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ROYAL DANISH DEFENCE LANGUAGE ACADEMY

"Language under pressure"
Interagency Language Roundtable
December 2021

AGENDA

1. My approach to "Language under pressure"
2. NATO: English as a foreign language
3. Language field observations
4. Observations linked with existing body of research
5. Mitigation through education, training and amendment of doctrine



Unclassified

"LANGUAGE UNDER PRESSURE": MY APPROACH

Academic approach: involves data collection and analysis from the closest I could get to real-life situations involving significant pressure

Practical approach: I am a teacher aiming to translate my research into skills training with an operative effect in the future work lives of my officer cadets

Practical approach (longer term): integrating research results on language use in operative contexts within SOPs and doctrine

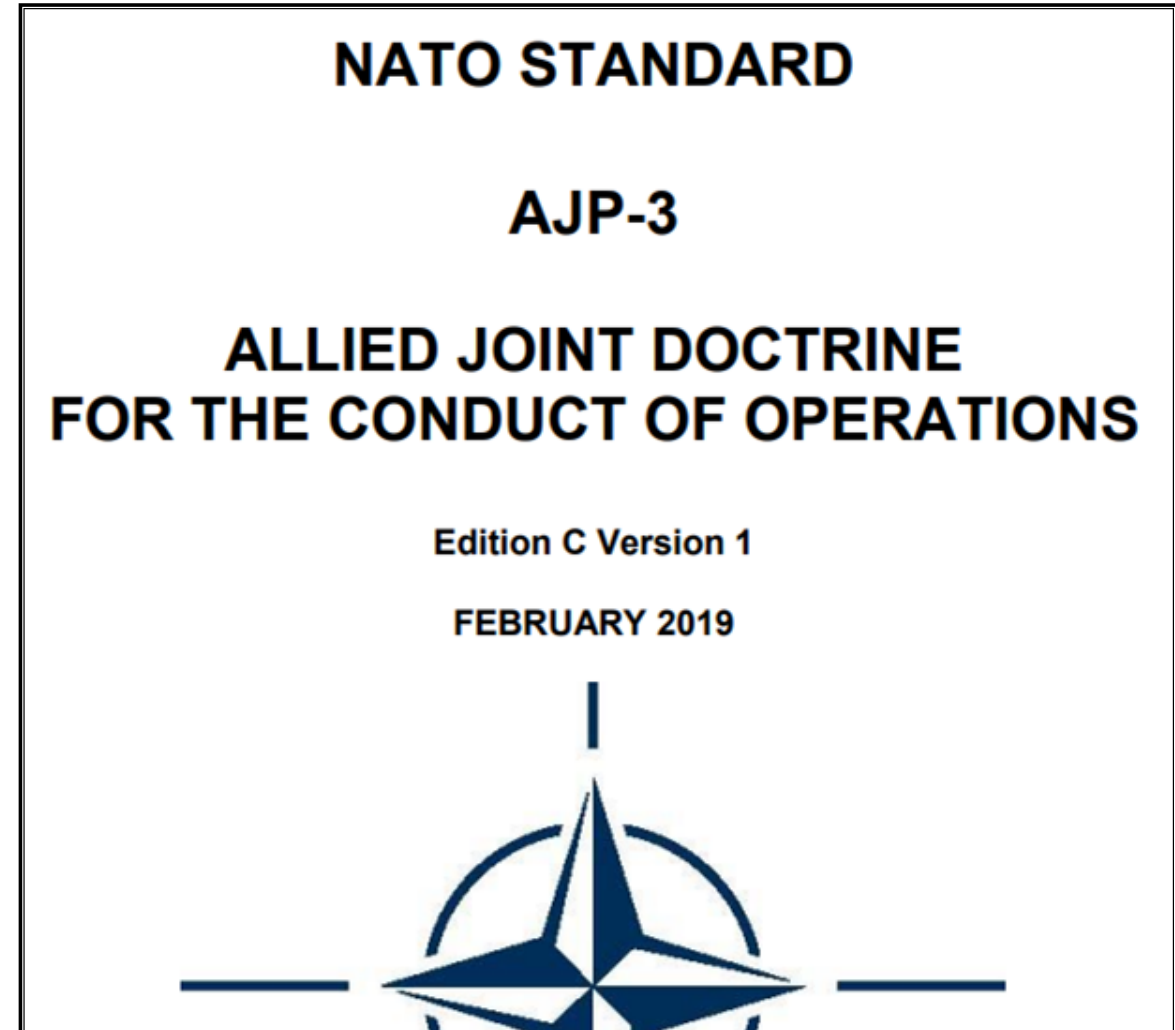
WHAT DID THE STUDY ARISE FROM?

Some simple figures:

NATO doctrine mentions
"communication(s)" 83 times and
"English" once.

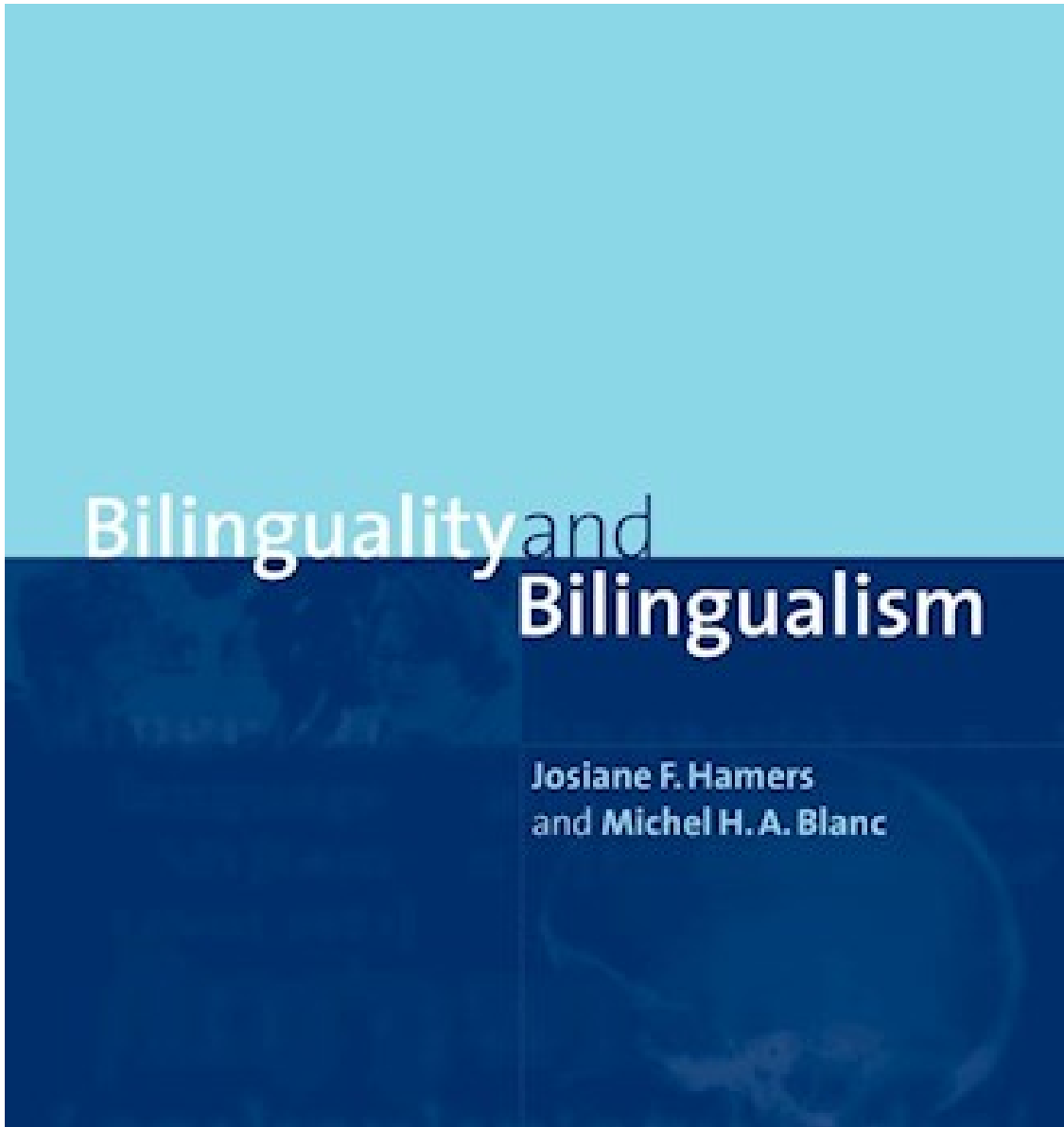
Problem:

There is no foreign language focus
in NATO doctrine





BILINGUALITY



COMMUNICATION IN THE ARMED FORCES

Classic stressors:

1. Noise (human voice, PA system, whistles, and sounds from external ground, air or surface attacks),
2. Multi-tasking due to concurrent communication taking place via radio, written chat, electronic displays and face-to-face interactions
3. Physical discomfort due to heat and other factors

THEMES

Do the difficult conditions under which we sometimes need to use our foreign language skills – such as in stressful, noisy or challenging environments – negatively affect those skills to a larger extent than they would affect our native language?

If so, why?

What kind of error categories or other language difficulties does this result in?

What can be done to mitigate them?

THE INTER- VS THE INTRA-PERSONAL

The inter-personal perspective

Larger communicative structures and systems



Organisational

The intra-personal perspective

Individual skills and responses to language situations



Affective

METHODOLOGY & DATA COLLECTION

- ❑ One week of observations on a Royal Danish naval vessel in March 2018 during the FOST training program in Plymouth, the UK
- ❑ Danish frigate, approx. size of ship's company: 100
- ❑ Five-pronged, qualitative methodology based on embedded observation and interviews



HYPOTHESIS VS RESULTS



REQUESTS FOR REITERATION

Contributing factors:

1. Multi-tasking
2. Stress
3. Sound-masking and accents
4. Language anxiety

OBSERVATIONS: SHORTENED SENTENCES AND EVASION

Ops-room interaction between officer and searider

Searider: [Asks question]

Officer: "What?"

Searider: [Explains and asks again]

Officer: "No idea", then "No"

➡ A tendency towards short answers with no explanatory follow-up

➡ A tendency towards evasion

OBSERVATIONS: REPETITION/ DELAYED PROCESSING

Searider: "What's that attacking us now?" [with glottal stops]

Repeated three times before the officer replies with one word.

➡ Requests for reiteration

OBSERVATIONS: NON-VERBAL REINFORCEMENT

Searider: "Has it been passed on?"

Officer: "What?"

Searider: "Has it gone out yet?" [gestures]

Officer: "Yes"

OBSERVATIONS: CODE-SWITCHING

Searider:

[Asks a question about the vessel's course, then repeats it]

Officer:

"Om det er North? Oh sorry... erh..."

➡ [Danish/ English code-switching]

WHAT DOES THE RESEARCH SAY ABOUT THE ISSUE?

1. Cognitive load, working memory & stress
2. Accent & sound-masking
3. Language anxiety

1: COGNITIVE LOAD, WORKING MEMORY AND STRESS

Returning to our previous example

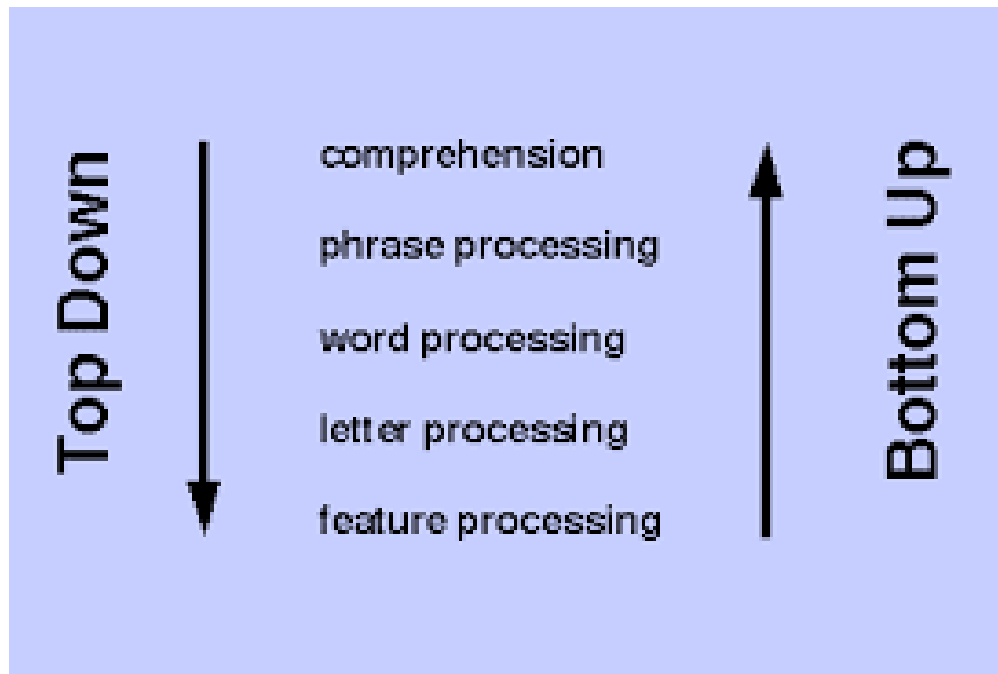
Evasion = lack of ability to apply cognitive resources to the question

Searider: [Asks question]
Officer: "What?"
Searider: [Explains and asks again]
Officer: "No idea", then "No"

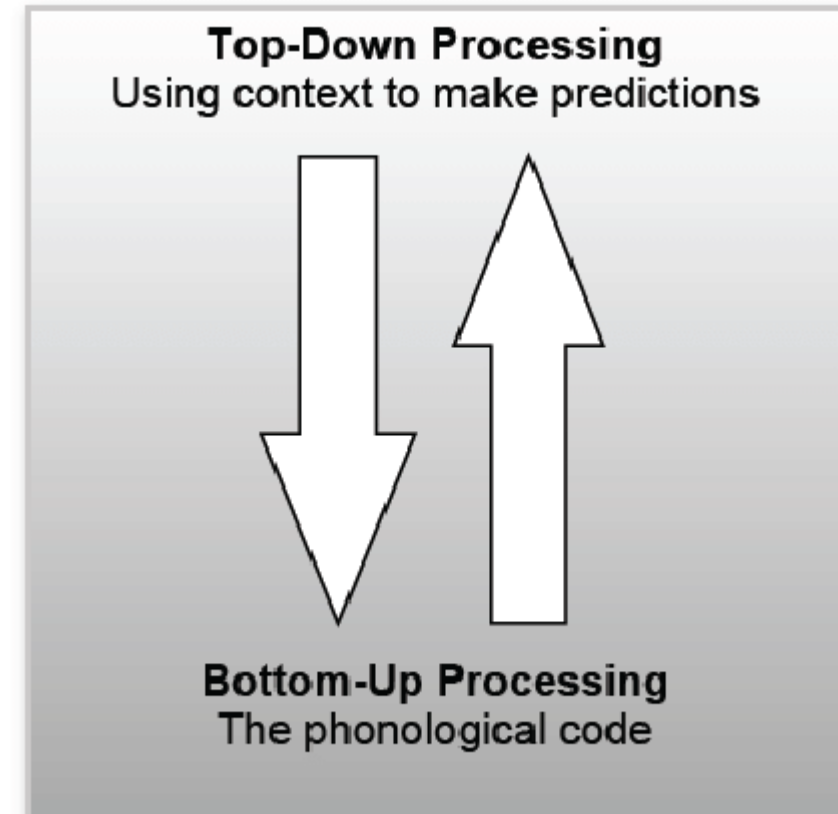
2: ACCENT & SOUND-MASKING

Users of a non-native language rely more on sound cues than meaning (lexical-semantic context) and sound cues are vulnerable to degradation. They are also less effective as a means of predicting meaning to come.

2: ACCENT & SOUND-MASKING



<http://www.aminlimpo.com/2017/01/listening-comprehension-through.html>



https://www.researchgate.net/figure/Top-down-and-bottom-up-processing_fig2_289498264

2: ACCENT & SOUND-MASKING

Searider: "What's that attacking us now?" [with glottal stops]

Repeated three times before the officer replies with one word

Mitigating strategies

Learning attentional control/ directing the mind towards a crucial source of information: listening skills

Learning to shift from acoustic cues to lexical-semantic context

3: LANGUAGE ANXIETY

“Adults typically perceive themselves as reasonably intelligent, socially-adept individuals, sensitive to different socio-cultural mores. These assumptions are rarely challenged when communicating in a native language as it is not usually difficult to understand others or to make oneself understood. However, the situation when learning a foreign language stands in marked contrast. As an individual’s communication attempts will be evaluated according to uncertain or even unknown linguistic and sociocultural standards, second language communication entails risk-taking” (Horwitz: “Preliminary evidence for the reliability and validity of a foreign language anxiety scale”, 1986.)

LEARNING DESIGN & MATERIALS

Four-tiered learning design:

1. Awareness-raising
2. Training specific skill
3. Combining skills into competency in complex, cross-disciplinary training scenario
4. Analytical summary: writing



Exercises:

- Artificially created stress contexts: "language lab"
- Listening skills training online
- Battle Damage Management (BDM)
- written assignment: "lessons identified/ lessons learnt"

CONCLUSION: LANGUAGE TEACHING

Raising the level of English in general will have a mitigating effect on all the issues identified in this paper: 1) multi-tasking, 2) sound-masking and accents, and 3) language anxiety. How large the mitigating effect is cannot be estimated on the basis of this present study.

Targeted training of listening skills under pressure, including accents, noise and multi-tasking will result in increased automaticity within limited tasks or work-functions.

Teaching meta-cognitive strategies will create the ability to adapt listening styles to a given context. Meta-cognitive strategies have been shown to be effective (Vandergrift 2007 and Bloomfield 2010)

CONCLUSION: LESSONS IDENTIFIED AND LESSONS LEARNT (LI/LL)

Creating a process for reiterative evaluation and development of a ship company's language needs within an LI/LL setting would ensure that the intra-personal language skills of the company match the interpersonal communication structures of an operative battleship.

An LI/LL process will also feed into doctrine

CONCLUSION: SOUND-MASKING

Reducing the volume and variety of noise in the operative environment where possible (e.g., in the operations room) will reduce the cognitive strain of L2 listening and enable greater use of lexical-semantic approaches to listening.

CONCLUSION: MENTAL HEALTH

Ensuring that mental restoration and replenishment are prioritized will alleviate ego depletion from cognitive strain

MATERIALS AND LEADS FROM COLLEAGUES

1. If you are interested in either my paper, my learning design or my materials, don't hesitate to get in touch; I'd be happy to share them
2. If you are in possession of research, materials or experience in this field that you would like to share with me, I would be delighted to hear from you

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