

Contents

1	1X	3
1.1	1C	4
	1.1.1 Gazzilli after 1D [*] /1H [*]	4
	1.1.2 XYZW	6
1.2	1D	7
	1.2.1 XYZW	8
1.3	1H	9
	1.3.1 Gazzilli after 1S [*] /1N [*]	9
	1.3.2 1H - 2S [*] (same as 1S - 2N [*])	11
	1.3.3 1H - (X)	11
	1.3.4 PH response	11
1.4	1N	14
	1.4.1 after Stayman	14
	1.4.2 after Jacoby transfer	15
	1.4.3 after minor Stayman	15
	1.4.4 comp	16
	1.4.5 vs CAPP	16
	1.4.6 vs DONT	17
	1.4.7 vs meckwell DONT	17
1.5	1S	18
	1.5.1 Gazzilli after 1N [*]	18
	1.5.2 1S - 2N [*]	19
	1.5.3 1S - (X)	20
	1.5.4 PH response	20

1.6	2C	21
1.6.1	puppet Stayman	21
2	pre	23
2.1	2D/NV (multi)	24
2.2	2H/NV (Ekren)	24
2.3	2S/NV (wild)	25
2.4	2D/V (multi)	26
2.5	2M/V (nat)	26
2.6	4-th seat	27
2.7	higher preempt	28
2.8	2N (minors)	28
3	comp	29
3.1	Gladiator	30
3.2	good bad 2NT	31
3.3	other	32
3.3.1	vs transfer openings	32
3.4	overcall	33
3.5	unusual	34
3.6	vs 1N	35
3.7	vs pre	36
3.7.1	vs nat	36
3.7.2	vs multi	36
3.7.3	vs Ekren	36
3.7.4	vs transfer preempt	36
3.7.5	misc	37
3.8	vs prec	38
3.9	X	39
4	util	41
4.1	1-2-3 Stops	42

4.2	2NT	43
4.3	Forcing Pass	44
4.3.1	XX = Q	44
4.4	suit GT	45
4.5	2NT and Lebensohl	46
4.6	maximum X	47
4.7	Rubens	48
4.8	Slam bidding	49
4.8.1	cuebid	49
4.8.2	FF	49
4.8.3	kickback RKC	49
4.8.4	ERKC	49
4.8.5	Obvious ERKC	50
4.8.6	ORKC	50
4.8.7	2-suied RKC	50
4.9	UwU	51
4.10	XYZW	52
4.10.1	2wPCB	52
4.10.2	PLOB	52
5	cardplay	55
5.1	lead	56
5.2	signal	57
5.2.1	Smith echo	57
5.2.2	other	57

Chapter 1

1X

1.1 1C

```

1C -
1D*: 4+H
1H*: 4+S
1S*: inv+, 4+D; or 5+D
    - 1N : min, 2-D or 4333 or some 4332
    - 2C : min unbal
    - 2D : 3+D
1N : 6-10
2C*: GF, 4+C # inv if PH
    - 2D*: 12-14
      - 2H*: nat or ask
    - 2M : 15+, nat, usually 3+M
    - 2N : 18-19
    - 3C : 15-17, 6+C
    - 3X*: spl
2D*: inv, 4+C # constr if PH
    - 2M : 15+, nat, usually 3+M
    - 2N : nat min
    - 3C : nat min
    - 3X*: spl
    - 3N : 13-14, nat
2M : 3-7, 6+M # not interested in 18-19 bal, 2-M
    - 2N*: feature ask, inv+
2N*: 7-9, 5+C # weaker if PH
3C*: 0-6, 5+C # weaker if PH
3X : 7+X, about 6-6.5 tricks

```

1.1.1 Gazzilli after 1D*/1H*

```

1C - 1D*;
1H*: 4+S # highest priority unless 4+ fit
1S*: 16+; or (13)14-15, 6+C, GT # may be 16-17, 2425 [3H]
    - 1N*: 8+
      - 2C*: 6+C, GT
        - P : s/o
        - 2N : re-inv
        - 3C : re-inv
      - 2D*: GF, catchall
      - 2H : 6+C, GT; and 3H # same as above but 3H
      - 2S*: 3H, GF
      - 3H : 4H, 16-17
    - 2C : min
    - 2D : min
    - 2H : min

```

```

# bids below applies to 2X above
- 2H : 3-4H, 16-17(18)
- 2S*: 3H, GF
- 3C : GF
- 3H : ?
- 2S*: min, 5+S # implies 6+H
- 2N+: C fit ST
- 3H : solid H ST
1N : min bal
- 2wPCB
2C : min unbal
- 2D*: GF
- 2H : NF
- 2S*: GF, (3)4+C
- 2N : inv
- 3C : inv
- 3D*: spl
- 3H : inv, 6+H
- 3S*: spl
2D*: 14-16, 6+C, 4+D
2H : min, 4+H
2S*: inv+, 4+H, spl S
2N : 18-19, bal
3C : (15)16-17, 6+C, GT
3D*: inv+, 4+H, spl D
3H*: 18-19 bal, 4+H
3S*: 20-22, 4+H, some spl
- 3N*: ask
3N*: GF, 4+H, S void
4C*: GF, 4+H, 6+C
4D*: GF, 4+H, D void
4H*: 4+H, 20-21 bal # or good 18-19 bal

```

```

1C - 1H*;
1S*: 16+; or (13)14-15, 6+C, GT # may be 16-17, 4225 [3S]
- 1N*: 8+
- 2C*: 6+C, GT
- P : s/o
- 2N : re-inv
- 3C : re-inv
- 2D*: GF, catchall
- 2H : 6+C, GT; and 3H # same as above but 3H
- 2S*: 3H, GF
- 3H : 4H, 16-17
- 2C : min
- 2D : min
- 2H : min
- 2S : min

```

```

# bids below applies to 2X above
- 2H*: 3S, GF
- 2S : 3-4S, 16-17(18)
- 3C : GF
- 3S : ?
- 2N+: C fit ST
- 3S : solid S ST
1N : min bal
2C : min unbal
- 2D*: GF
- 2M : NF
- 2N : inv
- 3C : inv
- 3D*: spl
- 3H*: spl
- 3S : inv, 6+S
2D*: 14-16, 6+C, 4+D
2H*: 14-16, 6+C, 4+H
2S*: min, 4+S
2N : 18-19, bal
3C : (15)16-17, 6+C, GT
3D*: inv+, 4+S, spl D
3H*: inv+, 4+S, spl H
3S*: 4+S, 18-19 bal
3N*: 20-22, 4+S, some spl
- 4C*: ask
4C*: GF, 4+S, 6+C
4D*: GF, 4+S, D void
4H*: GF, 4+S, H void
4S*: 4+S, 20-21 bal # or good 18-19 bal

```

1.1.2 XYZW

```

1C - 1D*; 1H* - 1S*: see utils/XYZW/PLOB
1C - 1DH; 1N - ...: see utils/XYZW/2wPCB
1C - 1S ; 1N - ...: no 2-way

```


1.2 1D

```

1D - # 11-21, 4+D unbal; 12-14/18-19, 4+D bal
1M : 6+, 4+M
1N : 6-10, nat
2C : inv, 6+C [3C]; or GF, 5+C
  - 2D*: 12-14 # may be 12-14 with good C support; ready to play 3N
    - 2H*: GF, ask
      - 2S*: 5D unbal
      - 2N : min bal
      - 3C : 3+C unbal
      - 3D : 6+D unbal
      - 3N : max bal
    - 2S+: nat GF
    - 3C : nat inv
  - 2M*: 15+ unbal, may be stopper
  - 2N : 18-19 bal
  - 3C : GF, 14+, 4+C
  - 3D : solid D ST
  - 3M*: GF, 4+C, spl
2D*: some 6+M pre # not interested in 18-19 bal, 2-M
# resp. similar to 2D/V (multi) except 3D
  - P : s/o
  - 2H*: P/C
  - 2S*: P/C, may be interested in H
  - 2N*: ask #
    - 3C*: min
      - 3D*: ask
      - 3H*: P/C
    - 3D*: max, H
    - 3H*: max, S
  - 3C : nat, NF
  - 3D : nat, inv # then 3M = max and show suit
2H*: GF, 4+D # inv if PH
  - 2S*: 15+, catchall # GF if partner inv
  - 2N : 12-14 bal
  - 3C : nat
  - 3D : min unbal
  - 3M*: spl
  - 3N : 18-19 bal
2S*: inv, usually 4+D, not prefer to declare # constr if PH
  - 2N : nat min
  - 3C : nat, F1
  - 3D : nat min
  - 3M*: nat, could be stopper
  - 3N : nat
2N : nat inv

```

```
3C*: 8-10, 4+D # weaker if PH  
3D*: (0)3-7, 4+D # weaker if PH  
3M : 7+M, about 6-6.5 tricks, NF
```

1.2.1 XYZW

```
1D - 1H; 1S - 2C*: see utils/XYZW/PLOB  
1D - 1M; 1N - ...: see utils/XYZW/2wPCB
```

1.3 1H

```

1H - # 12-21, 5+H
1S*: F1; 4-6, 3+H [2H]; inv, 3H [3H/4H]; constr. 5+H [4H]; 5-11, 2-H;
    12-14, 4-S bal [3N]
1N*: 5+S, F1
2C : GF, nat
2D : GF, nat
2H : 7-9, 3+S
2S*: 12+, 4+H
2N*: 8-9/12-13, 4+H, C/S spl
    - 3C*: ask
      - 3D*: C spl
      - 3H*: S spl, 8-9
      - 3S+: S spl, 12-13, cue-bid
3C*: 10-11, 4+H bal; 10-11, 4+H spl # the latter is GF
    - 3D*: ask, ST
      - 3H*: 10-11, 4+S bal
      - 3S+: spl # 3N* replaces the highest spl, i.e. D
    - 3H : light opening; or min, 5H(332)
3D*: 8-9/12-13, D spl
3H : pre
3S*: 10-12, S void
3N*: 12-14, 3H, bal w/o 6m, CoG
4X*: 10-12, X void
4H : pre

```

1.3.1 Gazzilli after 1S*/1N*

```

1H - 1S*: F1
1N*: 16+, any; or 12-15, 6+H
2m : 12-15, nat
2H*: 12-15, 4+S
2S*: 14-16, 6+H, 4+S
2N*: 14-16, 6+H, 4+m
    - 3C*: ask
      - 3D : 4+D
      - 3H*: 4+C
3m : 14-16, 5+m, NF
3H : 15-17, (s-)solid 6+H
3S : inv, 5+S, NF
3N*: GF, solid 7+H

```

```

1H - 1N*: 5+S
2C*: 16+, any; or 12-15, 6+H
2D : 12-15, nat

```

```

2H*: 12-15, 4+C
2S : 12-15, 3+S
2N*: 14-16, 6+H, 4+X
    - 3C*: ask
      - 3D : 4+D
      - 3H*: 4+C
      - 3S : 4+S
3m : 14-16, 5+m, NF
3H : 15-17, (s-)solid 6+H
3S : inv, 6+H, 3+S
3N*: GF, solid 7+H

```

```

1H - 1S*/1N*; 1N*/2C*: 16+, any; or 12-15, 6+H
+1*: 8+, any
    - 2H : 12-15, 6+H
2X : 4-7, nat
# after a weak nat response
    - 2S*: ... (TBD)
    - 2N*: GF, some 6+H
      - 3C*: ask
        - 3X : 4+X
        - 3H*: 4+C
        - 3N : no 4-card suit
    - 3X : GF, 5+X # except raise = inv
    - 3H : inv, 6+H
2N+: 5-7, nat # 2N usually mms
3H : inv, 3H
4H : nat

```

```

1H - 1S*; 1N*-2C*;
2D*: some (18)19+
    - 2H*: waiting
      - 2S+: same as below
    - 3m : nat good 6+m, ST
2S : 16-18, 4+S
2N*: some 5+m # 65 usually bids 3m then 4m
    - 3C*: ask
      - 3D : 16-18, 5+D
      - 3H*: 16-18, 5+C
3m : 16-18, 4+m
    - 3H : 2H
3H : 16-18, 6H(331/322) or 7+H
3S : 16-18, 7+H, spl S
3N : 16-17 bal
4m : 16-18, 7+H, spl m
4H : 16-18, 7+H

```

```

1H - 1N*; 2C*-2D*;
2S*: some (18)19+
    - 2N*: waiting
      - 3C+: same as below
2N*: some 5+m # 65 usually bids 3m then 4m
    - 3C*: ask
      - 3D*: 16-18, 5+D
      - 3H*: 16-18, 5+C
      - 3S*: 19-21, 5+C
      - 3N*: 19-21, 5+D
3m : 4+m
    - 3H : 2H
3H : 16-18, 6H(331/322) or 7+H
3S : 16-18, 3+S
3N : 16-17 bal
4m : 16-18, 7+H, spl m
4H : 16-18, 7+H
# 4S ?

```

1.3.2 1H - 2S* (same as 1S - 2N*)

1.3.3 1H - (X)

```

1H - (X);
P : weak or some unbal inv # then bid/X = inv
XX : 10+, s-bal, usually not concentrated # forcing pass on
1S : 5+S, F1 # system on, may be psyche but rare
1N*: 5+C, 6-10; or 4+C, GF
2C*: 5+D, 6-10; or 4+D, GF
2D*: 3+H, 4-6 or 10+
2H : 3+H, 7-9
2S+: system on

```

1.3.4 PH response

```

P - 1H; # 12-21, 5+H
1S : 4+S
    - 1N : min nat
      - 2X : nat s/o
      - 2N : inv
      - 3X : nat inv
    - 2C*: 16+, any; or 12-15, 6+H
      - 2D*: 8+
    - 2D : 12-15, nat
    - 2H*: 12-15, nat C

```

```

1N*: NF; 4-5, 3H [2H]; 5-11, 2-S # 4-5, 4H just simply 2H or 3H
  - 2C*: 16+, any; or 12-15, 6+H
    - 2D*: 8+
  - 2D : 12-15, nat
  - 2H*: 12-15, nat C
2C*: inv+, 3+H # Drury
  - 2D*: 13-14 bal
  - 2H : light opening or 12- bal
  - 2S+: same as after 1H - 2H
2D : inv+, nat
2H : 6-9, 3+H
2S : 4-7, 6+S
2N*: 8-10, 4+H, some spl
3m*: 8-10, (54+) H and m
3H : pre
3S*: 10-12, S void spl
3N*: 12-14, 3H, bal w/o 6m, CoG
4X*: 10-12, X void spl
4H : pre

```

```

P - 1H - 1S ; 2C*- 2D*;
2S*: some (18)19+
  - 2N*: waiting
    - 3C+: same as below
2N*: some 5+m # 65 usually bids 3m then 4m
  - 3C*: ask
    - 3D*: 16-18, 5+D
    - 3H*: 16-18, 5+C
    - 3S*: 19-21, 5+C
    - 3N*: 19-21, 5+D
3m : 4+m
  - 3H : 2H
3H : 16-18, 6H(331/322) or 7+H
3S : 16-18, 4+S
3N : 16-17 bal
4m : 16-18, 7+H, spl m
4H : 16-18, 7+H
# 4S ?

```

```

P - 1H - 1N ; 2C*- 2D*;
2S*: some (18)19+
  - 2N*: waiting
    - 3C+: same as below
2N*: some 5+m # 65 usually bids 3m then 4m
  - 3C*: ask
    - 3D*: 16-18, 5+D
    - 3H*: 16-18, 5+C
    - 3S*: 19-21, 5+C

```

```
      - 3N*: 19-21, 5+D
3m  : 4+m
      - 3H : 2H
3H  : 16-18, 6H(331/322) or 7+H
3S  : 16-18, 5+S
3N  : 16-17 bal
4m  : 16-18, 7+H, spl m
4H  : 16-18, 7+H
```

1.4 1N

temporarily use BTUBWS

```

1N -
2C*: ask 4M
2D* → 2H*: 5+H
2H* → 2S*: 5+S
2S*: ask 4m. s/o in 3m; or 44+m ST or CoG
2N : inv
3m : nat 6+m inv, NF
3H*: 55+Ms, inv, NF
3S*: 55+Ms, ST
3N : s/o
4C*: ask #A
4D* → 4H*: 6+H # FP not on
      - 4S+: (E)RKC
4H* → 4S*: 6+S # FP not on
      - 4N+: (E)RKC
4S*: (stronger) Quant
4N : (weaker) Quant
5m : s/o

```

1.4.1 after Stayman

```

1N - 2C*; # ask 4M
2D*: no 4M
      - 2H*: 5+S, inv # may don't have 4H
        - 2S : s/o
        - 2N : s/o
          - 3m : 5+m, s/o # ?
      - 2S*: 45xx, inv, NF
      - 3M*: 5+oM, GF
      - 4C*: ask #A
      - 4D* → 4H*: 46xx+
      - 4H* → 4S*: 64xx+
2H : 4M
      - 2S : 5+S, inv, NF
        - 2N : s/o
          - 3m : 5+m, s/o
      - 3H : inv
      - 3S*: 4+H, ST
      - 4C+: spl
2S : 4S
      - 3H*: 4+S, ST
      - 3S : inv

```



```

- 4C+: spl
# below applies to all above
- P* : weak and escaping 1N
- 2N : inv, should have 4oM
- 3m : ST, 5+m
- 3N : s/o, should have 4oM
- 4N : Quant

```

1.4.2 after Jacoby transfer

```

1N - 2D/H*; # 5+H
2H/S*: tr. acc
- P : s/o
- 2S*: inv # [TODO] or spl S?
  - 2N : s/o
    - 3m : 5+m, s/o
- 2N*: CoG, usually unbal # no slam interest
  - ... 3X : nat, good stopper or suit
- 3m : 4+m, ST
- 3M : 6+M, inv
- 3oM: 6+M, ST
- 3N : s/o
- 4m : 6+M, spl m # [TODO] actually, BTUBWS plays this as 5+m, ST
- 4M : mild ST
- 4N : Quant
# 1N - 2H*; 2S*- 4H : 55+Ms, CoG
# super acc. after 1N - 2D*
2S*: max, 4+H, xx in S
2N*: max, 4+H, otherwise
3C*: max, 4+H, xx in C
  - 3D*→3H*: re-transfer # applies to 2S, 2N, 3C
3D*: max, 5H
3H*: max, 4+H, xx in D
# super acc. after 1N - 2H*
2N*: max, 4+S, otherwise
3m*: max, 4+S, xx in m
  - 3H*→3S*: re-transfer # applies to 2S, 2N, 3C
3H*: max, 5S
3S*: max, 4+S, xx in H

```

1.4.3 after minor Stayman

```

1N - 2S*;
2N*: no 4m
  - 3m : s/o

```

```

3m*: 4+om # 3C could contain 4+C
# bids below applies to all above
- 3M : spl M, may be CoG
- 4om+1: RKC
- 3om: s/o # m = C
- 4om: s/o # m = D

```

1.4.4 comp

```

1N - (2C = nat or some 6+X) - X* : Stayman # others system on
- P/2D*: no 4+M
    -(2M)- X : optional (Hx+)
        - 3M : GF, t/o
        - bid: nat, inv, t/o
1N - (2D = nat) - X* : t/o
1N - (2M = nat) - X : pen
# otherwise UwU

```

1.4.5 vs CAPP

```

1N -(2C*) # some 6+X
P* : X shows t/o afterwards
X : inv+, near bal, FP on
2D*: Stayman
2M : s/o
    - 3M : s/o
2N* → 3C*: s/o in 3m
3C*: 5+D, inv+
3D*: 5+H, inv+
3H*: 5+S, inv+
3S*: 5+C, GF
3N : s/o

1N -(2D*) # MMs
X : can pen at least one M
P : may be bal, inv+ (then X)
2H*: 5+C, inv+
2S*: 5+D, inv+
2N : nat inv
3m : s/o

1N -(2M)
X : pen

```

1.4.6 vs DONT

1.4.7 vs meckwell DONT

```
1N -(X*) # 6+m or 54M
XX : inv+, near bal, FP on
2N* → 3C*: s/o in m
other: system on
```

```
1N -(2m) # m + higher
# treated as nat overcall
X* : t/o
2X : nat
```

```
1N -(2M) # m + higher
X : pen
```

1.5 1S

```

1S - # 12-21, 5+S
1N*: F1; 4-6, 3+S [2S]; inv, 3S [3S/4S]; constr. 5+S [4S]; 5-11, 2-S;
    12-14, 2-S bal [3N]
2C : GF, nat
2D : GF, nat
2H : GF, nat
2S : 7-9, 3+S
2N*: 12+, 4+S
3C*: 8-9/12-13, C/D spl
    - 3D*: ask
      - 3H*: C spl
      - 3S*: D spl, 8-9
      - 3N+: D spl, 12-13, cue-bid
3D*: 10-11, 4+S bal; 10-11, 4+S spl # the latter is GF
    - 3H*: ask, ST
      - 3S*: 10-11, 4+S bal
      - 3N+: spl # 3N* replaces the highest spl, i.e. H
    - 3S : light opening; or min, 5(332)
3H*: 8-9/12-13, H spl
3S : pre
3N*: 12-14, 3S, bal w/o 6m, CoG
4X*: 10-12, X void
4S : pre

```

1.5.1 Gazzilli after 1N*

```

1S - 1N*: F1
2C*: 16+, any; or 12-15, 6+S
2D : 12-15, nat
2H : 12-15, 4+H
2S : 12-15, 4+C
2N*: 14-16, 6+S, 4+X
    - 3C*: ask
      - 3X : 4+X
      - 3S*: 4+C
3X : 14-16, 5+X, NF
3S : 15-17, (s-)solid 6+S
3N*: GF, solid 7+S

```

```

1S - 1N*; 2C*: 16+, any; or 12-15, 6+S
2D*: 8+, any
    - 2S : 12-15, 6+S
    - other : nat and GF
2H : 5-7, 5+H

```

```

2S : 4-7
# bids below applies to both 2H and 2S
  - 2N*: GF, some 6+S
    - 3C*: ask
      - 3X : 4+X
      - 3S*: 4+C
      - 3N : no 4-card suit
  - 3X : GF, 5+X # except raise = inv
  - 3S : inv, 6+S
2N+: 5-7, nat # 2N usually mms, 3H probably 7+H
3N : 12-14, bal
3S : inv, 3S
4S : nat

```

```

1S - 1N*; 2C*- 2D*;
2H*: some (18)19+
  - 2S*: waiting
    - 2N+: same as below
  - 3X : nat good 6+X, ST
2S : 12-15, 6+S
2N : 16-18, some 5+X
  - 3C*: ask
    - 3D : 5+D
    - 3H : 5+H
    - 3S*: 5+C
3X : 16-18, 4+X
  - 3S : 2+S
3S : 16-18, 6S(331) or (322) or 7+S
3N : 16-17, bal
  - 4m : 6+m, ST

```

1.5.2 1S - 2N*

```

1S - 2N*: 12+, 4+S
3X : X short # then 3N = FF
3S : 14+, w/o shortness # then 3N = FF
3N*: FF, 12-13, w/o shortness
(TBD) after 3S/3N, choose from spl or cue-bid
# 4X usually with controls in two other suits, otherwise bid 3X instead
4m : 5+m
  - +1*: ask
    - 4S : min
4H : 5+H, extra
4S*: 5+H, min

```

1.5.3 1S - (X)

```

1S - (X);
P : weak or some unbal inv # then bid/X = inv
XX : 10+, s-bal, usually not concentrated # forcing pass on
1N*: 5+C, 6-10; or 4+C, GF
2C*: 5+D, 6-10; or 4+D, GF
2D*: 5+H, 6-10; or 4+H, GF
2H*: 3+S, 4-6 or 10+
2S : 3+S, 7-9
2N+: system on

```

1.5.4 PH response

```

P - 1S - # 12-21, 5+S
1N*: NF; 4-6, 3+S [2S]; 5-11, 2-S
    - 2C*: 16+, any; or 12-15, 6+H
      - 2D*: 8+
    - 2D : 12-15, nat
    - 2H : 12-15, 4+H
    - 2S*: 12-15, nat C
2C*: inv+, 3+S # Drury
    - 2D*: min bal
    - 2H : nat
    - 2S : light opening
    - 2N+: same as after 1H - 2H
2D : inv+, nat
2H : inv+, 5+H
2S : 7-9, 3+S
2N*: 8-10, 4+S, some spl
3X*: 8-10, (54+) S and X
3S : pre
3N*: 12-14, 3H, bal w/o 6m, CoG
4X*: 10-12, X void spl
4H : pre

```

1.6 2C

```

2C*-
2D*: waiting
  - 2H* → 2S*- 2N : 20-21 bal
    - 3X : 22+, nat, 5+H
    - 3N : 22-24, 5H(332)
  - 2N*: 4-7, 5+S
  - 2S : 22+, 5+S
    - 3C*: cheaper minor, 0-3
  - 2N : 22-24 # 4-th seat: 24-25
  - 3C : nat, 5+C
    - 3D*: cheaper minor, 0-3
  - 3D : GF, 5+D
  - 3M : nat solid ST
  - 3N : 25-27 # 4-th seat: 26-27
  - 4m : nat solid ST
  - 4M : 8.5+ tricks
  - 5m : 8.5+ tricks
2M : 8+, 5+M
2N : 8-10
3m : 8+, (5)6+m
3M : 4-7, 6+M
3N : 11-12
4m : 8+, solid (6)7+m, ST
4M : 4-7, 7+M

```

1.6.1 puppet Stayman

```

2N -
3C*: ask 5M # could be s/o 3N
  - 3D*: some 4+M
    - 3M*: 4+oM
    - 3N : s/o
3D* → 3H*: 5+H
  - 3S : 4+S
  - 3S*: 3433
  - 3N+: 4H, cue # 3N = S
  - 4H : 3H
3H* → 3S*: 5+S
  - 3N*: 4333
  - 4C+: 4S, cue
  - 4S : 3S
3S*: 44+m, ST
  - 4m : 4+m
3N*: 54xx+

```

```
4C*: Gerber
4D*  $\rightarrow$  4H*: 6+H, MST
4H*  $\rightarrow$  4S*: 6+S, MST
4S*: good Quant
4N*: bad Quant
```

Chapter 2

pre

2.1 2D/NV (multi)

```

2D - # 3-9, 6+M
P : s/o
2M/3M/4H*: P/C
4S : s/o
2N*: F1
  - 3C*: min
    - 3H*: P/C
  - 3D*: H, mid
  - 3H*: S, mid
  - 3S*: H, max
  - 3N*: S, max
3C : s/o
3D*: some 5+M, GF
  - 3H : 6+H
    - 3S : 6+S
    - 3N : 5S
  - 3S : 6(2-)xx
  - 3N*: 6322
  - 4C*: 63xx+, spl D
  - 4D*: 63xx+, spl C max
  - 4H*: 63xx+, spl C min
3N : s/o
4C*: fit in both majors, slam interest, ask
  - 4D*: H
  - 4H*: S
4D*: s/o 4M, not allowing re-raise

```

2.2 2H/NV (Ekren)

```

2H*- # 3-8, 4+MMs
2S : s/o
2N*: ask
  - 3C*: min
    - 3D*: ask, GF
      - 3M*: 5+oM
      - 3N : 44Ms
      - 4m*: 55Ms, spl m
  - 3D*: mid+, 55Ms
    - 3M : s/o
  - 3M*: max, 5+oM
  - 3N*: max, 44Ms
3C*: 4+H, inv+
  - 3D*: re-inv

```

```

- 3H*: min
- 3S*: shape-FF, 4H but max
- 3N+: 5H, super max, cuebid
- 4H : 5H, max, not super max
3D*: 4+S, inv+
- 3H*: re-inv
- 3S*: min
- 3N*: shape-FF, 4S but max
- 4C+: 5S, super max, cuebid
- 4S : 5S, max, not super max
3M : s/o
3N : s/o
4C*: ask, ST
4D*: pick a 4M, not allowing re-raise
4M : s/o

```

2.3 2S/NV (wild)

```

2S -
2N* → 3C* - P : s/o
- 3D : s/o
- 3H : 5+H, GF
- 3S : inv
- 3N : no fit, slam interest
3X : nat inv NF
3S : s/o
3N : s/o
4C*: ORKC
4D* → 4S : re-raise not allowed
4M : s/o

```

2.4 2D/V (multi)

```

2D - # 3-7, 6+M
P : s/o
2M/3M/4H*: P/C
4S : s/o
2N*: F1
  - 3C*: min
    - 3H*: P/C
  - 3D*: H, mid
  - 3H*: S, mid
  - 3S*: H, max
  - 3N*: S, max
3C : s/o
3D*: some 5+M, GF
  - 3H : 6+H
    - 3S : 6+S
    - 3N : 5S
  - 3S : 6(2-)xx
  - 3N*: 6322
  - 4C*: 63xx+, spl D
  - 4D*: 63xx+, spl C max
  - 4H*: 63xx+, spl C min
3N : s/o
4C*: fit in both majors, slam interest, ask
  - 4D*: H
  - 4H*: S
4D*: s/o 4M, not allowing re-raise

```

2.5 2M/V (nat)

```

2M - # 8-11, 6+M
2S : nat F
2N*: ask feature
  - 3X : cue
3M : s/o
3N : s/o
4C*: ORKC
4D*: s/o 4M, not allowing re-raise
4M : s/o

```

2.6 4-th seat

```
2D : 8-13, nat
2M : 8-13, nat
2N : 22-23 bal # 2C = 20-21/24+ bal
3X : nat solid ST
```

2.7 higher preempt

```
2N*: 5-9, 55ms+; could be 64 if partner PH; could be 54 if NV/V
3X : nat pre
3N*: gambaling
4X : nat pre
4N : strong mms, slam interest
5m : nat pre
5M : nat, slam interest
```

2.8 2N (minors)

```
2N*- # 5-9, 55ms+; could be 64 if partner PH; could be 54 if NV/V
3m : s/o
3M : 6+M, inv, NF
3N : s/o
4m : s/o
4M : s/o
4N*: inv to slam
5m : s/o
```

Chapter 3

comp

3.1 Gladiator

```
(1M) - 1N - (P) -
2C*→2D*: tranfer accepted
    - 2M*: GF, 4+oM
    - 2oM: s/o
    - 2N*: inv
    - 3C : s/o
    - 3X : 6+X inv
    - 3M*: GF, 4oM, short in M
    - 3N*: 54+mms CoG, usually extra
2X : inv, 5+X
2M*: inv, 4+oM
2N : inv, 5+C, NF # because may not able to pen. 2M
3X : GF, 5+X
3M*: GF, w/o 4oM, short in M # 2C* then 3M is 4oM
```

```
(1m) - 1N - (P) -
# similar, but D is the cuebid suit
2C*→2D*: tranfer accepted
    - 2M : s/o
    - 2N*: inv
    - 3C : s/o
    - 3X : 6+X inv
    - 3N*: 54+mms CoG, usually extra
2D*: inv+, Stayman
2M : inv, 5+M
2N : inv, 5+C, NF
3X : GF, 5+X
```

```
1m -(1M)- P -(P) ; 1N -(P) - Galdiator
(1X)- X* ; ... 2N - Gladiator
```


3.2 good bad 2NT

```
1X - (1Y)- [bid/X] - (2Y)
2N* → 3C*: comp
3X : good hand # if [bid/X] shows inv+ then GF, otherwise inv
```

```
# other situations that applies
1X -(P) - 1Y -(2M = jump overcall) - 2N*: good-bad
1X -(2Y)- X* -(P) - 2N*: good-bad
(1X)- 1Y -(2X)- 2N*: good-bad
(1X)- X* -(2X)- 2N*: good-bad
(1X)- 2Y -(2X)- 2N* → 3C*: tr. Leb. # notice the difference!
```

3.3 other

3.3.1 vs transfer openings

```
(1M-1*)- # 4+M
1M*: 16+, t/o; or 19+, any
X* : 10+, t/o; or 16-18, any
```

```
(1S*)- # 4+D
X* : t/o
2D*: MMs
```

```
(1D*)- # 44+M
1M : nat
X* : minor-oriented t/o
```

3.4 overcall

```
(1m) -
# style: the stronger the hand, more shapely to pre 2M

# V/NV
P : # may be lengthy but not enough values, ex: AJxxxxx.xxx.xx.x
1M : (8)9-17, 5+M # rebid 2M = 14-17
2M : 9-13(14), 6+M # promise defensive values

# V/V
1M : 8-17, 5+M # could be weaker (LD) if partner PH
2M : 6+M, pre # usually not 6322; unless ex: KQJ9xx.xx.Kxx.xx

# NV/NV
1M : 8-17, 5+M # 4oM or afraid of losing game
2M : (5)6+M, pre # usually unbal and partner PH if 5M
# KQxxx.JTxx.x.Qxx: 2S
# KJxxx.xxx.QJTxx: 1S/2S
# KQJxx.xxx.Qxx.xx: 1S/1-2S

# NV/V
1M : 8-17, 5+M # 4oM or afraid of losing game
2M : 5+M, pre # wild if partner PH
# KQJxx.xxx.Qxx.xx: 1S/2S
# KJxxx.xx.xxx.xxx: P/2S
```

3.5 unusual

```
# if we are able to overcall the higher suit at 1-level, then range = 3-10
  or 16+; otherwise 10+
```

```
(1M) - 2M*: 5+oM, 5+m
      - 3C*: P/C
      - 2N*: ask
        - 3m : 5+m, lo
        - 3H*: 5+C, hi
        - 3S*: 5+D, hi
      - 3X : nat s/o
```

```
(1M) - 2N*: 55+ms
```

```
(1m) - 2m*: 55+Ms; 54+ if NV/V
```

```
(1m) - 2N*: 5+H, 5+om
```

```
# NV/V
```

```
(1m) - 2m* - 2N*: ask
      - 3C*: min
        - 3D*: ask
          - 3H*: 5+S
          - 3S*: 5+H
        - 3H*: P/C
      - 3D*: min, 55Ms
      - 3H*: max, 5+S
      - 3S*: max, 5+H
      - 3N*: max, 55Ms
      - 4m : 16+, shortness in om
```

```
(1X) - (1Y) -
```

```
X* : 44+ unbid suits or strong
```

```
1N*: 54+ unbid suits
```

```
(1X)- 2m -(2X)- P -(P) - 2N*: 64+ mms
```

3.6 vs 1N

```
(1N)-
# case 1: non-pass
X : 15+
2C*: H and another suit, 54+ either-way # if MM then should be 54xx+
- 2D*: P/C # ask the 5-card suit
2D*: S and another suit, 54+ either-way # if MM then should be 45xx+
- 2H*: P/C
2M : nat, (5)6+M
2N*: 55(54)+mms
3X : nat, comp
# case 2: PH
X* : S and another suit, 54+ either-way
- 2C*: P/C
2m*: H and m, 54+ either-way
2M : nat, (5)6+M
2N*: 55(54)+mms
3X : nat, comp
```

3.7 vs pre

3.7.1 vs nat

```
(2M) -
X* : t/o
2S : 12-17, 5+S
2N : 15-18
  - 3C* → 3D* - P : s/o
    - 3oM: s/o
    - 3M*: 4oM
  - 3D : 5+D, inv
  - 3oM: 5+oM, inv
  - 3M*: 5+oM, GF
```

3.7.2 vs multi

```
(2D*)- # weak, some 6+m
X : 13+, near-bal; or 16+, any
P* : may be some 12-15 t/o against M [X]
2M : 12-17, 5+M
2N* → 3C*: 12-14, some 6+m
3m : 15-17, 5+m
3M : 15-18, 6+M
3N : s/o
4X : nat strong NF
```

3.7.3 vs Ekren

```
(2D*)-
X : 14+, near-bal
2H*: 14+, 5+C
2S*: 14+, 5+D
2N*: 16+, mms
3C*: 12-15, mms
3D : nat NF
3M : 15-17, 6+M
```

3.7.4 vs transfer preempt

```
(3X-1*)- # transfer pre to 3X
P* : then X = pen
```

```
X* : 15-17 [P]; or 18+ near-bal [X]  
3X*: 18+, t/o  
bid: nat
```

3.7.5 misc

```
1m - (3M) - X*: ask for stopper; may have 4oM  
1m - (3M) - P - (P) - X*: ask for stopper; may have 4oM  
# resp: pen with KJxx+ (IP) or equivalent values, otherwise  
# 5 good oM [3/4oM] > 1.5 stop [3N] > 4 good oM [3/4oM] > 1 stop [3N]
```

3.8 vs prec

```

(1C*)- # strong
# be a bit decipline when V
X* : 12+, 4H5m or 5+H
  - 1D*: ask
    - 1H : 5+H
    - 2m : 5+m
1D*: 12+, 4S5m or 5+S
  - 1H*: ask
    - 1S : 5+H
    - 2m : 5+m
1H*: (Rank) 0-10, 44+m or 44+M
1S*: (Odd) 0-10, 4C4H or 4D4S
1N*: (Color) 0-10, 4D4H or 4C4S
  # bids below apply to 1H*/1S*/1N*
  # even after opp. bids
  # if you have your own suit, bid twice
  - 1N : nat, (17)-(20)
  - bid: P/C
  - 3M+: nat
2m : 10+, 5+m
2M+: nat pre
2N*: mms, pre

```


3.9 X

```
(1X) - X* -(P) -  
2X*: inv+ w/o stopper; or GF
```


Chapter 4

util

4.1 1-2-3 Stops

1m - (1X); 2m

2X*: inv+

2N : inv

3m : s/o

1M - (X); 2X-1*: (5)6+X, 6-10; or 4+X, GF

3X : s/o against weak variant

4.2 2NT

```
# B = bid, all (B) here are NF raise, or bids that (may be) weak
1Y -(2X)- 2N : nat
1X -(2Y)- 2N : nat
1N -(2X)- 2N : tr. Leb
(2C)- X* -(P) - 2N : nat
(2X)- X* -(P) - 2N : tr. Leb
(1C)- X* -(2C)- 2N : nat
(1X)- X* -(2X)- 2N : tr. Leb
(1X)- 1Y -(B) - 2N : nat
(1Y)- 2m -(B) - 2N : nat
(1S)- 2H -(2S)- 2N* → 3C # 3X → 3[X+1]
(1X)- 1M -(2Z)- 2N* → 3C # 3X → 3[X+1]
(1X)- 1m/2m -(2Z)- 2N : nat
1X -(2M)- X* -(P) - 2N : good-bad
1X -(1Y)- X/B-(2Y)- 2N : good-bad
1X -(1Y)- X/B-(2Z)- 2N : good-bad
1Y -(2C)- X/B-(P) - 2N : nat
1Y -(2X)- X/B-(P) - 2N : good-bad
1Y -(2X)- P -(P) - 2N : t/o, usually 64+mms
1Y -(B) - P -(2X)- 2N : t/o, usually 64+mms
(2M)- P -(P) - X* -(P) - 2N : tr. Leb
(1X)- P -(2X)- X* -(P) - 2N : tr. Leb
(1X)- X* -(B) - X* -(P) - 2N : normal Leb (good-bad)
(1X)- 1Y -(B) - X* -(P) - 2N : normal Leb (good-bad)
(1Y)- 2X -(B) - X* -(P) - 2N : normal Leb (good-bad)
(1C)- 2X -(2C)- X* -(P) - 2N : nat
(1X)- 1N -(2X)- X* -(P) - 2N : min nat

# general rules for other situations:
# ... X* -(P) - 2N = usually normal Leb (good-bad)
# ... X* -(B) - 2N = normal Leb (good-bad) if X = neg or t/o
# free bid 2N is nat if inv is possible; otherwise t/o
```

4.3 Forcing Pass

4.3.1 $XX = Q$

4.4 suit GT

```
[fit in 2S] -
2N*: HSGT or ST, no shortness
  - 3X*: Qxx or xxx in X # partner having ctrl/xx is consider helped
  - 3S : min
  - 3N+: max # may need to cuebid since partner may want to ST
3S : s/o
# case 1: bidder only shows one suit
3C*: C spl GT; or H spl GT (lo); or C spl ST
  - 3D*: inv C spl
    - 3H*: H spl (lo)
    - 3S : C spl (lo)
    - 3N+: C spl ST
    - 4S : C spl (hi)
  - 3H*: inv H spl
3D*: D spl GT or ST
  - 3H*: inv
3H*: H spl GT (hi) or ST
# case 2: if bidder already shows another suit X, spl X replaced by long X
```

```
[fit in 2H] -
2S*: HSGT or ST, no shortness
  - 2N+: Qxx or xxx in X # partner having ctrl/xx is consider helped
  - 3H : min
  - 3S+: max # may need to cuebid since partner may want to ST
3H : s/o
# case 1: bidder only shows one suit
2N*: S spl GT; or D spl GT (lo); or S spl ST
  - 3C*: inv S spl
    - 3D*: D spl (lo)
    - 3H : S spl (lo)
    - 3S+: S spl ST
    - 4H : S spl (hi)
  - 3D*: inv D spl (lo)
3C*: C spl GT or ST
  - 3S*: inv
3D*: D spl GT (hi) or ST
# case 2: if bidder already shows another suit X, spl X replaced by long X
```

4.5 2NT and Lebensohl

```
Leb over (2M)-
2S : NF
2N* → 3C* - P* : s/o
           - 3D* : s/o
           - 3oM : s/o
           - 3M* : 5+C, GF
           - 3N : half stop
     - 3X : 18+, nat
3X* → 3X+1: 5+[X+1], inv+; if X+1 = M, then Stayman
           - 3M : max, but ask stop
3S* : ask stop
3N : s/o
```


4.6 maximum X

```

fit in 2M - (opp. comp to 3X) -
# if X = M - 1
X*   : inv+  # allow pen with low probability
# otherwise
3M-1: inv+

```

```

(1m) - 2H [V/NV] - (3D) - X*   : 2+H, inv
(1m) - 2H [V/NV] - (3C) - 3D*  : 2+H, inv

```

4.7 Rubens

```
(1X)- 1M -(P/X)-
XX : 10+, near bal
1N : nat
# if Y < X
2Y : 10+, nat, F1
# if Y >= X
2Y* → 2Y+1: 10+, 5+[Y+1] # if Y+1 = M then it means good raise
2X : comp. raise
```

```
(1X)- 1M -(2X)-
?
```

```
(1Y)- 2X -(P/X)-
XX : 10+, near bal
# if Z < Y
2Z : 10+, 5+Z
# if Z >= Y
2Z* → 2Z+1: 10+, 5+[Z+1] # if X = C, 2S is good raise
2N : nat inv
# if Z < X
3Z* → 3Z+1: 10+, 5+[Z+1] # 3X-1 is good raise
```

```
(1Y)- 2X -(2Y)-
X* : neg.
2S : NF
# if Y = C/D/H
2N* → 3C*: 10+, 3/5/5+C
# if Y = D/H
3C* → 3D*: 10+, 3/5+D
# if Y = H
3D* → 3H*: 10+, 3+H
```

4.8 Slam bidding

4.8.1 cuebid

```
cue = 1/2nd ctrl
# if opener shows a suit (unless 1C - 1X; 1N/2N), then
opener's cue on that suit = 2 of AKQ, usually source of tricks
resp's cue on that suit = never shortness, can be Q
```

4.8.2 FF

```
[fit in 3M] -
4M : min
3M+1*: FF, mild slam interest
4X*: cuebid, strong slam interest
```

4.8.3 kickback RKC

```
[fit in S] - 4N*: ask number of keycards # 4 Ace + Trump K
5C*: 0/3 keycards
  - 5H*: escape to 5S if 0-keycards
5D*: 1/4 keycards
  - 5S*: P if 1-keycard
5H*: 2/5 keycards w/ Trump Q
5S*: 2/5 keycards w/o Trump Q
5N*: 0/2/4 keycards, some void
  - 6C*: ask
    - 6X*: void in X
6X*: 1/3 keycards, void in X
```

```
[fit in X] - [4X+1]*: ask number of keycards
# similar responses, 5N replaces void in [X+1]
[fit in H] - (4S); 4N*: RKC
```

4.8.4 ERKC

```
[fit in X] -
# if opener already shows non-void Y, then it replaces the highest ERKC
5Y*: ask number of keycards, excluding Y
  - +1*: 0/3 keycards
  - +2*: 1/4 keycards
  - +3*: 2 keycards
```

4.8.5 Obvious ERKC

[opp. bids Y (or bidder showed shortness in Y) and we fit in X] -
 4X+2*: ask number of keycards, excluding Y
 # 5Y replaces ERKC in X+2 or the highest ERKC (if X+2 is NT)

4.8.6 ORKC

preempt in X (not C) - 4C*: ORKC
 4D*: min
 4H+: same as resp. to RKC

4.8.7 2-suited RKC

1M - 2X; 3X - 3M; ... [4M+1]: 2-suited RKC
 # Queen of M and X act as 0.5 keycards
 +1*: 0/3/6 keycards # may +0.5
 - +2*: ask if there's extra 0.5
 - 5M*: no
 +2*: 1/4/7 keycards # may +0.5
 - +3*: ask if there's extra 0.5
 - 5M*: no # +4 = 5M
 +3*: 2/5 keycards
 +4*: 2.5/5.5 keycards

4.9 UwU

TBD (low-low, high-high)

4.10 XYZW

4.10.1 2wPCB

(<https://www.ptt.cc/man/BridgeClub/D6D1/D49B/D130/M.924860463.A.html>)

```

1X - 1Y; 1N
2C*→2D*: transfer accepted
    - P : s/o
    - 2M : s/o, choose a partial [M <= Y]; inv, 5+Y, 4+M [M > Y]
    - 2N*: inv
    - 3Z : inv, 6+Z [Z = Y] or 4+Z [Z = X] or 5+Z and 4Y [otherwise]
    - 3N*: 5332, CoG # different from BTUBWS
    - 2Y*: max, 3Y
2D*: GF, ask
    - 2M : 3M [M = Y] or 6M [M = X] or 4M [otherwise]
    - 2N : nat
    - 3X : good 5+X
2M : inv, 5+M [M = Y] or 4+M [otherwise], NF
2N*→3C*: transfer accepted
    - P : s/o
    - 3D : 4-5Y, CoG, no slam interest. spl D.
    - 3H*: ask if 5Y
    - 3H : 4-5Y, CoG, no slam interest. spl H. # spl C if Y = H
    - 3S*: ask if 5Y
    - 3S : 5Y, CoG, no slam interest. spl H. # spl C if Y = S
    - 3N : 4Y, CoG, no slam interest. spl H. # spl C if Y = S
    # a bit diff from BTUBWS. similar to 1N - 2S; any - 3M*
3Z : ST, 4+Z [Z = X] or semi-solid 6+Z [Z = Y] or 5+Z [otherwise]
3N : s/o
4C+: 7+Y, spl
    - 4M : waste
4Y : s/o

```

4.10.2 PLOB

```

1C - 1D*; 1H*-
# 2S* is usually F1 only
1S*: any (9)10-14
    - 1N : 12-14, 2H bal
    - 2C : s/o
    - 2C : 12-14, 2-H, (5)6+C
    # bids below applies to both 1N and 2C
    - 2D*: F, not prefer to declare NT
    - 2H : s/o
    - 2S : s/o

```

```

- 2N+: nat inv
- 2D*: GF ... (TBD)
- 2H : F, 3H
- 2S*: F
- 3S : inv
- 2S*: GF, not prefer to declare NT
1N : nat NF
2X : s/o
- 2S*: F
- 2N+: nat inv
- 3S*: 6+C, 5+S, F
2N*: 15+, catchall
3C*: fit in C, ST
3D*: 5+H, 5+D, ST
3H*: 6+H, ST
3S*: 4+S, ST
3N*: 18-19, 4H

```

```

1D - 1H; 1S -
1N : nat NF
2C*: any (9)10-14
- 2D : 12-14, 2-H
- P : s/o
- 2H : s/o
- 2S*: F, not prefer to declare NT
- 2N : min
- 3N : max
- 2N+: nat inv
- 2H : F, 3H
- 2S*: general GF
- 2N+: nat GF
2X : s/o
2N*: 15+, catchall
3C*: fit in D, ST
3D*: 5+H, 5+C, ST
3H*: 6+H, ST
3S*: 4+S, ST
3N*: 18-19, 4H

```


Chapter 5

cardplay

5.1 lead

```
# lead vs suit: 3-low
# A/K = ask for count/att, but vs slam K = ask for count
A : Ax, AK, AKQ+, (AK+)
K : Kx, AKx, KQ+, (AK+)
Q : Qx(+), QJ+, (AQJ+)
J : Jx(+), JT+, AJT+, KJT+, (AJx), (KJx)
T : Tx, T9+, AT9+, KT9+, QT9+
hi-X: Xx, xXx+
lo-X: xXx+, HxX, HxXx, HxxxX, HxXxxx..., (xxX+)
# lead vs NT: 4-th
A : Ax, AKQ+, AK
K : Kx, KQ+, AKx, AKJT+
Q : Qx(+), QJ+, AQJ+, KQT9+, (AQx)
J*: Jx(+), JT+
T*: Tx(+), T9+, AJT+, KJT+
9*: 9x(+), AT9+, KT9+, QT9+, [AKT9+], [AQT9+] # exceptionally
hi-X: Xx, xXx+, (Xx+)
lo-X: HxX, HxxX+, HHxX+, xXx+
```

5.2 signal

```
UDCA: lo = enc/even
# vs suit
partner's lead: att, s/p
declarer's lead: cnt, s/p
discarding: att
# vs NT
partner's lead: att, s/p
declarer's lead: cnt, s/p
discarding: lav
```

5.2.1 Smith echo

```
# vs NT, declarer wins the lead, then on the next round available for
  signal,
# if first round x - x - H - win
both defenders' lo: enc leading suit
# if first round x - win - [att] - x
leader's lo: enc leading suit
# note: on/off may depends on dummy/lead
```

5.2.2 other

```
# vs suit, knowing partner empty
hi/lo = S/P
```