*** Create another table loaded with a whole bunch of unique row values

```
SQL> CREATE TABLE case_search_2 as SELECT rownum id, 'PINK FLOYD'|| rownum name FROM  dual CONNECT BY level
<= 100000;

Table created.
```

*** Insert one special, easy to identify unique row ...

```
SQL> INSERT INTO case_search_2 VALUES (100001, 'THE WALL');

1 row created.

SQL> COMMIT;

Commit complete.
```

*** Create a normal, binary index on this new table

```
SQL> CREATE INDEX case_search_2_name_i ON case_search_2(name);

Index created.
```

*** Collect statistics on the table

```
SQL> exec dbms_stats.gather_table_stats(ownname=>'BOWIE', tabname=> 'CASE_SEARCH_2', cascade=> true,
estimate_percent=>null, method_opt=> 'FOR ALL COLUMNS SIZE 1');

PL/SQL procedure successfully completed.
```

*** Now set both NLS parameters required for Linguistic Indexes

```
SQL> ALTER SESSION SET NLS_SORT='GENERIC_M_CI';

Session altered.

SQL> ALTER SESSION SET NLS_COMP='LINGUISTIC';

Session altered.
```

*** Let's see what happens when we just want to select this one row ...

```
SQL> SELECT * FROM case_search_2 WHERE name = 'THE WALL';

        ID NAME
---------- --------------------------------------------------
    100001 THE WALL


Execution Plan
----------------------------------------------------------
Plan hash value: 1727594812

--------------------------------------------------------------------------------------
| Id  | Operation         | Name          | Rows  | Bytes | Cost (%CPU)| Time     |
--------------------------------------------------------------------------------------
|   0 | SELECT STATEMENT  |               |     1 |    20 |    86   (6)| 00:00:02 |
|*  1 |  TABLE ACCESS FULL| CASE_SEARCH_2 |     1 |    20 |    86   (6)| 00:00:02 |
--------------------------------------------------------------------------------------

Statistics
----------------------------------------------------------
          1  recursive calls
          0  db block gets
        365  consistent gets
          0  physical reads
          0  redo size
        470  bytes sent via SQL*Net to client
        396  bytes received via SQL*Net from client
          2  SQL*Net roundtrips to/from client
          0  sorts (memory)
          0  sorts (disk)
          1  rows processed
```

*** We note that a FTS is performed even though there's an index on the name column and we just want the one row

*** Unfortunately, the existing index is a standard binary index and so is of no use and is ignored by the CBO with the NLS parameters set.

*** Let's perform a join between a table with an appropriate Linguistic Index (as created in the previous demo) with a table that only has a Binary Index

```
SQL> SELECT * FROM case_search cs1, case_search_2 cs2 WHERE cs1.name = 'ZIGGY' AND cs2.name = 'THE WALL';

      ID NAME                 ID NAME
-------- --------------- -------- --------------------
  100001 Ziggy             100001 THE WALL
  100002 ZIGGY             100001 THE WALL
  100003 ZiGgY             100001 THE WALL


Execution Plan
----------------------------------------------------------
Plan hash value: 2400034535

-------------------------------------------------------------------------------------------------------------
| Id  | Operation                     | Name                    | Rows  | Bytes| Cost (%CPU)| Time     |
-------------------------------------------------------------------------------------------------------------
|   0 | SELECT STATEMENT              |                         |     1 |    43|    89   (6)| 00:00:02 |
|   1 |  MERGE JOIN CARTESIAN         |                         |     1 |    43|    89   (6)| 00:00:02 |
|*  2 |   TABLE ACCESS FULL           | CASE_SEARCH_2           |     1 |    20|    86   (6)| 00:00:02 |
|   3 |   BUFFER SORT                 |                         |     1 |    23|     3   (0)| 00:00:01 |
|   4 |    TABLE ACCESS BY INDEX ROWID| CASE_SEARCH             |     1 |    23|     3   (0)| 00:00:01 |
|*  5 |     INDEX RANGE SCAN          | CASE_SEARCH_LING_NAME_I |     1 |      |     2   (0)| 00:00:01 |
-------------------------------------------------------------------------------------------------------------


Statistics
----------------------------------------------------------
          0  recursive calls
          0  db block gets
        369  consistent gets
          0  physical reads
          0  redo size
        650  bytes sent via SQL*Net to client
        396  bytes received via SQL*Net from client
          2  SQL*Net roundtrips to/from client
          1  sorts (memory)
          0  sorts (disk)
          3  rows processed
```

*** The Linguistic index on the CASE_SEARCH table is used however, the binary index is again ignored by the CBO and a FTS on the CASE_SEARCH_2 table is performed.

*** All binary indexes are of no use with nls_comp set to 'linguistic' and nls_sort not set to 'binary' ...