Harmony or conflict? Language activities, linguistic competencies, and intellectual functioning in the CEFR

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Overview

1. CEFR dimensions
2. Native speakers
3. Core components
4. Basic and higher language cognition
5. Implications for language assessment
CEFR dimensions

1. Activities (Ch. 4)

2. Competences (Ch. 5)
   - General competences
   - Linguistic, sociolinguistic and pragmatic competences

“acquiring an L2 is a matter of development along a horizontal and a vertical dimension” (p. 16-17).
L2 acquisition is a matter of “broadening of the range of activities, skills and language involved” (CEFR, p. 18).

But not all L2-ers can reach B2, C1 and C2 levels. Why?
B2 Can give clear, systematically developed descriptions and presentations, with appropriate highlighting of significant points, and relevant supporting detail.

C1 Can give clear, detailed descriptions and presentations on complex subjects, integrating sub-themes, developing particular points and rounding off with an appropriate conclusion.

C2 Can produce clear, smoothly flowing well-structured speech with an effective logical structure which helps the recipient to notice and remember significant points (C2).

Most L1-ers cannot do this!
Activities Competences

Intellectual skills, reflected in education, profession, and culture
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Linguistic skills of adult native speakers, as a function of age and level of education

Kimberley Mulder
Speaking tasks

- **Unemployment task** (complex, informal, descriptive): Participant tells a friend about the development of unemployment among women and men over the last ten years – B1.

- **Transportation task** (complex, informal, argumentative): Participant discusses the pros and cons of how to solve the problem of traffic congestions by using public transportation, bicycles, or automobiles – B2.

- **Hospital task** (complex, formal, descriptive) – B2: Participant works at the employment office of a hospital and tells a candidate for a nurse position what the main tasks in the vacant position are.

- **Car Park task** (complex, formal, argumentative): participant is manager of a supermarket, addressing a neighborhood meeting, arguing which one of three alternative plans for building a car park he/she prefers – B2.
## Participants by Age and Education/Profession

<table>
<thead>
<tr>
<th>Age group</th>
<th>Low EP</th>
<th>High EP</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young (18-35)</td>
<td>18</td>
<td>24</td>
<td>42</td>
</tr>
<tr>
<td>Older (36-50)</td>
<td>10</td>
<td>10</td>
<td>20</td>
</tr>
<tr>
<td>Senior (51-76)</td>
<td>24</td>
<td>12</td>
<td>36</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>52</td>
<td>46</td>
<td>98</td>
</tr>
</tbody>
</table>

(Mulder & Hulstijn, submitted)
Rating the speaking performances

• three raters (non-linguists)
• scale of six levels
  – (a) the amount and detail of information conveyed, relevant to the topic, setting (formal/informal) and discourse type (descriptive/argumentative) and
  – (b) the intelligibility of the response.

(Mulder & Hulstijn, submitted)
### Rating scale (0-30)

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>een niet geslaagde beschrijving</em></td>
<td><em>een zwakke beschrijving</em></td>
<td><em>een matig geslaagde beschrijving</em></td>
<td><em>een geslaagde beschrijving</em></td>
<td><em>een goed geslaagde beschrijving</em></td>
<td><em>een zeer goed geslaagde beschrijving</em></td>
<td></td>
</tr>
</tbody>
</table>

(Mulder & Hulstijn, submitted)
## Communicative adequacy of performance in four speaking tasks

<table>
<thead>
<tr>
<th>Task</th>
<th>Formality</th>
<th>Discourse Type</th>
<th>CEFR Level*</th>
<th>Performance by 92 NSs**, Max = 30, Means (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment</td>
<td>Low</td>
<td>descriptive</td>
<td>B1</td>
<td>13.8 (5.5)</td>
</tr>
<tr>
<td>Hospital</td>
<td>High</td>
<td>descriptive</td>
<td>B2</td>
<td>15.8 (5.7)</td>
</tr>
<tr>
<td>Transportation</td>
<td>Low</td>
<td>argumentative</td>
<td>B2</td>
<td>15.1 (3.9)</td>
</tr>
<tr>
<td>Car Park</td>
<td>High</td>
<td>argumentative</td>
<td>B2</td>
<td>17.7 (4.1)</td>
</tr>
</tbody>
</table>

* Task rating on CEFR scale

** Overall oral production

** Pass-fail cut-off point at 15

\[ F(3,91) = 18.082; \ p < .000; \ \text{partial } \eta^2 = .166 \]

Average performance of native speaker is remarkably low

(Mulder & Hulstijn, submitted)
• Thus, on average, the L1-ers scored just below, or just above the pass-fail point.
• High EP Ss talked longer, producing more words, than Low EP Ss.
• The responses of High EP Ss were communicatively more successful than those of low EP Ss.

(Mulder & Hulstijn, submitted)
Lexical fluency, lexical knowledge and lexical memory skills were shown to be significantly associated to the adequacy of the information conveyed in the four speaking tasks, together explaining 31% of the variance.

(Mulder & Hulstijn, submitted)
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WiSP project

‘What is speaking proficiency?’

2004-2010

Researchers:
Nivja de Jong
Margarita Steinel
Arjen Florijn
Rob Schoonen
Jan Hulstijn

Funding:
NWO
(Grant 254-70-030)
181 learners of L2 Dutch and 54 native speakers

Speaking in 8 tasks

knowledge

Vocabulary Grammar

processing

Lexical retrieval Articulation Sentence building Pronunciation

(De Jong et al., submitted)
<table>
<thead>
<tr>
<th>Predictors</th>
<th>Correlation coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Linguistic knowledge skills</strong></td>
<td></td>
</tr>
<tr>
<td>Knowledge of vocabulary</td>
<td>.79</td>
</tr>
<tr>
<td>Knowledge of grammar</td>
<td>.75</td>
</tr>
<tr>
<td><strong>Linguistic processing skills</strong></td>
<td></td>
</tr>
<tr>
<td>Speed of lexical retrieval (ms)</td>
<td>-.49</td>
</tr>
<tr>
<td>Speed of articulation: response latency (ms)</td>
<td>-.18</td>
</tr>
<tr>
<td>Speed of articulation: response duration (ms)</td>
<td>.08</td>
</tr>
<tr>
<td>Speed of sentence building (ms)</td>
<td>-.67</td>
</tr>
<tr>
<td>Pronunciation: speech sounds (rating)</td>
<td>.65</td>
</tr>
<tr>
<td>Pronunciation: word stress (rating)</td>
<td>.51</td>
</tr>
<tr>
<td>Pronunciation: intonation (rating)</td>
<td>.78</td>
</tr>
</tbody>
</table>

Variance explained (error free) = 76%

(De Jong et al., submitted)
language ability

language knowledge

strategic competence (metacognitive components and strategies)

organizational

pragmatic

grammatical  textual  functional  sociolinguistic

Bachman & Palmer, 1996
language ability

language knowledge

organizational

pragmatic

grammatical

textual

functional

sociolinguistic

linguistic knowledge

speed of processing

Bachman & Palmer, 1996

strategic competence (metacognitive components and strategies)
Core components of language proficiency

- language ability
- language knowledge
- strategic competence (metacognitive components and strategies)
- grammatical
- functional
- sociolinguistic
- linguistic knowledge
- speed of processing

Bachman & Palmer, 1996
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Shared L1 knowledge and skills of adult native speakers
Basic Language Cognition (BLC)

1. The largely implicit, unconscious knowledge in the domains of phonetics, prosody, phonology, morphology and syntax,
2. the largely explicit, conscious knowledge in the lexical domain (form-meaning mappings), *in combination with*
3. the automaticity (fluency) with which these types of knowledge can be processed.

High-frequency words and structures that may occur in any communicative situation, common to all adult L1-ers, regardless of age, literacy or educational level.
Within LP a basis can be defined, called basic language cognition (BLC), and an extension, called higher language cognition (HLC). Whereas all adult native speakers are claimed to share BLC and therefore perform at ceiling in BLC tasks, they are claimed to differ in their HLC profiles (depending on their intellectual skills, education, professional careers and leisure-time interests) and therefore to vary enormously in their performance of HLC tasks. For most adult L1-ers, BLC is only part of their LP. They differ primarily in the realm of HLC. (A possible exception concerns speed of processing, a feature of BLC and HLC, which may show individual differences as a result of aging or other causes, such as hearing impairment.)
Higher Language Cognition

Basic Language Cognition

Other cognitive abilities
- Executive Control
- Reasoning
- Working Memory

Encyclopedic knowledge
Hypothesis

All adult L1-ers are able to segment and comprehend, both correctly and quickly, isolated utterances consisting of high-frequency lexical phrases and high-frequency morphosyntactic structures.

Individual differences will be relatively large in HLC tasks but small in BLC tasks.
How small or large is BLC?
To find out whether, and to what extent, someone’s level of L2 proficiency can be regarded as “native” or “native like”, his or her L2 proficiency should be compared to the L1 proficiency of a native speaker with the same profile (intellectual skills, age, education, etc.), or with herself/himself in her/his L1.
Since L1-ers are expected to hardly differ in BLC-related oral language skills but are expected to differ substantially in HLC skills, level of proficiency attained in a L2 cannot be compared to that of “native speakers” wholesale, simply because “the” native speaker does not exist (except in the domain of BLC).
L2-ers who have reached C2 may not have acquired BLC. Performance at the B2, C1 and C2 levels requires higher intellectual skills but not necessarily native-speaker BLC.

At the same time, most L1-ers cannot perform B2, C1 and C2 tasks because they lack the required intellectual skills.
• The vast majority of old people remain capable of processing linguistic information fast enough to allow for relatively unimpaired functional language use, provided that they continue to practice their language skills on a daily basis and do not suffer from severe mental disorders.

• This claim holds for all languages someone has acquired (first and second languages).

• In other words, continued language use modulates the decline in processing speed in old age, while the continued use of written language is modulated by level of education, work-related activities, and leisure-time activities.
Language proficiency

Language proficiency (LP) is the extent to which an individual possesses the linguistic cognition necessary to function in a given communicative situation, in a given modality (listening, speaking, reading, or writing). Linguistic cognition is the combination of the representation of linguistic information (knowledge) and the ease with which linguistic information can be processed (skill). Linguistic cognition in the phonetic-phonological, morphophonological, morphosyntactic, and lexical domains forms the center of LP. LP may comprise peripheral components of a less-linguistic or non-linguistic nature, such as strategic or metacognitive abilities related to performing listening, speaking, reading or writing tasks.
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Implications for L2 assessment

1. Test providers and examination boards must be transparent in informing stakeholders about the implied intellectual level of their examinations and certificates. Make clear that tests at the B2 and higher levels are not targeted at people with lower levels of education.
2. Test one or several core components of language proficiency separately. The choice of core components to be tested depends on the integrative skills (e.g., reading vs speaking) and the levels (e.g., A2 vs C1) that you want to assess.
Implications for L2 assessment

3. Two-phase assessment
Two-phase assessment

Test candidates (at A2 and higher levels) on (one or two) linguistic knowledge/skills prior to the administration of functional, communicative tests.
Candidates who failed the Phase-1 test cannot sit the Phase-2 test → efficiency

Candidates have passed the exam only when they have passed the Phase-2 functional test.
Implications for L2 assessment

4. Is it a good thing to develop a CEFR-like framework for L1 curricula in secondary schools?

[cf: 2009 Meijerink et al. proposal for learning targets in Dutch (and mathematics), modeled after the CEFR.]

For higher language cognition? **YES**
For basic language cognition? **NO**
Implications for L2 assessment

5. Do we need a test of basic language cognition in L2?

To test the BLC/HLC theory: YES
For diagnostic purposes: YES
For CEFR-like communicative testing: NO
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