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Transitivity Analysis in the Teaching of Scientific and Technical Writing

Tony Brown, May 2017

Earlier Publication

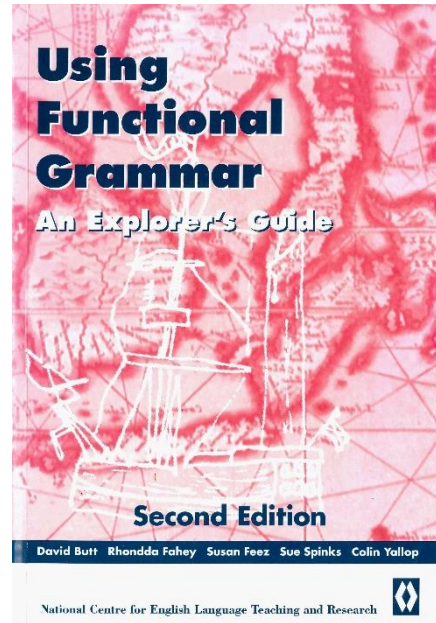
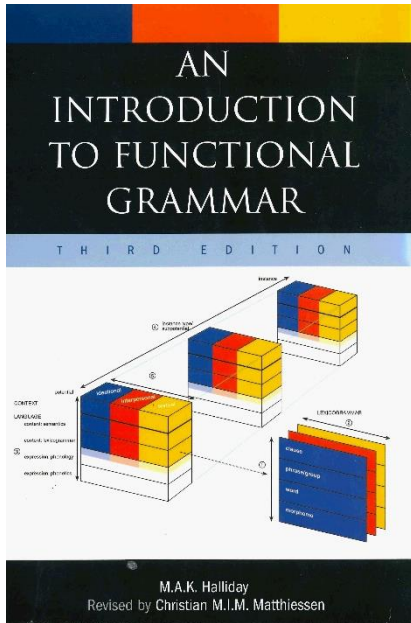
Teaching Advanced Writing Through The Application Of Transitivity And Nominal Grouping As Defined In Systemic Functional Linguistics

Anthony Brown (2015)

Fremdsprachen Lehren und Lernen 44, Heft 1, 2015

Gnutzmann, C., Königs, F.G., and Küster, L. [eds], vol 44, n° 1, 2015, p. 55-67.

Resources



Process

- Participants select a research article from their field
- Select an excerpt of approx 100 – 150 words
- Divide the text excerpt into clauses
- Transitivity analysis (experiential meaning) [experiential, interpersonal, textual]
- Identify Participants, Processes and Circumstances
- Describe clause structure and frequency thereof

Example

There is little quarrel with the general premise here, yet Widdowson's status as an ESL specialist with, perhaps, little knowledge of foreign languages as well as his over-reliance on 'hard' science texts may have led him to jump to a somewhat incautious conclusion. While there are good reasons for positing syntactic and stylistic universals characteristic of scientific discourse – such as passive constructions or nominalisation – such an analysis is far too superficial. A moment's reflection suggests that general cross-linguistic constants of this kind exist in any sub-language. Thus, parodying Widdowson's line of argument, we might say that turn-taking, hesitation and imprecision are universal features of colloquial speech.

Siepmann, 2006

From: Academic Writing and Culture: An Overview of Differences between English, French and German

Clause Split

1. There is little quarrel with the general premise here,
2. yet Widdowson's status as an ESL specialist with, perhaps, little knowledge of foreign languages as well as his over-reliance on 'hard' science texts may have led him
3. to jump to a somewhat incautious conclusion.
4. While there are good reasons for positing syntactic and stylistic universals characteristic of scientific discourse – such as passive constructions or nominalisation –
5. such an analysis is far too superficial.

Clause Split

6. A moment's reflection suggests
7. that general cross-linguistic constants of this kind exist in any sub-language.
8. Thus, parodying Widdowson's line of argument,
9. we might say
10. that turn-taking, hesitation and imprecision are universal features of colloquial speech.

Transitivity

1. There **is** little quarrel with the general premise **here**,
2. **yet** Widdowson's status as an ESL specialist with, perhaps, little knowledge of foreign languages **as well as** his over-reliance on 'hard' science texts **may have led** him
3. **to jump to** a somewhat incautious conclusion.
4. While there **are** good reasons for positing syntactic and stylistic universals characteristic of scientific discourse – such as **passive constructions** or **nominalisation** –
5. **such an analysis is** far too superficial.

Transitivity

6. A moment's reflection suggests
7. that general cross-linguistic constants of this kind exist in any sub-language.
8. Thus, parodying Widdowson's line of argument,
9. we might say
10. that turn-taking, hesitation and imprecision are universal features of colloquial speech.

Results – Participant First Clauses

	SS17	WS16/17	WS15/16	SS15	WS14/15	SS14		Total
Part, Proc, Part	27	23	27	29	27	27		160
Part, Proc, Circ	12	15	28	11	19	28		113
Part, Proc, Part, Circ	18	10	13	4	9			54
Part, Proc	6	2	6	9	10	9		42
Part, Proc, Circ, Part	2		4			1		7
Part, Circ, Proc, Part	1	4	1		1			7
Part, Circ, Proc		1	3		1	2		7
Part, Circ, Proc, Circ			2					2
Part, Circ, Proc, Part, Circ	1							1
							Total	393

Results – Process First Clauses

	SS17	WS16/17	WS15/16	SS15	WS14/15	SS14		Total
Proc, Part	20	4	6	10	6	7		53
Proc, Part, Circ	5		11			3		19
Proc, Circ	1		4	3	3	1		12
Proc	1				1			2
Proc, Circ, Part					1			1
							Total	86

Results – Circumstance First Clauses

	SS17	WS16/17	WS15/16	SS15	WS14/15	SS14		Total
Circ, Part, Proc, Part	8	2	2	2	10			24
Circ, Part, Proc, Circ	4		2	1	3	5		15
Circ, Part, Proc	2		1	1	7	2		13
Circ, Proc, Part	3			1		1		5
Circ, Proc, Part, Circ			1	1		2		4
Circ, Part, Proc, Part, Circ	2				1			3
Circ, Part, Circ, Proc, Circ						1		1
Circ, Part, Circ, Proc, Part, Circ	1							1
Circ, Part, Proc, Circ, Part			1					
							Total	66

Participant Components

- The twelve long torque to yield head bolts
- Deictic, Numerative, Epithet, Classifier, Classifier, Thing
- Bolts of a non-yielding nature
- Thing, Qualifier

Participant structure	Frequency
Thing; Deictic, Thing; Deictic, Numerative, Thing;	79
Thing, Qualifier; Deictic, Thing, Qualifier; Numerative, Thing, Qualifier; Deictic, Numerative, Thing, Qualifier;	65
Classifier, Thing; Deictic, Classifier, Thing; Numerative, Classifier, Thing; Deictic, Numerative, Classifier, Thing;	48
Epithet, Classifier, Thing; Deictic, Epithet, Classifier, Thing; Numerative, Epithet, Classifier, Thing;	27
Epithet, Thing; Deictic, Epithet, Thing; Numerative, Epithet, Thing;	26
Epithet, Thing, Qualifier; Deictic, Epithet, Thing, Qualifier; Numerative, Epithet, Thing, Qualifier;	20
Classifier, Thing, Qualifier; Deictic, Classifier, Thing, Qualifier; Numerative, Classifier, Thing, Qualifier;	18
Epithet, Classifier, Thing, Qualifier; Deictic, Epithet, Classifier, Thing, Qualifier;	3

Old to New

“Antibiotic resistant microorganisms have significantly compromised antibiotic treatment. A large proportion of resistance in Gram-negative bacteria can be attributed to resistance gene cassettes contained within a site-specific recombination system, termed the integron. Mobile cassettes contain genes that confer resistance to nearly every major class of antibiotic, and some disinfectants. New gene cassettes continue to be identified and the sequences of over 60 cassettes are deposited in the GenBank/EMBL databases, as of January 2001. This rapid increase in the identification of gene cassettes has led to the same name being given to two different gene cassettes, or the incorrect naming of gene cassettes. This letter aims to clarify the current nomenclature for the aadA and dfr families of genes.” (White and Rawlinson 2001)

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