

Palaeontologist & geologist, composer of music, teacher

\* Professional bridge teacher 1928-1936; taught auction (1928-32) and then contract bridge; founding member; as he was a paraplegic, Baden Wilson used to piggyback him up the stairs of the AMP building; member of 1936 Otago team vs Crockfords, partnered Ron Mathieson (one of the two best partnerships in 1930s); gave radio talks on contract bridge; convenor of tournament committee June – Sept 1937 but resigned – not his thing; later represented Wellington in provincial matches.

Harold was born in Comilla, in what is now Bangladesh, 60 miles east of Dhaka in the Ganges Delta. His parents were Baptist missionaries from Dunedin, influenced by Alfred North's teachings at the Hanover St. Baptist Church. Harold contracted poliomyelitis when he was four which left him a paraplegic for life with no muscular control over his legs. As an adult he wore gloves and was an expert with a wheelchair. John McIndoe (JM) likened his skill with a wheelchair to that of Inspector Ironside in the 1974 TV series. The family returned to Dunedin in 1906 & Harold was educated at North East Valley and Dunedin Normal Schools. He excelled academically, & in 1916 was the leading student in the national public service examination. He entered the University of Otago in 1918 with a Beverly scholarship (*created by Dunedin astronomer and watchmaker, Arthur Beverly 1822-1907*), graduating BSc in 1921 in chemistry with 1<sup>st</sup> Class Honours. He then studied geology under W.N. Benson taking a particular interest in palaeontology and gaining his MSc degree. After considerable work in difficult circumstances as a paraplegic he collected thousands of fossil specimens from several coastal Otago sites. JM remembers his own brother, Dr K. G. McIndoe, carrying Harold on his back from the road over the sand dunes to the pools left by the receding tide at Bruce Rocks, south of Brighton, where Harold searched for some rare specimens for his collection. He became a leading authority on molluscan systematics, receiving his doctorate in 1927.



Harold Finlay 1901-51 © Institute of Geological & Nuclear Sciences Limited



Harold Finlay & family in the late 1940s. Harold was a foundation member of OBC & professional tutor of bridge 33-37

For the next ten years during the Depression he was unemployed which is where his tutoring of bridge (Maurice and Ina Arthur were two of his students) & musical appreciation at Knox College (1927 to 1932) became useful. Also, further research into foraminifera (*micro-fossils*) led to his appointment in 1937 as a micro-palaeontologist with the Geological Survey in Wellington. The same year he married Dorothy Gillies & they had two daughters. The culmination of his work came in 1947 when he published with John Marwick a time scale for the last 85 million years of Tertiary & Quaternary geological sequences in New Zealand which has remained over the years the basis for further research in this area. He was elected a member of the Royal Society of New Zealand in 1937 and awarded its Hector Memorial Medal in 1941.

Harold was passionate about music - he played the piano and loved opera. When the National Orchestra was formed in 1946 he composed several works which were performed by the orchestra and chamber ensembles. JM remembers Harold as a man with an acute brain and a phenomenal memory. He died unexpectedly at his home in Wellington in 1951.

His younger brother, Martyn Finlay QC, 1912-99, became MP for Waitakere and attorney-general in Norman Kirk & Bill Rowling's Labour Governments, leading New Zealand's case against French testing at Muroroa Atoll.

*Source: Biographical extracts are drawn from the recorded memories of John McIndoe and Scott, G. H. 'Finlay, Harold John 1901-1951'. Dictionary of New Zealand Biography, updated 22 June 2007 URL: <http://www.dnzb.govt.nz/>*



# Wellingtonian Active In Three Fields

## Science ☆ Contract Bridge ☆ Music

### —And He's Successful In Each

By the Wellington Representative of the "New Zealand Free Lance."

Already firmly established in a couple of fields, Wellington's Dr. Harold John Finlay, at 49 years of age, is having such fun in a third field that he is beginning to wonder whether he has missed his vocation.

THE doctor is for Doctor of Science, Dr. Finlay having attained that not-common dignity at the youngest age ever for a New Zealander. Science, then, is one of the fields, Dr. Finlay's particular branch being "tertiary and upper cretaceous foraminifera, especially as applied to stratigraphic problems." If the quoted piece isn't plain to you, it means that Dr. Finlay studies the minute fossilised shells that occur in mudstone deposits in various parts of New Zealand.

#### Attracted Attention

The shells are so small in some cases that they look like specks of dust until they are put under a microscope. Examination of them, allows a geological picture of the making of New Zealand over millions of years to be drawn. The study has all sorts of uses—as a palaeontologist Dr. Finlay worked with an oil company—and the New Zealand research has attracted wide attention.

*You are pretty sure to get a knowing nod if you mention Dr. Finlay's name in contract bridge circles. He is one of the early New Zealand devotees of the modern game and claims with some pride to have taught it, as a university student, to a good slice of Dunedin's society. He still manages a couple of evenings of bridge a week and an occasional tournament. Bridge is field number two.*

Field number three is musical composition, not the light-hearted ditties that spring from the musically most unlikely places, but serious works of highly-technical musician-ship that have been performed by the National Symphony Orchestra, broadcast, and recorded by overseas artists. Dr. Finlay has reached opus 29 in this field and still gets musical ideas faster than he can set them down.

His interest in music goes a long way back, to the days when, as a

schoolboy, he was a pupil of W. Paget Gale, city organist in Dunedin. He even did some composing as a boy and thinks even now that some of the work he did then is worth further attention. In those years he did not know whether he was going to take on music, science, or arts. Later he decided on science, had his own home laboratory, and

orchestra really sounds like. Recordings of symphonies aren't the same, he argues, because the mechanical limitations of sound reproduction are likely to lead to false standards. It wasn't the same either when music had to be fitted into the limited number of instruments that were available to orchestras that preceded the National orchestra.



**WONDERING.** Dr. H. J. Finlay is having so much fun as a composer of music that he is beginning to wonder whether he has missed his vocation.

even conducted classes at the school at which he was studying.

He got to university on a Beverley Scholarship and there, as a science student, distinguished himself by winning a poetry prize against the competition of arts students. A Hector Medallist, he was research scholar at Otago University for two years, after a period of oilfields research in the Gisborne area.

Except in amassing a collection of records, to whose playing he listened with the score in his hands, and visits to orchestral performances to "keep his ear right," Dr. Finlay left music alone for nearly 30 years. He came back to it after hearing the first concerts of the National Symphony Orchestra. These concerts, he says, gave New Zealand its first experience of what a full

hold of you," Dr. Finlay said. He once noted down the theme for a trio on the back of an envelope while travelling by air and has at times risen in the middle of the night to set down ideas which have still looked good next morning. His compositions, mainly chamber music, are for professionals and he likes frequent changes of key, modulation and time signature.

Dr. Finlay is soon to visit the South Island. His progress will illustrate the three facets of his activities. He will take along musical notebook to occupy the hours of travelling, instead of a book; he will take part in a bridge tournament in Christchurch; and he will give a scientific lecture at Otago University.

That's not a bad record for a man who has spent life in a wheel-chair.

Courtesy HOCKEN COLLECTIONS ARCHIVES AND MANUSCRIPTS, DUNEDIN

## RADIO 4ZM 1936 – Lesson 1 on Bridge by Dr Harold Finlay

Good evening, listeners all

This evening I am going to talk to you about bridge. It has always seemed to me surprising that, when so much time is given on the air to musical and other amusements, practically none has been given as yet to one of our best, most interesting and universal amusements of the winter months – the game of bridge. For that reason 4ZM has suggested that I should give a short talk for say a quarter of an hour for the next three Saturdays at this time especially with a view to teach people in the country who cannot come into town for lessons and are anxious to improve their bridge.

By that time we will have some idea of whether listeners are interested enough for further talks to be given, and if so, we can plan a more definite series.

These talks will, of course, for a start be quite elementary, but at the same time even those of you who have played for years may be surprised at a number of points you had not known or fully understood before.

No game can give you the utmost benefit unless it is played as well as possible. Bridge is the best card game ever invented; it is complicated and hard, but at the same time not nearly so difficult to play well as many think. The trouble is that most people have simply tried to pick it up while watching others playing, and the others have often not been good enough players to make their demonstration helpful.

There is less luck and guess-work in bridge than in most card games, and very much more scope for reasoning and shrewdness. Let me give you an example. Supposing you are fourth player; the dealer bids 1 Spade, your partner passes, the next player bids 2 Clubs, and the call is up to you. You hold the AK of Hearts and the AK of Diamonds, but only four cards of each. I shall repeat that. (Supposing etc....). Do you realise that it is dangerous to call anything, as your partner is unlikely to have a single picture card? How does a good player instantly see that, if the other calls were correctly, he will probably go down about three tricks if he calls 2 hearts or 2 Diamonds? Simply by a simple bridge rule called the Rule of 8, which I shall tell you about later,

Take another example. Your partner has the opening bid and passes. Next player calls 1No Trump & you are sitting with nothing at all except six Diamonds to the AKQJ. What is the sense of calling 2 Diamonds – just to let your partner know you’ve got them. What good does it do to him – he can’t have much since he’s already passed. Don’t you see that you do your side tremendous harm by letting the other side know you’ve got them. They will promptly shy clear of No Trumps, bid a game in a Major suit, and what damage can you do then? Do you not see that you must do one of two things: either pass, hoping they will play in No Trumps; or else actually encourage them to play in No Trumps by making an extremely improper call of 2 Clubs, hoping that the player over you, with a stop in Clubs, will go 3 No Trumps, against which you promptly lead out all your Diamonds. The fact that you have nothing in Clubs will not worry you even if you get doubled, for you then merely bid 2 Diamonds, and keep on bidding them if your partner goes back to Clubs.

Now I have just taken two instances at random – the first an example of bridge deduction and adding 4 & 4 together, – the second an example of bridge psychology and the laying of a trap for the opponents when in a helpless position oneself.

As I suppose most of you know, two kinds of bridge are played nowadays – the ordinary Auction and the more modern Contract. Since I want these remarks to be useful to as many players as possible, I am not stopping here to explain the differences between the two games, except to say that the actual play of the cards is exactly the same, but the scoring and bidding differs. In Contract, you have to bid up to game or slam before the first card is led if you wish to score that amount. But many of you, especially in the country, will still be playing only Auction – very likely in a hit or miss sort of fashion, that you would like to improve. Since most of the first principles are identical in the two games, it will be best to go over these & then consider more fully the differences. The increased competition in the bidding at Contract has made it necessary for players to have a more accurate idea of the value of their cards, and the trick-taking possibilities of any hand dealt. Certain tables have been compiled and rules suggested which practice has shown are not only useful but indeed necessary if one wishes to improve as a player. Let me give you an example. It is still possible to find auction players, who, holding nothing but, say, six hearts to the King, open the bidding with 1 Heart – just to let partner know that they have a suit. And then they wonder why they go down so often, and suffer so much from doubles. Every partner has a right to expect not only a suit but a certain minimum amount of strength from the opener’s bid, and if you misinform him about this strength, that is, if by bidding at all you promise him what just isn’t there, you have only yourself to blame if you have to pay up at the end of the evening. Now, why is it necessary to have this minimum in reserve, in case of accidents, if you start the bidding ball rolling, or even if you continue it after the other side gives it a push? Well, perhaps it has not occurred to you that all bidding is just imaginary play of the cards before they really are played – in other words you are reviewing your and your partner’s hands in speech before the work of taking and losing tricks commences. Have you ever thought what a bid of 1 Heart really

means? This is what it conveys in Bridge language – “ Partner, if Hearts are trumps, I can reasonably expect to take four tricks ; if you have an average dummy I expect 3 more tricks from you, which will make 7 altogether; the first six not being counted, I shall therefore get 1 Heart.” If you pause to think that there are only 13 tricks altogether, if everyone has a fair share, 3 of the players can take 3 tricks each and the fourth can take 4 - he is the only one with a hand strong enough to jump into the bidding breach. Now you see why the man who opens on six to the King and nothing else deceives his partner, for he can expect to take only 2 or at the most 3 tricks himself, and if his partner has a poor hand he can easily be 3 or 4 down, probably doubled.

So we get this first important rule - you must not open the bidding unless you are good for at least 4 tricks yourself.

But it is not easy to see, in a hand of 13 cards just what ones will take tricks. For this reason, a short-cut has been devised and it is now universally used by players who know anything at all about modern bidding. It makes use of the fact that the known-cards alone in the hand can be used to give a convenient and pretty accurate idea of the goodness or badness of the whole hand. This is based on the fact, which is common knowledge to you all, that in Bridge a suit will go round usually between 2 and 3 times, that is, 2-3 leads of the same can be made before it is trumped. Thus the Ace is a sure trick, the King fairly sure, but the Queen doubtful. We simplify this by saying that a suit is worth 2+ honour tricks, that is, that each suit can be relied on to yield 2 and a fraction tricks from its honour cards alone. Since there are four suits, the total number of honour-tricks is 4 times 2+, that is, 8 to 9. This ninth trick usually depends on a finesse, so for all practical working purposes we have the second important rule to remember – the total number of known card tricks in the whole hand is only 8, and this must be divided amongst the four players. This is really the very significant Rule of 8, which I referred to before, and which Culbertson defines as follows: - “The total of defensive honour-trick is that will be won at any bid (trump or no-trump) after each deal is about 8 out of the 13 tricks.”

If you have been listening carefully to this you will observe there are two highly important features of this rule – first, that the 8 honour tricks have to be divided somehow between the four players. And second that the ratio of honour-tricks to all the tricks won is 8 to 13.

Let us look at the first feature – 8 honour tricks must be divided somehow amongst 4 players – if you have not got them, someone else has. We can illustrate this by returning to the example mentioned earlier, where you as fourth player hold AK of Hearts and AK of Diamonds, that is, 4 Honour tricks, and the opponents have called 1 Spade and 2 Clubs, your partner remaining silent. As we shall see shortly, a bid of 1 Spade shows 2½ Honour tricks at least, and a bid of 2 Clubs another 1½ Honour tricks, so that the opponents have already guaranteed by their bidding, 4 Honour tricks. Since you yourself hold another 4, you can place the whole 8, so that it is extremely unlikely that your partner has even a picture card. Now you can see why it is quite hopeless to call, hoping for something in dummy; ordinary intelligence and arithmetic will tell you that there is nothing in dummy, & that you would have to play away from your hand all the time, so that the only tricks you would make would be your two AKs; in other words you would be down four tricks if you called 2 of anything, even though you hold the best hand at the table.

I know it is a very tempting indeed to bid when your hand looks so nice, especially for some of you men players who like to take a fly just to see what will happen., and with four known tricks it is hard to ask you to keep silent. Unfortunately, the number of times you see just what disaster does happen, does not, I am afraid, instil enough caution into the too-aggressive type of player, for “Hope springs eternal in the human breast; Man never is, but always to be blest.” It is not really a very different matter to teach intelligent people to bid correctly; it is much harder to get them to pass correctly.

I shall be returning later to many more applications of this valuable Rule of 8. In the meantime I pass on to the second feature, that the ratio of honour card tricks to all tricks won is about 8 to 13. Here let us stop to consider just how tricks are won. There are three ways of winning tricks & no more:-

(1) if your own card ranks higher than anybody else’s ; for example the other three players play the J,Q & K of a suit and you beat them all with the Ace. Everyone here has followed suit, but you have the advantage of the top card



(2) if you have no more of the suit led and trump it; for example, even if the other three players play the Q, K and Ace of a suit, you can still take the trick with the 2 of trumps. Here, when you cannot follow suit, you have won the trick by trumping or ruffing it.

(3) if the opponents trumps are exhausted and you have the last card in a suit.

### **RADIO 4ZM 1936** - Part of Lesson 2 on Bridge by Dr Harold Finlay

Good evening everyone

I'm afraid the problem you had for last week was very easy, but here is the solution.

You remember that Lady Trumpet had:

S Axx

H QJx

D A10xx

C xxx

And you as her partner held

S Kx

H AKxxx

D KJx

C Qxx

The other two had been bidding spades and clubs, but you finally played it in 4H. The problem was what to do if the other side bid up to 4S and what should Lady Trumper4 lead. Well, it is pretty obvious from the calling that you cannot expect to make 5H and that the other side is sacrificing. (So) Double. Lady T sees 6 honour tricks so evidently they have bid on distribution. Therefore to make the most of these honour tricks you must play the hand as far as possible in no-trumps. So get out trumps and prevent ruffing. Therefore lead A of Spades then an x of spades. As a matter of fact Colonel Flannery (?) and Miss Voke held these cards respectively:

S JTxxx      S Qxx

H x      H 10xxx

D Qxxxx      D x

C JT      C AKxxx

If Hearts are led & you thus allow them to cross-ruff and make their trumps separately, they will be only two down at most, but if there are two trump leads for a start and you then lead a small diamond to your partner to put her in to lead a third trump, they will be four down, making only 3 Spade tricks, 2 in Clubs and the last Diamond. This is a substantial loss of 700 and will compensate you for having been pushed out of a game, whereas 2 down is only 300 and would not.

Here is a singular hand from the Otago Bridge Club and is like the problem of last week. I was dealt this nice hand:

S xx

H xx

D 98xxx

C KJxx

The player over me opened with 1Spade, which my partner doubled. The next opponent redoubled. I called out into 2D (can't leave redouble) and 2S was called. My partner then called 5D which was doubled and I was left to play it. The K of S was led & this dummy went down for me:

S –

H AKxx

D QJ10x

C A10 xxx

It was certainly a raise to 5D and it looked as though I only (*ED*: text missing but was probably: *needed to find the QC*. I ruffed the spade and drove out one of the diamond honours (*KD*) held by the player on my right who returned a heart won in dummy's *K of Hearts*. A second heart was returned. Again I take this with Dummy's Ace and lead another heart, trumping it in my hand. I lead my last spade and trump it with Dummy's last trump and then lead Dummy's last Heart. The next player shows out & I trump it and draw the last trump. Now I know the whole position. The opponent who opened the bidding and doubled me has followed to four rounds of hearts and 3 of diamonds. Also, he must have had at least 5 spades to rebid them, perhaps 6. That makes a total of 12, possibly 13 cards; so he could not have had more than 1 Club. I therefore play a small Club from my hand and if a singleton Q does not drop, I put up the Ace & finesse the next round up to my Jack, quite confident that it will win.

The actual hands of the opponents were

Opener: S AKQxx	Partner: S J10xxxx
H Jxxx	H Q10x
D Axx	D K
C x	C Qxx

The redouble made by the hand with 6 spades was quite wrong. – should have bid 4S.

**Courtesy HOCKEN COLLECTIONS ARCHIVES AND MANUSCRIPTS, DUNEDIN**

Dr Finlay gave a total of 12 lessons, the transcripts of which are in the *Hocken Library, Dunedin*. He combined instruction in the Culbertson honour-trick system of bidding with setting problem hands which were reviewed the following Saturday.

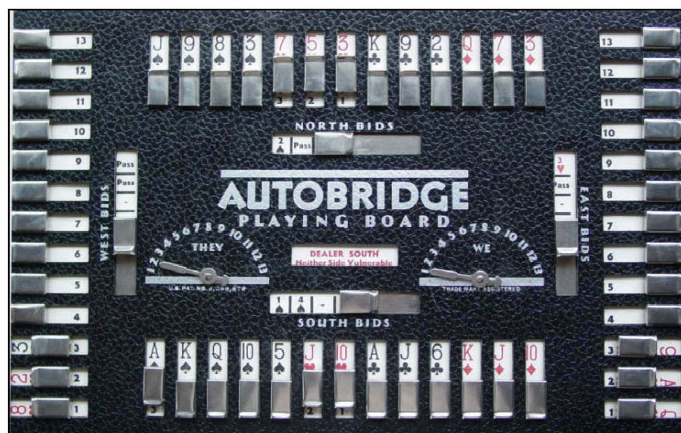
Honour tricks were calculated as follows:

AK of the same suit = 2 HTs  
 AQ of the same suit = 1½HTs  
 A or KQ or KJT = 1 HT  
 Kx(x) or QJx= ½HT

To open the bidding you needed:

2 HTs and at least a 6-c suit **or**  
 2½ HTs & at least 2 + values & a 5-c rebiddable suit **or**  
 3 HTs with 2 suits **or**  
 3½ -4 HTs & a 4333 distribution = 1NT

In addition, Culbertson recognised '+ values' (Any Queen not already counted and any Jack with a higher honour)



Another commercial initiative of Culbertson's was *Autobridge*, first produced in 1938. This consisted of hand sheets of various levels of difficulty, many played by the stars of the day, that could be put under a template playing board (see illustration) allowing a player to play solo, practising skills of bidding and declarer play against the best defence. On the hand shown, South is in 4♠ and with a ♦ & two ♥ losers he needs to win three ♣ tricks. The silver sliders over the East-West cards can be moved away after one has decided on one's play to each trick in hand and dummy. The first three tricks have

been played showing East, who overcalled 3♥ winning the first two with ♥Q and ♥A and South ruffing the 3<sup>rd</sup> round of ♥s with his A♠. This was a hand played by Ely Culbertson himself and is a simple matter of disclosing East's 3631 distribution, laying down the ♣A at trick 11 hoping the ♣T or ♣Q drops. When the ♣T appears as the singleton, declarer simply finesses dummy's ♣9 at trick 12. Culbertson used every ounce of his business and promotional nous to sell his products.

So, *Autobridge* was promoted as “ideal for the train to work in the morning, it was the finest thing of its kind – it almost beats four handed bridge” and: “Mothers appreciate the fact that knowledge of Contract is a social necessity. Yet few mothers have the time and patience to give the necessary instruction.” (Tut, tut! - women seeking to abrogate their motherly duties of reading a bedtime story or helping young Johnny with his bridge, even in those days!). Also, “Beginners are also relieved of any embarrassment over making mistakes in the presence of others.”