The Effect of Increasing Task Complexity on L2 Spanish Oral Production in Dialogic Tasks

Carly Henderson & Ángel Milla Muñoz
Indiana University

Background

TBLT (Task-based language teaching)

- Fosters student-centered learning using tasks as vehicles for real world/functional language use (Ellis, 2003, 2009; Long, 1985).
- Pedagogic tasks should be designed & then sequenced from more simple to complex to gradually approximate real-world target task demands (Robinson, 2007)
- Task complexity can be manipulated to affect learner production often measured by examining complexity, accuracy, and fluency (CAF) (Housen, Kuiken, & Vedder, 2012)

Manipulation of Task Complexity (Robinson, 2007, 2010)
(cognitive dimensions)

Resource-directing variables	Resource-dispersing variables
+/- few elements	+/- planning time
+/- here and now	+/- single task
+/- reasoning demands	+/- prior knowledge

The Cognition Hypothesis
(Robinson, 2007, 2010)

More complex dialogic tasks will result in more accuracy, less fluency, and less syntactic complexity in learner production than simple dialogic tasks

Literature Review

Rahimpour (1997)

- 32 upper intermediate Iranian EFL Learners
- Tasks: written narration tasks, simple & complex
  (complexity: structured events/sequence crucial to story's coherence & -planning time)
- Results: task complexity had no effect on CAF

Robinson (2001)

- 44 Japanese ESL learners - 8 years of prior instruction
- Dialogic map task (simple & complex along various dimensions)
- Results: complex task (resource-dispersing) led to less fluency; no significant effect found for accuracy or syntactic complexity

Michel, Kuiken & Vedder (2012)

- 44 learners of Dutch
- Monologic & dialogic narration tasks (simple & complex)
  (complexity: – few elements)
- Results for dialogic: Complex tasks led to less accuracy and no change for syntactic complexity when compared to simple tasks

Robinson (2009) calls for more research on the effects of task complexity dimensions on learner production in oral dialogic tasks

Research Question

What is the effect of increasing task complexity on the language complexity, accuracy and fluency produced by intermediate Spanish L2 learners in oral dialogic tasks?

Methodology

- **Participants:**
  - n=18 intermediate adult Spanish L2 learners from two intact classes
- **Tasks:**
  - 2 doctor-patient role plays (simple & complex)
    (designed based on needs analysis for intermediate Spanish learners)
  - **Complexity**
    +intentional reasoning
    - Doctors had to justify diagnosis & treatments
    - Patients had to give reasons for their illnesses

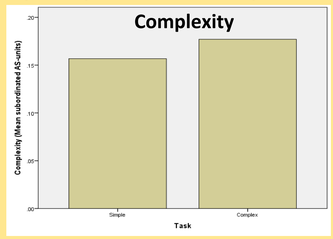
    -planning time
    - Simple group: 5 minutes planning time
    - Complex group: no planning time
  - **Analysis** (following Foster, Tonkyn & Wigglesworth, 2000)
  - **Speech unit = AS-unit**
    - **Syntactic complexity:** Number of subordination clauses per AS-unit
    - **Accuracy:** Total error-free AS-units
    - **Fluency:** Number of words per AS-unit

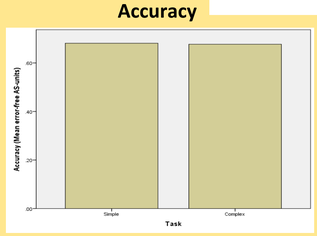
Speech examples (AS-units)	Coding
Pues pienso que tienes el gripe	complex syntax, incorrect, 6 words
Estoy cansada todo el tiempo y también me duele el cuerpo	simple syntax, correct, 11 words
Yo espero que esté bien	complex syntax, correct, 5 words
Garganta está, está en hinchado	simple syntax, incorrect, 5 words

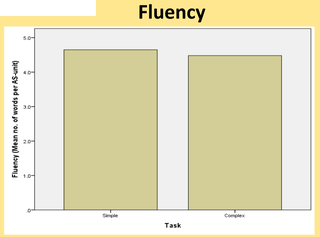
Results

- No significant effects of complexity on CAF
- Slightly more complexity in complex task

- Complexity: Simple 15% vs. Complex 18%
- Accuracy: Simple 68% vs. Complex: 67%
- Fluency: Simple 4.65 vs. Complex: 4.48







Discussion

- Results do not align with Cognition Hypothesis for oral dialogic tasks
- Accuracy & Fluency essentially unaffected
- Slightly more syntactic complexity in complex task

- **Fluency**
  - Perhaps online planning time allowed in oral dialogic tasks led to more fluency (Tavakoli & Foster, 2008)
  - This may have trumped the complex dimension of the task that would normally lead to less fluency

- **Accuracy**
  - Task complexity did not increase accuracy as hypothesis predicts
    - Possible trade-off effect (Foster & Skehan, 2009)
      - Complexity & accuracy tend to compete for learners' resources
    - **Concords with Nuevo (2006)**
      - Increased task complexity (+reasoning demands) did not affect accuracy compared to simple task

- **Complexity**
  - Less syntactic complexity predicted in dialogic complex tasks due to more interaction/turn taking & interruptions (Robinson, 2001)
  - However current study contradicts this
    - Interactive nature of these tasks did not impede ability of a complex task to elicit more complex speech (which the hypothesis predicts for monologic tasks)
  - Increasing complexity along resource-directing (+intentional reasoning) & dispersing (-planning time) may result in less complexity (Robinson , 2001)
  - However this was not the case in this study (must be further explored
    → Could be due to possible task repetition effect
    - Learners familiar with content and procedure when completing second more complex task

Limitations & Future Directions

- Possibility of task repetition effect
- Need to test two variables separately (intentional reasoning & planning time)
- May be individual difference variation
- Need to examine:
  - Different proficiency levels & more learners
  - Specific structures
  - Different tasks
  - More measures of CAF