | p pk | p pk |
| pp p | pp p | pp p b | pp p b | pp p r | pp p R | p p R | p p PR |
| Ppp | Ppp | Ppp | P P | P P | P P | p P P | P |
| P PN | P N | P N | P p | P p | P | P | p |
| P BQ R | P BQ R | P BQ R | P B R | P B | P B p | P BNp | P BNp |
| PP K C | PP NK C | PP NK C | PP NK C | PP NK C | PP NK C | PP K C | PP K C |
| R | R | R | R | R | | | |

```

25 Bg5 ke8 Bf6 1-0

g7 forcing

ke6 Bg3

-----	-----	Until the last move, the game was still on the line.
k q k q		If carelessly 26. cd instead, d5 draws for Black.
p p p p		E.g., 26 cd d5, ed kd7, Bf4 Qf8, Rh7 Qd5, Bf3 qf5, Rc7
p p PR p pBPR		kb5, 32. g7 qe4 draws: Kdx qg6 0-1; Kf1 qbl, Ne1 qe4 =;
P B P		Kf2 qbl, Nx qe4 =; Kf2 qbl, Ke2 qh1 0-1. Indeed any
p p		move But 32 ... qe4 loses. E.g., 32 ... qbl, g8=Q qh1,
.P Np P Np		34 Qe8 wins: one tale is 34 Qe8 ka6, Qc8 kb5, Bal
PP K C PP K C		kb3, Rc3 ka2, Qc4 kb1, Rc1 kb2, Rc2 ka3, Bb4 ka4,
-----	-----	Bd2 ka3, Rc3 kb2, Qb4 ka2, Qa3 kb1, 46 Rc1 1-0.

If Black avoids check with the a-Pawn he lasts longer:

34 Qe8 ka6, Qc8 ka5, Be1 ka4, Rc4 kb5, Rb4 ka5, Rb3 ka4, Ra3 kb5,
Qd7 kc4, Qe6 kb5, Qd7 kc4, Ra4 kd5, Qb7 ke6, d5 kf5, Qd7 kg6,
Rg4 kf6, Rf4 kg6, Qf7 kh6, Rh4 1-0, captures Black queen move 52.

The Curious Case of the Cloistered Cappy

-----	-----
r	It might seem that White is lost on the left, with
	so many lines open and the cappy moved. Yet Nh2
	draws. After ke1, Bf3 rb3, Kg2 rb2, Kg1 rf2, Bg4
	rf8, Kg2 rg8, Nf3 ke2, Nh2 etc. And Ke2, Bf3 ke3,
	kg2 is no better. After rg8, Bf3 kd2, Ng4 rb8,
NC	Kf2 rb2, Kf1 we arrive at titled CCCC position
	on the right. Not only is the cappy cloistered,
k KB	but so is the bishop: neither have to move again.
-----	-----

Pawn Endgame

-----	Black to move wins, but not with kf3, Kh7 ke3, Kg6 kd3,
	Kf5 kc3, Ke4 kb3, Kd3 ka3, Kc3 ka2, Kc2 a3, h7 draw.
Kp	The win is by forcing Ch7 before capturing ka3:
C	kg4, Kh7 kh5, Kg7 kg5, Kh7 kf6, Kg8 kg6, h7; then
	White has no tempo move after a3 above, so loses.
p	White to move draws: Kh7 kg4, Kg8! grabs distant opposition.
P k	Note kg4, Kg8 kf5, Kf7 (opposition) loses the race.
	With the g,h pieces one square down, Black to move can only
	draw since forcing the cappy to move costs the opposition:
-----	kg3, Kh6 kh4, Kg6 kg4, Kh6 kf5, Kg7 kg5, h6 = as above.

After the "opening" e4-nc3 e5, nf3 f6, ne5 e5, Qh5 ke7, Qe5 kf7, Bc4 kg6,
Qf5 kh6, d4 g5, h4 kg7, Qf7 kh6, Bg5 qg5, g5 kg5 we arrive at:

-----	-----
rnb bnr	Rh5 kg4, Rh4 kh4 [kg5, Qf5 kh4, Cf3], Qf5 bd6 [mate in 6].
pppp Q p	f4 kg4, Qf5 kg3, O-O any, Rf3 any, Cg3 [mate in 5].
	Rh5 kg4, Qe8 [or Qg6!] any, Be2 kf4, Cg3 [mate in 4].
k	With the Pf2 and Cg2 switched,
Bpp	Rh5 kg4, Ne2 bb4, Kf1 any, Cf3 [mate in 4].
N	Other tempting lines, which allow Black to "escape":
PPP PC	After f4 kg4, kf2 nf6, Be2 kf4, Rh5 rg8, Black escapes.
R K R	After e5 h5, Black escapes.
-----	-----

Almost a win for White

2 Rg3 rh2

k	Black is to move in the following position.	k
PC	It is easy to see that if Black can trade	PC
K	his rook for the pawn, the game is drawn;	K
B	if the cappy were on the fifth rank White	B
R	could mate, but he has been forced to the	R
r	sixth rank for safety. After 1. ... rg2	r
	2. Rg3 rh2, how is White to continue? Black	A.
	threatens rh7-g7-g6. Call this position A.	

After 3 Rc3! rh7, Rc7 rh5+ we have position B (shown later).
To see how White can lose, consider instead

3 Rc3 rg2 f7+ kf8 Rc8+ kg7 Be5+ kh6 f8=Q kh5 0-1

k	k	R	R	R Q	Rc8+ was the losing move.
PC	P	Pk	P	C	Had Black played 4 ... kh8
K	C	C	Ck	BK k	then Rh3+/Be5+/Rh8+/f8=Q+
B	K	K	BK		1-0. After 4 ... kg7
R	B	B			[or 4. ... kf8, Bd6+ kg7],
r	R				Be5+ kh6 [kf8, Rc8+ ke7,
	r	r	r	r	f8=Q+ kd7, Qd6 1-0] we
					arrive at the following.

Be5+ kh6

Rg3 rh2 Rc7 rh5+ Bg3 kg7 Bf4 kg7

P	The obvious 6. f8=Q+	k	k	Pk	Pk
Ck	only draws(!): kh5	PC	PC	C	C
BK	then 7. Bg3 rf2+ =,	K	K r	K	K
R	or 7. Rg3 rxg3 =.	B	B		B
r	Tries for 1-0 are	R		R B	R
	6. Bg3 kg7 (C) and	r		r	r
	6. Rg3 rf2+ forcing	A.	B.	C.	D.
	7. Bf4+ kg7 (D).				

What is the value of positions A-D? Subsequent positions can be complex. Starting from A, 3 f7+ kf8, Ke6 rh7? [rh6 =], Bd6+ kg7, 6 f8=R rh6, Rf7+ kg8 = [not kh8, Be5+ kg8, Rg7+ kf8, Rf3+ ke8, Re7+ kd8, Rd3+ kc8, Rc7+ kb8, Rh7+ 1-0 wins with the swinging rook]. If instead of 6 ... rh6 Black tries (eg) rh1, then Rf7+ kg8, Be5 yields position E.

after 8 Be5

Rgh3 rf1

k	Black must vacate the h file as	k
R	Rg7+ kh8, Rh7++ wins the rook, and	R
K C	Rg7+ kf8, Rf3+ yields the swinging	K C
B	rook as above. 8 ... rel sets the	B
	trap Rh3 re5+, Ke5 stalemate.	
R	Then 9 Rg7+ kh8, Rh7+ kg8, Rgh3	R
	threatens the swinging rook, but	
E. r	11 ... rf1 seems to foil that plan.	F. r

Starting from B, Bg5 rh1 almost loses to f7+. Note ... kg7, Bf6+ kh6 [kf8? g7 mate], f8=Q+ kh5, Qe8 1-0. [If Rc7 is on c8, then after Qe8: rf1, Ke6 rel, Be5 rgl! Black draws.] Or ... kf8, Be7+ kg7, Bf6+ ditto. But ... kh8!, Rc8+ kf7, Be5+ etc. With White to move after Bg5 kx8, is there a file x so that White can force a win with the bishop pinned?

k	k	Pk	k	Pkr	k
R	R	P	R	P	R
PC	P	C	P	C	P
KBr	KBr	KBr	KBr	KB	KB
*	A.	B.	C.	D.	E.

From *, all Black rook moves lose, so: 1. Ra7 kf8 or h8 threatens rh1, so: 2. f7 ? . The question is with Black to move, from which positions A,B,C can Black safely move the rook? * or A none; B rh7; C rh1,rh2,rh3.

*: rh8, f7+ kg7, Bf6+ kf8, g7m 1-0.
rh1, f7+ kf8, Be7+ kg7, Bf6+ kh3 [kf8, g7], f8=Q+ kh5, Qe8 rcl+, Ke6 rel+, Be5 rg1, Rh7+ 1-0. Note if instead of Be7+, Rc8+ =.
A: rh8, Rc8+ 1-0.
rh7, Rc8+ kg7, Bf6+ kh6, Rh8 kh5, Bg7 1-0.
rh1 see *.
B: rh8 or rh1 see *.
rh7 is position D.
C: rh7, Rc8+ kg7, Bf6+ see *.
rh6, Rc8+ 1-0.
rh1 is position E.

There appears to be no win for White from the initial position.

White, to move, to avoid cappy promotion must concede the pawn.

		K	K	kCK	C	K	K
K	kCK	C	kCP	P	kP		kCP
kCP	P	kP					
g6 is	Kh7 is	h6 by	g7 is	Kh8 is	h7 by		
forced	forced	choice	forced	forced	choice		
... kf6	... kg5	... kf6	... kf7	... kg6	... kf7		
					0-1		

But starting from the 3rd or 4th rank, White keeps the pawn:

		Line A:				Line B:
		C	CK	CK	C	
K	kCK	K		P	P	K
kCP	P	k P	kP	k	k	P
after						
g5 any,	A... kf4			Kg6 =	B... kf6	
Kh6 =					Kh6 =	

Black to move. From the above we find that
A: kd4 loses after Kg4, but kf3 draws as above.
B: kd3 draws after Kg6, but kf4 wins as above.
Another way to draw after A. kf3, g4 kf4,
g5 kf5, Kh6 kg4, Kg6 kh4, Kf5 kg3, h6!
After kf3, g7; after kh4, Kf4; after kh3, Kg5.
A: B:

Pawn + Cappy

When do P+C win? The only cases of interest are Cf-h and Pb-g, as can't mate with Ce or promote with Pa, Ph. Let the C,P be on rank i, $1 < i < 7$, separated by j files [$j=0$ was P6 above], and the K,k be in opposition, between the C,P on ranks i-1 and i+1 with Black to move. Aside from P6, the only cases which win are $j=1, i < 6$; $j=2$; and $j=3, i=6$.

The surprises are: White to move doesn't help, and $j=3, i=5$ is a draw.

$j=1, i=6$ is a draw as

	xkx	
	xxx	

 is a draw with White to move.

[K any, k attacks P; | PKC | K defends, k straight back, etc.]
[$j=3, i=6$ wins as Black must approach P from the 8th, and White can select the tempo, and so promote without moving the cappy]

When queen vs rook may not draw

-----				-----	
	p pNk		Consider the 1-0 position A) on the left.		k K
	P		Black's rook is hopelessly out of place.		p pN
	r PPK p		With his king on e7 or d8, ra6 loses to Nb8.		P
	Pp C		The quick win is 1. Kf5 kd8 2. Kf6 ke8		r PP p
	P		3. Kg6 ke7 4. Kg7 kd8 5. Kf8 kc8 leads		Pp C
	A)		to position B) on the right. It might seem		P
			that 3. e7 kxN 4. Kf7 was a shorter route		
			to 6. e7 kxN 7. Kf7, but rc5 may be 0-1!		B)
-----				-----	

Kf7 rc5 e8=Q kd6 Qd8 ke5 Qg5 kd4* Qd2 ke4 Qg2 kf4

			Q		Q											
	p pkPK		p p K		p p K		p p K		p p K		p p K		p p K		p p K	
			k													
	rP p		rP p		rPk p		rP Qp		rP p		rP p		rP p		rP p	
	Pp C		Pp C		Pp C		Pp k C		Pp k C		Pp k C		Pp k C		Pp k C	
	P		P		P		P		P		P		P		P	
									Q				Q			

Ke6 rc3 Kf6 rg3 Qxr kxQ Kg5 kf3 Kf5 ke3 Ke5 kd3 d6 cd 0-1

	p	p	.		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p	p		p
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If Qh1 instead of Qxr, then rg4 and White hasn't a perp.

From B) the win is 6. Ne5 rc5 7. e7 rd5 8. e8=Q rd8 9. Ke7 rxQ 10. KxR then the K+N win the a,b,c pawns and promotes a pawn.

* Better for White after Qg5 kd4 was Ke6, which probably draws. But rc3 still presents problems as the White pawns are weak.

```

-----
|k      | How does White win this game? Kf8 ral, f7 ra6 only draws.
|ppp P K| Idea 1: Masking the e-pawn with the N doesn't seem to work:
|      PC| Nh5-Nf7-Nd8-Kf7 rh1, 1. e8=Q rh6 2. Nb7 kb7 3. Qe4 c6 is
|      R| only a draw! Or 3. Qb5 kc8, Qa6 kd8 =. Or 3. Rb5 ka6 =.
|      N| Idea 2: Trade the e7 and R at h8 for r: Rh5 rg1, Rh4 ral.
|      | f7? ra5 wins; Rh5 rg1 repeats; Ne5 rg1, Rg4 rh1 stops f7.
|      | Idea 3: Re5 rg1, Re4 ral, f7 ra6, Nf6 and Rg4 wins quickly
|      r| with e8=N then soon f8=Q.
|      | Idea 4: f7 re7, Nf6 rf7, Kf7 wins by a slimmer margin.
-----

```

A typical escape by White

```

-----
|      r| After 1. Nf1, Black wins quickly with rg8, threatening both
|rp k p| bd2 and bh7. Instead he took the direct approach bh7:
|      p| Nf1 bh7, Rd2 nf4, Cg3 nh5, Bh5 h5, Rd5 ke6, f4 ef, Cf4 rg8,
|p p n| Ne3 raa8, Kf2 rac8, Rhd1 rcf8, Re5 kf7, Rf5 Kg7, Rdd5 kh8,
|P Pb P| Rf8 rf8, Rf5 rd8, Nd5 rg8, Nf6 rc8, Rh5 rc7, Ra5 rg7,
|P B | Na5 kg6, Kf3 flag.
|P N PC|
|RK R|
-----

```

Mating with double check

```

-----
|      | Minimum material seems to be N,B,R,R,C vs p. |m. next |
|      | With room to maneuver [cappy on ranks 3-5, | B      |
| R      | files e or f], White mates by blockading the | R N    |
|      kpK| Black pawn on an adjacent file with the N on | kpK    |
|      N | a color opposite that of the bishop, forces |      |
| C      | the pawn to advance to the N, places his | C      |
|      | king next to the pawn, and hems the Black |      |
| BR     | king into two squares as on the left. Then | R      |
|      | the mate is Ba5 kf4, Bc7 kf5, Nf6 g4, Cg5. |
-----

```

We compress the above position to the next diagram.

The cappy is on any of the files c-f and ranks 2-5. ...xxx* xx...

The central bishop diagonal has been marked with *'s. *kpK

The other rook is on any square marked "x" or "." . B *N

For the notation that follows, C is on f5. C*

1. R *

After kf6, it takes a while to hem in the king:

Re8 kg5, Re5 kh5, Bc7 kg5, Rh4 kf6, Rg4 kf7, Rf4 kf6, Bd8 kf7,

Re7 kf6, Re6 kf7, Ne5 kf8, Nd7 kf7, Re5 mates next. Position 1.

[After pg5 it's Cg6 en passant, double check, cappy mate. Nice.]

R | Here the cappy is on h2-h5. With Ch5:

BKpk| Bd6 kh6, Bf4 kh7, Nh8 mates next.

N | Position 2.

C|

2. R|

K | Here the cappy is on g2-g4. With Cg4:

R | Bc5 kg5, Be3 kg6, Ng7 mates next.

B pk| This also works with ph, near right. B kp|

N | kg5, Bc7 kh4, Bb6 kg5, Bd8 kg6, Ng7. N|

C | With Cg5, ph7 we begin from far right: C |

R | Bd7 kg6, Bc8 kg7, Rf5 kh8, Bc6 kg7, R |

3. | Be4 kh8, Rf8 kg7, Nf7 mates next. 4. |

5. |

The case Cg5, pf7 seems to require more material.

```

-----
Summary: Cases are listed at the cappy location, except "5" means
          5 with ph7, open question with pf7. And, "7" means 3 if
          pf, 4 if ph.
          1152|
          1172|
          1172|
          1172|
          . 1172|
          -----

```

PPC vs p

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0:B| Always: K is on x or y (or ...) and :B means Black to move.
p  | It would seem that White wins, even though to win he must
   | promote one Pawn without losing the other, as W+eC = draw.
k  | It is easier to maneuver the White King behind the Pawns than
P C| it is for the Black King to maneuver in front of the Pawns.
y P| But a close look suggests the position is a draw. We pose
.  | it as a three Pawn problem in which a Pawn may not promote,
   | and Black draws if he captures any Pawn.
-----
Claim: with W to move, b5 b6 is always worse for White.

```

All positions are drawn, since the best W can do is reach another.

```

-----
1:B| 2:B| 3:W| 4:W|
p  | p  | p  | p  |
   | k  | k  | k  |
k P| P  | P  | P  |
P P| P P| P P| P iPj|
xy | wxyzr| wxyzr|
   | stuv | stuv |
-----

```

In 1: Kx or Ky, kd6=3.
 In 2: ke5 forces 1 (Kz loses b4).
 In 3: Kc4 ke5 forces 1, Kd4 ke6=4i, Kf4 ke6=4j, K other is 2.
 In 4: e5,g6 lose a Pawn, Kany ke5 forces 1.

```

-----
5:W| 6:W| 7:W| 8:W| 9:W|
p  | p  | p  | p  | p  |
   |   | k  | k  | k  |
P P P| P P P| P P| P KP| P PK|
xyz | K  | K P| P  | P  |
-----

```

In 5: Kd4 kg6 or Kf4 kd6 force Ke3, then ke5=6.
 In 6: Kany loses a Pawn, and g5=1.
 In 7: g4 ke6=5, Kd3=0.
 In 8: e5 kf5 loses g Pawn, g4 kf6 Ke3 ke5=6.
 In 9: e5 kd5 loses b Pawn, g4 kd6 Ke3 ke5=6.

From 0: kd6 Kd4 ke6=8, or kf6 Kf4 ke6=9, or kf6 Kd4 ke6=8. Draw.

```

-----
|   k | What is the outcome with White to move?
| R   | Ne7 kh8, g7 kh7, g8=B kh8, Ng6 kg8, h7 is mate.
| PC  | [so for example, if rook is on f7 not b7, 1-0]
| NK  | Ne7 kf8, g7 ke8?, g8=R kf7, Ng6 ke6, Nf4 kd6, Rg6 kc5,
|     | Rb2 rh1, Nh5 Rh5 =.

```

```

-----
| p   |
| r   |
|     |

```

c2 fork square b4 d4 e3 e1
from/forks c6 d5 d3 e6 f5 f3

```

RR
RR c7 d7 e7 f7 g7
c6 d6 e6 f6 g6 CC
c5 d5 e5 f5 KK
c4 d4 e4 NN g4
c3 d3 e3 f3 g3
pp c2 d2 e2 f2 g2
rr

```

```

-----
| p   | What is the outcome? Black to move wins: kd5, Ke3 kc4,
| ,k  | Ke4 b5, d5 b4, d6 b3, d7 b2, d8=Q b1=q,
| P   |
| K   |
| PC  |
|     |

```

1-0. How?

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-----
| = = = | With W to move, a6 seems to win as B is in Zugswang.
| = k = | But it's Black's move, and after kb7, what? 1. Bd3,
| = = C = | ka7 or kc7? ka7, 2 Kb5 kb7, 3 Be4 kc7, 4 Kc5 kd7,
| P K =B = | 5 Kd5 kc7, 6 Ke6 kb8, 7 Kd6 ka7, 8 Kc5 ka6, 9 Kb4
| = = = | ka7, 10 Kb5 kb8, 11 Kb6 kc8, 12 Bc5 wins. And kc7,
| = = = | 1 Be4 is a faster version of the above. Endgames
| p = = = | like this aren't in the chess literature. Note
| = = = | kb7, 1 Bd3 kc7, 2. a6 kd7, 3. Bc5 kc7 is a draw,
|     | as both the cappy and a-pawn are weak.

```

```

-----
|   B | What is the outcome with White to move?
| r   | It appears White may have enough to force
| N C | a position as on the right, which wins.
| P   |
| RK  |
| k   |

```

```

-----
|   B |
|     |
| RC  |
| P   |
|     |
| r   |
| NK  |
|     |
| k   |

```

Draw	B wins	W wins	Can W win?
	p	p	k
			p p ppp
			p b
R	Pk	k	nP r P
k PC	PC	PC	P NB
r			P R PC
k	k	k	K R

[It once occurred to the Cappy players that White had earlier made an illegal move (possibly the best move for that position!). The net result has been that Black on occasion uses extra time checking that the last White move was kosher.]

Found by Jack Rogers 7/6/97 on a Stash Earl Grey Tea wrapper:

"There are few hours in life more agreeable than the hour dedicated to the ceremony known as afternoon tea." Henry James

Qe8 almost wins, but Black has a narrow path to a draw.

Q						
pp						
R	xyz	xyz	xyz	xyz	xyz	
kppP						
C						
P P r						
PP						
K						

Qe8 kc4	Qa4 kd3	Qd1 kc4	b3 kb5	a4 ka5	b4 b4	b4 kb4 Qe1 1-0
		ke3	Qe1 .	Qg3 .	Rg5 1-0	
		ke4	Qh1 kd3	Qf1 ke4	Qf4 1-0	
Qe8 ka5	b4 b4	b4 kb4	Qf8 kb5	Qe8 ka5	Qd8 ka4	Qd7 ka3 Qe7 ka4
Qd7 ka3	Qd6 ka4	Qd7 ka3 =				

a xyz	b xyz	c xyz	d xyz	e xyz	f xyz	g xyz

Keep your King on the pink squares.

Make a house with your pawns and your King will be safe inside.

Is that a free Pawn?

1/16/98 PL-GS

e4 c5, Bc4 Nc6, b3 e6, Bb2 Nf6, e5 Nd5, Qf3 N5e7, Nh3 Ng6, Qg3 Qc7, f4 d6, ed Bd6, O-O a6, Bg7 Rg8, Bc3 b5, Bd3 Bb7, Bg6 Rg6, Qh4 Ne7, Rf2 Qc6, Qh7 OOO, Qf7 Rg2, Kf1 Rf2, Kf2 Qg2, Ke3 Nd5, Kd3 Nf4, Ke3 Qe2 mate.

4/15/98 GS-AR Cappy

e/h4 g5, hg nf6, e5 nd5, d4 h6, g6 fg, Bd3 rg8, Qg4 h5, Rh5 gh, Qg8 nb4, Nf3 b6, Nc3 bb7, Ne4 nc6, Bh6 nd3, cd a5, Bf8 ra6, Qh8 qa8, Bh6 kf7, Nfg5 kg6, Qg7 kf5, Qf7 kg4, Qf3 kh4, g3 mate.