ON THE AIR

TUESDAY PROGRAMS

CFCY TV

3:00 p.m.—Musicale
3:30 p.m.—Take Thirty
4:00 p.m.—R.C.M.P.
4:31 p.m.—Vacation Time
5:30 p.m.—The Lone Ranger
6:00 p.m.—Interview: Mr. Steve French
6:15 p.m.—Calendar '64
6:31 p.m.—Gazette
7:01 p.m.—CFCY-TV News
7:15 p.m.—Challenge Golf
8:00 p.m.—My Favourite Martian
8:30 p.m.—Hennessey
9:00 p.m. Happy End
9:30 p.m.—Question Mark
10:00 p.m.—Canadian Bar Assoc. 50th Anniversary
10:30 p.m.—The Planemakers
11:30 p.m.—The Nature of Things
12:00 p.m.—CBC TV News
12:13 p.m.—Local Weather
12:14 a.m.—Sign Off

CKCW TV

5:45 p.m.—Station Sign On News, Weather, Sports
6:00 p.m.—R.C.M.P.
6:30 p.m.—Vacation Time
5:30 p.m.—Lone Ranger
6:00 p.m.—Buckskin
6:30 p.m.—Television News
6:45 p.m.—Weather
6:50 p.m.—Sports
7:00 p.m.—Sumnerizin Sports
7:30 p.m.—Ripcord
8:00 p.m.—Bunkhouse Boys
8:30 p.m.—Theatre
9:00 p.m.—Happy End
9:30 p.m.—Question Mark
10:00 p.m.—Canada Bar Assoc.—50th Anniversary
10:30 p.m.—The Planemakers
12:00 p.m.—CBC TV News
12:15 a.m.—Viewpoint
12:20 a.m.—Lionel Network News
12:25 a.m.—Station Sign Off

CFCY RADIO

TUESDAY

6:28—Sign On
6:30—News & Weather
6:35—Country & Western Roundup
6:55—News & Weather
7:00—Hebrew Christian Hour
7:15—Country & Western Roundup
7:30—News & Weather
7:35—Farm Report
7:41—Country & Western Roundup
8:00—News
8:11—Weather
8:16—Country & Western Roundup
8:45—Weather
8:50—Atlantic News
8:57—Thought For Today
9:00—News & Voice Reports—CBC
9:10—Preview Commentary—CBC
9:15—Notes & Music
9:27—Matinee Musical Charades
9:30—Notes and Music
9:35—What's The Song Contest
10:00—News and Weather
10:05—Notes & Music
11:00—News and Weather
11:05—Notes and Music
11:27—Matinee Musical Charades
11:30—Notes and Music
11:45—Bulletin Board
11:50—Notes and Music
12:00—Weather
12:05—Town and Country Time
12:30—News & Weather
12:43—P.E.I. Road Report
12:45—Town and Country Time
1:00—News, Weather & N.S. Road Report
1:05—Town and Country Time
1:15—Shirley Harmer—CBC
1:45—Cafe Variety
2:00—News & Weather
2:05—Tops In Country and Pops
2:27—Matinee Musical Charades
2:30—Tops In Country and Pops
3:00—News & Weather
3:03—Trans-Canada Matinee—CBC
3:30—Tops in Country and Pops
4:00—News & Weather
4:03—Canadian Roundup—CBC
4:10—Tops In Country and Pops
4:30—The Outports
5:00—News & Weather
5:05—Matinee Musical Charades
5:26—The Outports
5:55:20—Marine Weather
5:28—The Outports
6:00—News & Weather
6:15—On Parliament Hill—CBC
6:45—Sports Parade
6:50—Tonight's Music
7:00—Back to the Bible
7:05—News & Weather
7:45—Program Schedule
7:46—Lone Guide Program
8:00—Tonight's Music
8:05—Citizen's Forum—CBC
9:30—Talent Festival—CBC
10:00—CBC National News
10:30—Reserved For Music CBC
11:00—News & Regional Weather
11:05—Starlight Serenade
11:30—News & Maritime Weather
11:35—Starlight Serenade
12:00—News, Regional Weather & Sports Scores
12:05—Sign Off

CBA RADIO

TUESDAY

6:30—The Gerry Fogarty Show
7:00—The Gerry Fogarty Show
8:00—CBC News and Inland Weather
8:15—Maritime Sportscast
8:21—The Gerry Fogarty Show
8:35—Max Ferguson
9:00—CBC News
9:11—Commentary
9:16—AM Chronicle
10:15—Playroom
10:30—To Market With Music
11:00—CBC News
11:05—Shirley Bratt
11:15—For Consumers
11:20—Record Album
11:30—The Archers
11:45—Devitt Drops By
12:00—Jamboree Junction
12:15—Tennessee Ernie Ford
12:30—Maritime Farm At Last
1:00—CBC News & Weather
1:15—What's On Tapp
1:45—Time Out For Melody
1:50—80 Time Signal
2:00—Time Out For Melody
2:45—Reading From The Classics
3:00—CBC News
3:05—Trans-Canada Matinee
3:30—Trans-Canada Matinee
4:00—CBC News
4:05—Canadian Roundup
4:15—Music In The Air
4:45—Music In The Air
4:30—Countdown
5:00—Mar. Fish B'Cast
5:20—Tempo

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Working Of The Brain World's Biggest Challenge To Scientists

CHICAGO (AP)—Your eyes scan written words, and nerve signals flash information to your brain.

Somehow among your 10,000,000 brain cells, the new knowledge is instantly assessed, and some at least is stored away.

Memory springs it forth again when you need or want it—sometimes, anyhow.

But how, exactly how?

Sitting in the study of his home one recent evening, Dr. George W. Beadle, Nobel Prize winner and president of the University of Chicago, tapped his head with his right forefinger.

"There is no more complex problem than what Happens up here," he said.

SCIENCE CHALLENGED

"Probably the greatest challenge in science is to discover how the brain works, how it stores information, recalls it, and what consciousness is."

"It is what is in our minds that determines how we are going to behave.

The tempo of change in our lives is increasing rapidly, bringing new knowledge, new opportunities, and new problems. Can we speed up our learning, improve our memories, strengthen our mental capacities, broaden our understanding, find ways to correct mental ailments and deficiencies?

"What determines what we let into our minds? Or what we lock out?

"We've scarcely made a beginning yet toward understanding these things. But there are some fascinating clues and theories."

Dr. Beadle put a match to his dying cigar.

"The answers, in fact, may turn out to be rather simple.

"In the biological sciences, one great inhibiting factor is a feeling that life and living systems are very complex and so it must be terribly difficult to understand them. There is resentment against simple ideas—they're even considered simpleminded.

"But nature, we are learning, operates with fundamental or simple rules and methods—the task is to discover them."

Dr. Beadle reached back in memory for an illustration.

In 1927, he was a college student from Wahoo, Neb., planning to specialize in scientific farming. To help make expenses, he bumped at the offer of 30 cents an hour to assist a professor in an experiment with hybrid wheat.

On lunch hours, the nearest thing at hand to read was a book on genetics, the still-young science of heredity. The tall young man read with growing fascination, and decided to become a biologist, and geneticist.

The book "described nice, clearcut rules about how chromosomes and genes determine inherited characteristics. The challenge was that no one knew how genes functioned, or what they were."

SOME ANSWERS

Pursuit of this question brought Dr. Beadle and Dr. Edward Tatum a Nobel Prize in 1958 for having shown that a single gene controls a single enzyme, or chemical governor, in a cell. Enzymes play a major role in the machinery of cell life.

"Our work—though we didn't know it at the time—was really a re-discovery of what (Sir Archibald) Garrod had suggested way back in 1908. But few geneticists then paid much attention—they said it was too simple an idea."

Now, in a great burst of progress, scientists are fairly certain they are well on the way to discovering the key to the genetic code of life itself.

Full understanding of the code could lead to methods of controlling it for human benefit, for example by suppressing or circumventing the effects of genes that are harmful or which cause defects.

A main spearhead in progress now is molecular biology—delving deeper and deeper into the units and sub-units and molecules that are engaged in or which govern life processes.

"An important next step is to determine the system by which the brain codes information and makes it available again. Just what happens inside brain cells, or to molecules within them?"

The puzzles are great, but many scientists feel a great deal of progress will be coming from research being carried on, Dr. Beadle said.

URGENT CHALLENGE

There's another immediate and urgent general challenge about human learning, said Dr. Beadle, the educationist.

For analogy, he pointed to the fact that a newly hatched duckling will fix upon the first moving thing it sees as its "mother." It might be the duckling's real mother. It can also be a goose, a dog, even a human being. This phenomenon is known as "imprinting" in the duckling's brain.

In humans, he said, a kind of cultural imprinting begins very soon after birth. The newborn baby's brain is pretty much a clear slate, except for inherited instinctive knowledge.

"What we have failed to appreciate is that a child has done much of his decisive learning before he even enters school. He learns from parents, friends, in numerous ways.

"Let me back up a moment, to say this: Now we know how genes are transmitted from generation to generation. Likewise, we know a good deal about how human culture—our history, art, literature and so forth—is transmitted from generation to generation."

The slow process of evolution of cultures now is running headon into the turbulence of rapid expansion of knowledge, of new technical skills and controls over means of production and livelihood, new situations and problems from populational growth.

"There is more for us to learn, and to keep on learning, if we are really to understand this changing scene, to adapt to new situations, to maintain what is good or right about our culture, to keep it progressing."

Vancouver Man Has Problem With Addicts

VANCOUVER (CP) — Jack Selkirk has a narcotics problem—he hopes he can lick it.

So deeply involved is he with it, that he gets addicts calling him at all hours—or many of his callers used to be addicts.

For Mr. Selkirk is a federal parole service officer here and his experimental rehabilitation scheme for addicts places him at their disposal at any time.

He runs Snap II—Special Narcotics Addiction Project No. 2—which has been launched following successful results from Snap I, a pilot project in 1962.

The scheme calls for specially selected addicts from the British Columbia Penitentiary who have jobs and accommodation waiting for them when they leave the prison. The men are required to fulfil rigid requirements—including staying away from those downtown Vancouver areas where narcotics are more easily obtainable.

"It meant we were asking them to change their entire way of life," Mr. Selkirk said. "For most of them, their only friends are addicts and criminals."

Mr. Selkirk works to get the men's confidence in his power to help them leave narcotics for good.

"My phone goes at all hours of the day and night with men calling me about all kinds of problems—from girls to drugs."

Sixteen addicts were paroled from the penitentiary in 1962. Of these, 11 went back to jail because they either broke the conditions of their parole or committed other minor offences.

"But for the same five who succeeded, who are still out on parole leading useful lives, we feel the experiment is worthwhile."

WORST STORM

Hurricane Hazel, which devastated parts of Ontario in 1954, left a trail of 81 dead—the worst tropical storm to hit the province in recorded history.

CBC Notebook
6.00—CBC News
6.15—On Parliament Hill
6.20—Today's Editorial
6.25—Inland Weather and Sports Scores
6.30—Music In The Evening
7.30—Business Barometer
8.00—Assignment
8.30—Winnipeg Pops
9.00—Nat'l Conference on Canadian Goals and Assists
9.30—Chapel Royal
10.00—CBC Nat'l News. On Parliament Hill & Speaking Personally
10.30—Music Scene—Montreal
11.00—Action Theatre
11.30—Nightspot
12.00—CBC News
12.03—Sports Scores, Inland and Marine Weather
12.15—Music In The Night

CONTRACT BRIDGE

By B. JAY BECKER

South dealer
Both sides vulnerable.

NORTH
♠ J6
♥ K Q 10
♦ J 5 3
♣ J 9 7 4 2

WEST
♠ K 10 7 2
♥ 9 8 6
♦ 10 7 4
♣ K 6 3

EAST
♠ A Q 5 4
♥ 4 3
♦ 9 8 6 2
♣ Q 10 8

SOUTH
♠ 9 8 3
♥ A J 7 5 2
♦ A K Q
♣ A 5

The bidding:

South	West	North	East
1 ♥	Pass	2 ♥	Pass
4 ♥			

Opening lead — nine of hearts.

The opening lead has an enormous effect on the outcome of many hands. It sometimes results in giving the declarer the contract, and at other times results in defeating the contract. Quite often it will change the entire course of the play, since the lead may force declarer to adopt a method of play which he would not otherwise have pursued.

For example, take this hand where West is on lead against four hearts. He has no clearly indicated play, since any lead he makes may turn out badly — depending on how the unseen cards are divided. Let's say he decides to make the neutral lead of a trump. This proves to be as good a move as he can possibly make, since, if West had chosen a spade or a diamond, South could eventually have ruffed a spade in dummy and thus acquired his tenth trick.

But the trump lead makes the outcome uncertain, as far as South is concerned. He has to decide at once whether or not to attempt to ruff a spade in dummy. In the actual hand, if he tries for a ruff, he goes down.

Thus, suppose he wins the heart and leads a spade at trick two. East wins and returns a trump. When declarer then leads another spade, West wins and plays his last trump. South eventually goes down, losing three spades and a club.

However, the trump lead should persuade South that trying for a spade ruff is apt to prove fruitless. The defense will obviously not sit still and let him ruff a spade in dummy.

So South turns to a different line of play forced upon him by the opening lead. After winning the first trick in dummy, he plays the ace and another club, hoping to find the suit divided 3-3. This counterstroke proves successful, and, in fact, if the defenders do not cash two spade tricks at this point, South eventually makes eleven tricks.

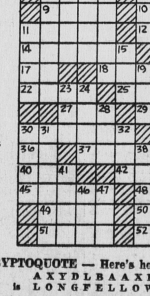
RIPLEY'S BELIEVE IT OR NOT

DAILY CROSSWORD

Yesterday's Answer

ACROSS
1. Lustrous mineral
5. Meadows
9. Unadulterated
10. Lamb's pen name
11. Tapestry
12. A country house: Eur.
14. A forage grass
16. Source of heat and light
17. Indefinite article
18. A center of population
21. Brazilian palm
22. Male deer
25. Fragments
27. A fashionable hairpiece
29. British sailor: sl.
30. A tactile organ
33. Subterranean part of a plant
36. Farm animal
37. Term of endearment
39. Hindu sacred tree
40. Consumed
42. Mature
45. Opposite of "hated"
48. Ladies
49. Italian coin
50. Ostrich-like bird
51. Dross of metal
52. Minus

DOWN
1. Run at top speed
2. A stitch in knitting
3. Inland sea: Asia
4. To set anew
5. Monetary unit: Italy
6. High priest
7. Troubles
8. Military gesture
11. Wine receptacles
13. Cuckoos
15. Spinning toy
19. Humor
20. Close to
23. Solemn wonder
24. Cover with gold coating
26. Weigh
28. Exclamation
30. Young horse
31. Lauds
32. Male sheep
34. Ancient Greek coin
35. Hauls, as a trailer
38. Insurgent
41. Wicked
43. Cripple
44. False-hoods
46. Epoch
47. Pistol



9-15

DAILY CRYPTOQUOTE — Here's how to work it:

A X Y D L B A A X R
is L O N G F E L L O W

One letter simply stands for another. In this sample A is used for the three L's, X for the two O's, etc. Single letters, apostrophies, the length and formation of the words are all hints. Each day the code letters are different.

A Cryptogram Quotation

A E N Q Z X G R N A Z O Y L E Q X ' R
Q E N E M C E I Y Q S Z G M C G M N G T -
X E N E X . —C Z Y Q C E S Z Q M E Q X R A E L

Yesterday's Cryptoquote: THE HEAD DOES NOT KNOW WHAT THE HEART IS AFTER.—VAUVENARGUES

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