



UNIVERSITETET I OSLO

Institutt for litteratur, områdestudier og europeiske språk

TAKE-HOME EXAM AUTUMN 2015 4 pages

ENG4151 – Systemic Functional Grammar

7 – 10 December 2015

Your paper must be submitted in the folder “Innleveringsmappe” (to be found in the Fronter “fellesrom”) **at 14.00 (2 p.m.)** on the submission day. The folder will automatically close at this hour. If you have technical problems, you must contact the exam coordinator immediately.

The first page of your paper must contain:

- Candidate number (4 digits, which you find in StudentWeb), **NOT** your name
- course code and course name
- semester and year

Please use Times New Roman, 12 pt., 1.5 line spacing in the body of the text. In the header you write your candidate number, course code and semester. All pages must be numbered.

When submitting your paper, you must confirm that you are familiar with the University’s rules regarding proper citing of sources. Make sure that you have enough time to read through the declaration (see “Eksamensinnlevering” in Fronter).

Answer Part I and ONE question from Part II. Pass marks are required on both parts.

PART I (30%)

Define and discuss briefly **THREE** of the following sets of terms / concepts. Give references to relevant literature on the subject and illustrate with English examples.

- modal metaphor vs. mood metaphor
- demonstrative vs. comparative reference
- new information and Rheme
- mood type and speech function
- projection in verbal and mental processes

PART II (70%)

Choose **ONE** of the following topics (**a**, **b** or **c**). Give references to relevant literature on the subject and illustrate with examples from the texts provided.

- Write an essay on features of scientific language on the basis of Text 1. Your discussion should include the use of grammatical metaphor, the presence or absence of Actors, Sensors and Sayers, the use of long thematic constituents, and other relevant expressions you may notice in Text 1. Relate your discussion to the field and the tenor of the text.

- b. Give a brief outline of the system of transitivity. Using Text 2, describe the participant roles of Doreen Gow and the tiger and the process types in which they are typically involved. To what extent does the analysis of participant roles contribute to the characterization of the two main participants in Text 2? Illustrate your discussion with relevant examples from the text.
- c. Explain how clauses can be combined in clause complexes and how clause complexes can be linked together in text. Give examples from the texts provided. To what extent are the two texts similar or different in terms of the linking of clauses and clause complexes?

Text 1 – Human Trials Begin on Memory-Improving Brain Implants

By Conor Gaffey 11/4/15 at 1:15 PM, *Newsweek.com*

1 Researchers developing brain implants that could improve long-term memory have
2 begun human trials, *Nature* reported.

3 According to evidence presented at the Society for Neuroscience meeting in
4 Chicago in October, two studies funded by the U.S. military's research wing suggest
5 that implanted electrodes could improve memory.

6 One of the projects—run by the University of Southern California (USC)—
7 involves using electrodes to mimic the process of electrical stimulation in healthy
8 brains through which long-term memories are formed.

9 USC biomedical engineer Dong Song said that the method had been tested on
10 a female subject with epilepsy, who already had electrodes implanted in her brain.
11 Song said it was too soon to say if the subject's long-term memory had improved, but
12 that the team planned to carry out further human trials in the coming months.

13 The research was originally aimed at helping soldiers suffering from brain
14 injuries, which are a common result of the detonation of Improvised Explosive
15 Devices (IEDs.) According to the Brain Trauma Foundation, up to 300,000 veterans of
16 the Iraq war may be suffering from some level of traumatic brain injury, many of
17 which are undiagnosed.

18 However, the studies could also have implications for stroke victims and even
19 those suffering memory loss through the normal aging process. Both studies worked
20 with epileptic subjects who already had electrode implants in their brains.

21 Memory formation is complex and not fully understood, but the
22 hippocampus—a structure in the brain thought to also play a role in emotion—is
23 believed to be central to the process. In short-term memory, the hippocampus is
24 thought to collect sensory information and hold it in a readily accessible format.
25 Recalling this information regularly helps solidify it into the long-term memory. The
26 process by which long-term memories are formed involves an electrical signal
27 traveling from one part of the hippocampus (CA3) to another (CA1).

28 The USC study involved 12 subjects with epilepsy, who were asked to recall

29 pictures 90 seconds after looking at them. Researchers mapped the pattern of
30 electrical signals fired between CA3 and CA1 and used this to develop an algorithm
31 that mimics the natural signaling pattern in healthy brains. The algorithm was
32 accurate 80 percent of the time and would allow for the stimulation of CA1 cells in
33 subjects whose CA3 cells were not firing properly—in other words, those with long-
34 term memory damage.

35 The second study, carried out by neuroscientists at the University of
36 Pennsylvania, recorded brain activity in 28 epileptic subjects while the subjects
37 recalled a list of words. Using this information, the researchers produced an
38 algorithm that could predict whether a person would forget a given word. By limiting
39 electrical stimulation of the brain only to words likely to be forgotten, researchers
40 hypothesized that memory performance could be improved by 140 percent.

Text 2 – the opening of a short story by Irvine Welsh: “Murrayfield (you’re having a laugh”

1 It was a glorious hot summer’s day. Doreen Gow was chopping up spring onions as
2 the tiger nosed into the kitchen. She was aware of its mass from the corner of her
3 weeping eye but at first thought that it was Ross, the neighbour’s large crossbreed
4 dog, who often came in when she was cooking.

5 – I’ve nothing for ye pal, she began, then she turned and faced the animal. It
6 stopped about a foot away from her and looked straight at her, almost petulant in its
7 regard. It had blood staining the white fur around its bottom jaw. Doreen turned
8 back to the chopping board, felt the knife in her grip. Considered the futility of it and
9 just shut her eyes and waited for her life to end. For some reason she thought of her
10 ex-husband Calum, who’d walked out on her two years ago. She wondered how he’d
11 react when he learned she’d been mauled to death by a tiger. Then an almost silent
12 prayer came into her head in an insistent whisper: as if somebody else was saying it
13 on her behalf. The big cat, after a cursory sniff at the back of her bare leg, turned
14 away and ambled back out through the kitchen door.

15 Doreen had felt its hot breath on the skin at the back of her knees, then heard
16 the pads on its feet bomp and its claws click across the tiled kitchen floor. It sounded
17 like a dog, rather than a cat. Was she seeing things, hallucinating in the heat? No, she
18 turned around to watch the tiger’s hackles moving up slowly, languidly as it exited
19 the room. Doreen followed almost robotically, like she was a crude mechanical
20 device created to simulate the tiger’s ambling stride, and pushed the sliding door
21 shut. From behind its frosted glass she could see the outline of the animal as it
22 bounded up the stairs. It seemed as if her hall carpet was ripping under its claws.

23 That tiger needs tae get its claws cut, she thought. That’s terrible, my good

24 carpet.

25 Doreen looked out the back window towards her well-stocked patio garden. It
26 wasn't the biggest in the neighbourhood, but she kept it tidy with various shrubs,
27 potted plants and climbing roses. It was a balmy, hazy day and she struggled to focus
28 in the shimmering light. She noted that her garden shed needed a new coat of
29 creosote. On the yellow-green lawn next door she saw a familiar brown mound, but
30 it was streaked with blood and completely motionless. The tiger had got Ross, and
31 she hadn't heard a thing. Doreen picked up the phone book and dialled Edinburgh
32 Zoo. A girl's voice came on the other end of the line.

33 – Edinburgh Zoo-hoo...

34 – Do youse have a tiger that's escaped? Cause I've got one here, Doreen said,
35 lighting up a cigarette. She'd stopped for a few months but had put on too much
36 weight as a result. The Benson & Hedges diet was the only thing that helped; only a
37 cigarette could stop her pigging out on snacks. Thank god that tiger had just feasted
38 on Ross and had a full belly, otherwise it might have gone for her.

(Note on the text: Doreen's speech mimics a Scottish dialect: *tae* = "to", *ye/youse* = singular/plural of *you*.)

The grades will be published within 3 working weeks after the exam date.

For an explanation of the mark obtained, please contact the exam coordinator, Kristin Berstad (k.m.berstad@ilos.uio.no) within one week after the exam results have been published in StudentWeb. Remember to include your name and candidate number. The examiner will then decide whether to give a written or oral explanation.