Reconceptualizing the structures underlying academic language learning in CLIL classrooms

Thomas Somers

Universidad Autónoma de Madrid
thomas.somers@uam.es
“Academic Language”

Cognitive demand and context embeddedness (Cummins 2000)

— Is there any truth to “decontextualized” language?
— Where does cognitive demand reside? In language, in cognitive processes, or both?

Breaking down academic language

— School Navigational Language & Curriculum Content Language (Bailey & Heritage 2008)
— Regulative register & instructional register (Christie 2002)
— Foundational Language Knowledge & Essential Academic Language (Scarcella 2008)

Academic discourse functions

— “Academic functions” (Cummins 2000): application, analysis, synthesis, evaluation, …
— “Academic language functions” (Bailey et al.): informing, explaining, persuading, …
— “Cognitive discourse functions” (Dalton-Puffer 2013, 2014): describe, explore, explain, …

Academic genres

— “staged, goal oriented social processes. Staged, because it usually takes us more than one step to reach our goals; goal oriented because we feel frustrated if we don’t accomplish the final steps (...); social because writers shape their texts for readers of particular kinds” (Martin & Rose 2008: 6)
— E.g. Martin (1990), Veel (1997), Christie et al. (1990), Coffin (1996), …
— Procedure, Historical recount, Exposition, Taxonomic report, Causal explanation, …
The “logical problem” of academic language learning

But the distinctive character of a register is very hard to pin down, and this for two reasons:

first, what distinguishes one register from another is a matter of *probabilities* rather than certainties — certain *patterns* occur more frequently than elsewhere, others less often;

and second, many of these features have to do with *grammar* [lexicogrammar] rather than vocabulary, and grammar [lexicogrammar] is much less obvious to the language user.

*We notice words; they spring to our attention very easily. It is much harder to notice [lexico]grammatical patterns*”

(Halliday 1986, 299)
Usage-Based Linguistics

— Umbrella term (Langacker e.g. 1991, 2000; Tomasello 2003; Barlow & Kemmer 2000).

— A theory of language rooted in language users’ needs as communicators.

— Linguistic knowledge and language development are grounded in the concrete experience of real usage events (i.e. ‘local’).

— Symbolic unit: form-meaning pairings (from concrete formulas to abstract schematic templates) called ‘constructions’.

— Language knowledge: a structured inventory of these symbolic units.

— Language is learnt on a pattern-by-pattern basis in interaction (sensitive to frequency of usage).

— Conventionalized constructions become entrenched as language knowledge.
Put it on the table

Put it on the table

Put it on the table

“Put it on the table”

Put it on the desk

Put it in the bag

Put it on the bed

Put it in the trash

Put it in the fridge

“Put it L”

Set it on the table

“V it L”

Put me on the way (to…)

“V O L”

(example from Ellis 2002)
Usage-Based Linguistics

— Presupposes an inherent and intimate relation between linguistic structures and discourse.

— Constructions are *abstracted from usage events*, retaining as part of their value any recurring facet of the interactive and *discourse context*.

— An expression is produced and understood with respect to a presupposed discourse context, which shapes and supports its *interpretation*.

— Each such event consists of a *comprehensive conceptualization*, comprising the interlocutors' apprehension of *their interactive circumstances* and the very discourse they are engaged in.

— When associated with particular elements, they amount to *discourse expectations* engendered by those elements ("contingencies", Lemke 1990)
“What is ‘with’?”
An example from the CLIL classroom

— 1 class session
— Students: Spanish L1
— Spain, Autonomous Community of Madrid
— 4th year primary
— Topic: the animal kingdom – the cycle of the frog
Excerpt 1 – quiz time (I)

TCH    Ok, ... so the next one is “how are reptiles born?” Who knows this? Ana...

Ana    From eh.. reptiles born from eggs

TCH    Reptiles are born from eggs. Remember, you had to answer it at home. Next one. How do reptiles breathe?((she writes it down on the blackboard))

CHI    Reptiles breathe from ... lungs

TCH    From lungs ok? Next question.
Excerpt 2 – revising the cycle of the frog (one student)

Rocío  Then, when... when they... are born from eggs they.. make a tail

Rocío  And then the tail becomes shorter and... and they breathe from \langle x...x\rangle, they breathe from lungs

TCH   From lungs, ok.
Excerpt 3 – underlining key phrases in students’ notes

TCH Yes. And then we jump and ... ((she starts counting)) one, two, three, four, five, six, seven, in the eighth word:

   breathes with lungs and still has out his tail.

Ok? And then the last sentence, we underline it completely

CHI Underline?

TCH The whole sentence. The adult frog breathes from lungs and has no tail, it has been absorbed by the body. Ok?
Excerpt 4 – quiz time (II)

*TCH*  How are reptiles born? Ok? Elena

*Elena*  Eh.. eh... reptiles are **born from** eggs

*TCH*  They’re **born from** eggs. Very good. Ok... How do marine mammals breathe? Enrique?

*Enrique*  Marine mammals **breathe from** from... lungs

*TCH*  Ok. **With their lungs**. Very good. Ok, next group

*CHI*  **What... what is “WITH”?**

*TCH*  With? ... With...(!) ‘With the pencil’ ((makes a writing gesture)) With the lungs. Do you understand that?
Usage-Based Linguistics

— A construction can correspond to an entire series of usage events constituting a *discourse sequence*.

— A *unified approach* is thus adopted for lexical items, grammatical constructions, and discourse patterns of any size.

— Being abstracted from usage events, a construction resides in a *schematized pattern of action* carried out by the interlocutors, each of whom apprehends it from their own perspective.

— “Classroom education, to a very large degree, is talk: it is the social use of language to enact *regular activity structures* and to share systems of meaning among teachers and students” (Lemke 1985).

— “All social cooperation is based on participants sharing *a common sense of the structure of the activity*: of what’s happening, what the options are for what comes next, and who is supposed to do what” (Lemke 1990, 4).
The “usage event” as “context of situation”

— The “context of situation” can be expressed in terms of three variables:
  — FIELD: the ‘design’ (Hasan 1999) of the verbal action
  — TENOR: the prosodic facilitation of relation-based sub-contexts (Hasan 1999) as related to appraisal (Martin & Rose 2007)
  — MODE: the extent to which the verbal action is embedded within the ‘immediate material situation’ (Hasan 2009)

— “the activity (i.e., field) is constituted by verbal action(s) in the sense that there would be no activity for linguistics to analyse if there were no action of speaking” (Hasan 1999, 276)

— “The most important concept relevant to field is action: what is being done. Everything else in field may be seen as an elaboration of this concept” (Hasan 1999, 274).
“A debate”

— 1 class session
— Students: Spanish L1
— Spain, Autonomous Community of Madrid
— 1st year secondary
— Topic: *The War of the Castilian Succession, 1474-*
<table>
<thead>
<tr>
<th>Diego</th>
<th>I think that Joanna should be the queen because she was the daughter of Henry IV and eh Isabella was only the wife of the eh of Henry’s brother and he and she hasn’t had anything related with the crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alexandra</td>
<td>Eh I think that eh Isabella eh will be a better queen because she she knows more about the decisions that are better for the for the kingdom and also because she is married with the king of Aragon, and if they join the the kingdom we have more power and will will be good for our future.</td>
</tr>
<tr>
<td>Carlos</td>
<td>But eh I think ehm eh Isabella has nothing related with the crown, so... wha- why does she eh going to the queen?</td>
</tr>
</tbody>
</table>
Rocío: But we don’t know if eh Joanna was the real eh daughter of Henry IV, no? Because if they don’t know if she was his daughter... We don’t know if Joanna was the real daughter of Henry so we can’t say that she is the heir.

Carlos: Also eh we don’t know that eh Joanna was the daughter of Beltrán.

Rocío: And we don’t know if if Joanna was the daughter of Henry, so... we can’t say that.

Nerea: I think that maybe maybe Isabella invented that Joanna was the daughter of Beltrán de la Cueva because she was very ambitious and she was and she wanted that eh and wanted to... rule the town and only her brother or she could rule the town.
Elisabet: Yeah, I think that Joanna should be the queen because if she wasn’t the real heir of the throne eh she wouldn’t fight for the throne because it’s something a little bit stupid because if eh she wasn’t the real heir maybe she let Isabella be the queen. I think.

Alexandra: First, I don’t think that eh Joanna knows that from who is the daughter, but if I was her I won’t let Isabella eh be the queen because if more power. But I think that although if it was invented or not, Isabella too for a good reason that is to the kingdom continue expanding into really a great kingdom, and have territories, and to maintain ... with power.

Marco: Eh I think that w- it can’t be proved that Joanna was eh the daughter of the lover of the queen, but eh I think that eh if she don’t couldn’t be the queen, was for something.
Sonia   And eh **what Elisabet said** that is a stupid thing to go for the eh rule the kingdom, that if you were a king you have adva- eh the person that more privilege have in the kingdom.

Alexandra Eh **I agree with Sonia because** maybe she she was like the more with advantages because she has all the crown of Aragon eh supporting him her, and she was like... eh has like, she was an ambitious woman, and she was like, how more power and all those things. And **I think that** Joanna was the eh Joanna has to be the queen because eh winning the eh the crown that m- that means that, that, no... that demonstrates to Isabella that she cannot have all the things that she eh have to do to make...

Silvia   Eh **I agree with Sonia and Alexandra because** if Joanna wasn’t... eh going to be the queen, well, if she wasn’t the real daughter of Henry she wouldn’t eh go for the throne because she had she had to have any reason, because if not it’s a stupid thing. And also if she was the queen, she would have trade with Portugal and we’ll gain land and then we’ll solve everything with Isabella. So eh Spain will, the Iberian peninsula would be more united, and it would be one kingdom, so it was a bigger territory.

Elisabet   Hm, **about what you were saying** of expanding territory, we know now that she expand the territory and she get the Iberian peninsula united. **But** in that moment, anybody knows what maybe she’s going to do.

Ester    **I don’t agree with Elisabet because** eh because eh she said that it was also good that eh Portugal and Castile could join like Castile and Aragon could join. **But** in that moment eh Aragon had more territories. So if Castile joined with Aragon because of Isabella, they immediately have more power. But if they joined with Portugal, Portugal eh will have to spend will eh pass more time until Portugal gets the eh the territory of Aragon.
“Verbal action” as a taxonomy of “activity structures”

— Allows us to represent within one single system network
  1) the permeability of field, tenor, and mode,
  2) and their generic contextual configurations realized as different academic activity structures/cognitive discourse function/academic language functions.

— Clarifies how different activity structures relate to each other in terms of field-tenor-mode, where
  — FIELD: the ‘design’ (Hasan 1999) of the verbal action
  — TENOR: the prosodic facilitation of relation-based sub-contexts (Hasan 1999) as related to appraisal (Martin & Rose 2007)
  — MODE: the extent to which the verbal action is embedded within the ‘immediate material situation’ (Hasan 2009)

“Activity structures” as “constructions”

— Adopting a usage-based approach allows us to view the distance between lexis and lexicogrammatical patterns and school genres as one bridged, or rather, unified by *schematic constructions*.

— Constructions at different levels of schematicity/abstraction, then, are the *units of language learning*.

— Academic language proficiency consists in the accumulation of these units as *interactional resources and routines* ...

— ... as they are frequently used in the classroom and thus ‘*institutionalised*’ in the speech community of that (discipline-specific) classroom.
“Activity structures” as “constructions”

— Students learn from the usage they experience

— Need to pay attention to the social, interactional language learning environment in terms of the usage event

— Need to look at teacher-student and student-student interaction as a whole

— Linguistic knowledge, language development, and interaction are not independent from one another but are two sides of interactional experience.

— Learning happens, not in an interactional vacuum, but in a real world where interaction matters as more than a site for information exchange, but as a social environment for emergent language knowledge.
Thank you for your attention!