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HUMANKIND AS THE IMAGE OF GOD: A COGNITIVE-SEMANTIC APPLICATION OF GENESIS 1:1-2:3 IN THE CLASSROOM¹

ABSTRACT

Searching for new methods to start a narrative dialogue in secondary school classrooms, cognitive semantics was used. The research focused on examining relationships between the exercises ‘exegetical reading’, ‘mystery’ and ‘concepts to work with’ and acquiring and applying the religious concept ‘image of God’ in Gen. 1:1-2:3 and, by means of writing an essay, entering into a narrative dialogue regarding this concept; five lessons in seven classes were analyzed in a qualitative cross-case analysis. During the exercise ‘essay’ the majority of the students entered into a dialogue with the text, while the minority changed their opinion about the question of life ‘Who is humankind?’. Due to the support of the teacher, the students were able to do the exercises.

KEYWORDS

Design research, teaching and learning in the classroom, secondary school, dialogical pedagogy, cognitive semantics

Introduction

‘Madam, have you read the whole Bible?’ Behind this question, which was recently asked in the first author’s class, lay the wonder why someone would read the Bible. The Netherlands is a pluralistic, multireligious, and secularized society. Many pupils within Dutch secondary schools are not raised religiously at home and are not familiar with religion and religious texts. For example, surveys conducted by Van Dijk-Groeneboer in 2017-2018 show that 43% of 2302 secondary school students, states to be ‘no member of church or religion or have a philosophy of life’. Twelve percent call themselves atheist. Thirty-four percent state they are Christian or belong to a specific Christian denomination. Two percent designate themselves as Muslim, 1% as Humanist, 1% as Jew and 1% as Hindu. In addition, this survey and similar research from 2012 show that students who indicate they have a religious background are not always practicing. For example, in 2012, 3% of Catholic students (235 of the total students surveyed) indicated that they read the Bible (very) often, compared to 16% of Protestant students (281 students). Of Muslim pupils (46 in total), 20% read (very) often in the Quran.²

However, this does not mean that young people aren’t interested in religion or don’t have their own questions about life. Nevertheless, for most adolescents, it is hard to

¹ This research is part of a doctoral thesis: Cornelia Jacoba Maria Melisse, “De mens als beeld van God. Een cognitief-semantische studie van Genesis 1:26-27 en van Kolossenzen 1:15; 3:10 en naar het gebruik van Genesis 1:1-2:3 in de klas.” PhD. diss. Tilburg University, Enschede: Ipskamp Printing, 2020.

² Monique van Dijk-Groeneboer and Bernice Brijan, *Kerk uit zicht? Jongeren inspireren!* (Tilburg: Tilburg University, 2013), 4-6, 11, 15. Monique van Dijk-Groeneboer and Briene van Herpen-de Regt, “Jongeren en hun waarden,” *Religie & Samenleving* 14, 2 (2019): 146-150, 155, 157.

understand why religion and its manifestations, such as texts and rituals, can be meaningful for people. The question about the Bible, which was a genuine and sincere question, is an example of this lack of familiarity with religion.

A meaningful biblical text is Genesis 1:1-2:3. Gen. 1:1-2:3 describes the creation of the world by God. In Gen. 1:26 God proposes to make humankind 'in our image (*tzelem*), after our likeness'. Subsequently, he creates humankind 'in his own image' (verse 27). The meaning of the word *tzelem* can be studied by means of Cognitive Grammar³ in relation to exegesis, which can be called cognitive semantics. The term 'cognitive' is used to indicate that language should be regarded as an integral part of a person's ability to know and think.⁴ Our interaction with and in the world we live in, takes place on the basis of the information structures in our thinking ability. Language plays an important role in this process: language ensures that the information we receive, is ordered, processed and interpreted. The meaning of words is determined by their users and depends on their own context, namely the world they live in and how they interpret this world (their cognitive worldview).⁵ A word should be regarded as a mental idea or concept. It is a principle to classify, to make distinctions.⁶

The word *tzelem* in Gen. 1:26-27 can be translated with 'image': humankind has a characteristic which connects him to God; he is his image. The preposition which precedes the word *tzelem* can be translated as 'in the image of God', or 'as the image of God'. In fact, the Genesis text uses the latter interpretation: God does not need an example or model to create man, so humankind is not created in his image, but as his image.⁷ Gen. 1:1-2:3 is part of the Priestly source (P)⁸ and was probably written down during or shortly after the Babylonian exile, i.e. in the same time when the ban on images was imposed.⁹ Within the then cognitive worldview, cult images were considered to be the representation of the deity depicted, in which he/she was really present. The statue represented the physical, anthropomorphic form of the deity.¹⁰ In Israel's polemic against cult statues, man stated that the divine was not present in an image and images were meaningless and without power.¹¹ Gen. 1:26-27 should be understood against this background: the text clarifies that the image of God is no longer formed by a wooden or metal statue, but by humankind: humankind is the image of God.

In religious education (RE), Gen. 1:1-2-3 can be used as example to illustrate why a biblical text can be meaningful. Moreover, the text can be used to discuss the question of life

³ See, for example, J.R. Taylor, *Cognitive Grammar*. Oxford Textbooks in Linguistics; Oxford: Oxford University Press, 2002.

⁴ Dirk Geeraerts and Hubert Cuyckens, "Introducing Cognitive Linguistics," in *The Oxford Handbook of Cognitive Linguistics* (Oxford Handbooks, ed. Hubert Cuyckens and Dirk Geeraerts; Oxford: Oxford University Press, 2007), 3-4.

⁵ E. Van Wolde, *Reframing Biblical Studies: When Language and Text Meet Culture, Cognition and Context* (Winona Lake: Eisenbrauns, 2009), 23, 34-35, 53-54.

⁶ Taylor, *Cognitive Grammar*, 42-43.

⁷ See for example: Ute Neumann-Gorsolke, "Reigning within the limits of creation: A contribution to Old Testament anthropology using the example of Psalm 8, Genesis 1 and related texts" (PhD. diss., Eberhard-Karls-Universität, 2002), 193-196; Ernst Jenni, *The Hebrew Prepositions, Volume 1: The Preposition Beth* (Stuttgart, Berlin, Cologne: W. Kohlhammer, 1992), 71, 79, 84.

⁸ See for example Phyllis A. Bird, "Theological Anthropology in the Hebrew Bible," in: *The Blackwell Companion to the Hebrew Bible* (ed. Leo G. Perdue; Oxford: Blackwell, 2001), 259-261.

⁹ Silvia Schroer, *In Israel gab es Bilder: Nachrichten von darstellender Kunst im Alten Testament* (OBO 74; Freiburg: Universitätsverlag, Göttingen: Vandenhoeck und Ruprecht, 1987), 12-13.

¹⁰ Angelika Berlejung, "Geheimnis und Ereignis: Zur Funktion und Aufgabe der Kultbilder in Mesopotamien", in: *Die Macht der Bilder* (ed. Marie-Theres Wacker and Günter Stemberger; JBTh 13; Neukirchen-Vluyn: Neukirchener, 1999), 109-111.

¹¹ Berlejung, "Geheimnis und Ereignis," 141-142. Jill Middlemas, *The Divine Image: Prophetic Aniconic Rhetoric and Its Contribution to the Aniconism Debate* (FAT 2 Reihe 74; Tübingen: Mohr Siebeck, 2014), 28, 43.

‘Who is humankind?’. In order to reduce the unfamiliarity or foreignness that students possibly experience while reading the text, cognitive semantics can be used to explain the context in which the text is written and how the text can be interpreted.

Design research

Design principles

Design principles can be used as directives to design lessons. Based on theological and pedagogical insights, we have discerned four design principles for RE.¹²

In RE, two of the main approaches are learning about religion and learning from religion.¹³ Which approach is most suitable, depends on, for example, the subject and objective of the particular lesson. Learning about religion is important because, as already been mentioned, most Dutch adolescents don’t have knowledge about religion in itself and about religious traditions. However, this knowledge is needed, among other things, to participate in the pluralistic and multireligious society.¹⁴ By means of learning about religion, students gain more insight in the religious world views of others, which hopefully leads to more understanding and respect for these views. Furthermore, they learn what it means to be religious or to be brought up that way, which challenges them to see the world from a different perspective. The acquisition of religious (meta-)concepts and of religious thinking skills is an example of learning about religion.¹⁵

Learning from religion is aimed at ensuring that students do not merely become acquainted with religious traditions, but (learn to) see the value of these traditions for the development of their own view.¹⁶ Thus; students are considered as active subjects who construct their own world view.¹⁷ Learning from religion requires students to have an involvement, albeit minimal, in their own tradition (learning in¹⁸) which they dare to examine and question. They must also have knowledge of other religious traditions (learning about).¹⁹ Learning from religion can be achieved by reading the life stories of other people in order to

¹² See: Jan van den Akker, “Curriculum Design Research,” in *An Introduction to Educational Design Research* (eds. Tjeerd Pomp en Nienke Nieveen; Enschede: SLO, 2009), 37, 43, 45. Tjeerd Pomp, “Educational Design Research: An Introduction,” in *An Introduction to Educational Design Research* (eds. Tjeerd Pomp en Nienke Nieveen, Enschede: SLO, 2009), 9, 13, 15, 17, 19-20. Susan McKenney, Nienke Nieveen, Jan van den Akker, “Design research from a curriculum perspective,” in *Educational Design Research* (eds. Jan van den Akker et al., London: Routledge, 2006), 72-73.

¹³ See for example: M. Grimmitt, “Religious education and the ideology of pluralism,” *British Journal of Religious Education* 16 (3) (1994): 133-147. M. Grimmitt, *Pedagogies of Religious Education: Case Studies in the Research and Development of Good Pedagogic Practice*. Great Woking: McCrimmons, 2000.

¹⁴ Markus Altena Davidse et al, “Religie en levensbeschouwing: rationale voor een kerncurriculum vo,” *Narhex* 1 (2017): 19.

¹⁵ Paul Vermeer, “Meta-concepts, thinking skills and religious education,” *British Journal of Religious Education* 3 (2012): 333-347.

¹⁶ E.T. Alii, *Godsdienstpedagogiek: Dimensies en spanningsvelden* (Zoetermeer: Meinema, 2009), 111.

¹⁷ Michael Molenda, “Historical Foundations,” in *Handbook of Research on Educational Communications and Technology* (ed. J. Michael Spector, 3rd ed., New York: Lawrence Erlbaum Associates, 2008), 15-16.

¹⁸ See also M. Grimmitt, “Religious education and the ideology of pluralism,” *British Journal of Religious Education* 16 (3) (1994): 133-147. M. Grimmitt, *Pedagogies of Religious Education: Case Studies in the Research and Development of Good Pedagogic Practice*. Great Woking: McCrimmons, 2000.

¹⁹ Bert Roebben, “Interreligieus leren op school: Een tussentijdse godsdienstpedagogische balans,” in *Religieus opvoeden in een multiculturele samenleving* (red. Bert Roebben, Leuven: Davidsfonds, 2000), 94-95. Bert Roebben, *Inclusieve godsdienstpedagogiek. Grondlijnen voor levensbeschouwelijke vorming* (Leuven: Acco, 2015), 63-64.

challenge the students to examine their own story. As a consequence, a narrative dialogue is started.²⁰

This leads to two design principles. Firstly, lessons of RE must be aimed at learning about and/or from religion; depending on the objective of the lesson. Secondly, within learning about religion the acquisition of basic knowledge, religious (meta-)concepts and of religious thinking skills are important. A key element within learning from religion are exercises that aim at entering into a narrative dialogue.

The third design principle relates to how students learn. This can only succeed if the students are motivated and supported by their teacher by means of scaffolding.²¹ We follow the six intervention strategies that are mentioned by Van de Pol, Volman and Beishuizen, namely feedback, hints, instructing, explaining, modelling and questioning.²² Feedback involves the direct evaluation of students' behaviors, whereas hints entail providing clues regarding a given topic (or the deliberate withholding of a complete solution); instructing encompasses requesting a specific action or supplying information so that students understand what to do and how. Likewise, explaining involves providing information concerning how and why. Modeling encompasses demonstrating a behavior for the purpose of imitation; questioning entails prompting students to think, or to request a specific reaction.²³

Based on the revised taxonomy of Bloom, Anderson and Krathwohl, six thinking skills can be distinguished.²⁴ 'Analyse', 'evaluate' and 'create' are higher order thinking skills, whereas 'remember', 'understand' and 'apply' are lower order thinking skills. In RE, all of these skills are important and students should be given opportunities to develop them. For example, learning about religion takes place if students are able to apply religious (meta)concepts in order to understand and reflect on religious phenomena (thinking skills: 'analyse' and 'evaluate'). To enter into a narrative dialogue, higher order thinking skills are indispensable. Students should be open to the stories and visions of others, and must be able to analyse these stories in order to evaluate whether elements of them can enrich their own vision. If this is the case, a renewed vision is created.

Moreover, learning from religion, especially participating in a narrative dialogue, is only possible if adolescents feel safe to examine their own position, to question it or to let it questioned by others, and to communicate about it. A safe learning environment is therefore indispensable and can be regarded as the fourth design principle.

Teaching material, based on Cognitive Grammar

In searching for new methods to start a narrative dialogue in lessons of RE in senior grades of Dutch secondary education,²⁵ we have developed teaching material on Gen. 1:1-2:3, in particular the meaning of Gen. 1:26-27 and the question of life 'Who is humankind?'. Starting

²⁰ Roebben, "Interreligieus leren op school", 94-95. Roebben, *Inclusieve godsdienstpedagogiek*, 63-64.

²¹ See Natascha Kienstra, Monique van Dijk-Groeneboer and Olav Boelens, "Religious-thinking-through using bibliodrama: An empirical study of student learning in classroom teaching," *Religious Education* (2018): 3-4.

²² Janneke van de Pol, Monique Volman, Jos Beishuizen, "Patterns of contingent teaching in teacher-student interaction," *Learning and Instruction* 21 (2011): 51, 56. Janneke van de Pol, Monique Volman, Jos Beishuizen, "Scaffolding in Teacher-Student Interaction: A Decade of Research," *Educational Psychology Review* 22 (2010): 277.

²³ Kienstra, Van Dijk-Groeneboer and Boelens, "Religious-thinking-through using bibliodrama," 2.

²⁴ David R. Krathwohl, "A Revision of Bloom's Taxonomy: An Overview," *Theory into Practice* 41, no. 4 (2002): 212-215.

²⁵ The senior grades of secondary education prepare pupils for studies at a university or a university of applied sciences.

point of this teaching material are the four design principles for RE above mentioned, namely learning about and from religion, the importance of thinking skills and scaffolding, and of a safe learning environment. Starting from these design principles, the teaching material is primarily focused on the acquisition of the religious concept ‘image of God’²⁶ as this emerges in Gen. 1:1-2:3 (learning about religion) and subsequently at the opportunity that students enter into a dialogue with the text (learning from religion). The teaching material includes several exercises in which higher order thinking skills can be reached in a safe learning environment, in which the students are supported by their teacher. Cognitive semantics is used in several ways in the teaching material. In the first place, it is used to define the meaning of Gen. 1:1-2:3 and 1:26-27 in particular. Secondly, by explaining the context in which the users of the text live and speak about humankind as the image of God, the students obtain a better understanding of the word. This can reduce the unfamiliarity experienced when reading the text and result in more sympathy for (the meaning of) the text. The purpose is to create more openness to the text, in order that students will actually enter into a narrative dialogue with the story. Cognitive Grammar introduces the students to the principle of hermeneutics, which can be regarded as an important religious thinking skill. They experience that when they study biblical texts, they automatically interpret these texts on the basis of their cognitive worldview, whereas the biblical text represents the interpretation of the author, based on his cognitive worldview.

Four higher order thinking skills exercises were included in the teaching material that was executed in five lessons. Table 1 provides an overview of the exercises within the lessons, the approach of the exercise, the intervention strategies which can be used and the level of the revised taxonomy of Bloom, Anderson and Krathwohl that can be reached.

Table 1. RE exercises mapped against approach, scaffolding and thinking skills.

Exercise	Lesson	Approach	Scaffolding	Thinking skills
exegetical reading	1 and 2	about	instructing, feedback, hints, questioning	understand and analyse
mystery	3	about	instructing, feedback, hints, explaining	analyse
concepts to work with	4	about and from	instructing, hints, questioning	understand, apply and evaluate
essay	5	from	instructing, feedback, hints, questioning, explaining	evaluate and create

In the exercise ‘exegetical reading’ the students read and interpret Gen. 1:1-2:3 by reading the text, indicating its structure and answering some questions. They acquire a first/preliminary meaning of the concept ‘image of God’. The exercise ‘mystery’ focusses on the question why humankind is called the image of God in the story. The students solve this mystery by arranging cards with information about the historical context in which the story

²⁶ For example, Clive Erricker calls *Tzelem Elokim: in the image of God* a type C concept. These concepts belong to a particular religion. Clive Erricker, *Religious Education: A conceptual and interdisciplinary approach for secondary level* (London, New York: Routledge, 2010), 113, 116.

was written. The expectation was that by means of this exercise the students would experience that if they know more about the context in which the story was written, they could (further) acquire the different meanings of the concept 'image of God'.

The application of the concept 'image of God' and the relating concepts 'prohibition to make graven images and 'worship of images' is being practiced in the exercise 'concepts to work with'. Students are asked to answer a number of questions. These questions relate to forms of contemporary religious practises and our contemporary society. Since the students are asked to give their own opinion in the final question of the exercise, the required thinking skill for this last question is evaluate. Moreover, this question marks the transition from learning about religion to learning from religion.

By means of writing the essay, the students are entering into a narrative dialogue with Gen. 1:1-2:3 regarding the concept 'image of God'. They are given the task to write their version of the creation story, considering the original story. They can adopt, adapt or omit items of the original story and must be able to explain their choices.

Research question

The research question is: what is the relationship between the exercises 'exegetical reading', 'mystery' and 'concepts to work with' (cognitive semantics: Cognitive Grammar in relation to exegesis) and acquiring and applying the religious concept 'image of God' in Gen. 1:1-2:3 (design principle: learning about religion) and, by means of writing an essay, entering into a narrative dialogue regarding this concept (design principle: learning from religion)? In addition to this research question, two supplementary questions are asked, namely: 1. In which way does scaffolding contribute to acquiring and applying the religious concept 'image of God' and to pursuing a narrative dialogue regarding this concept? 2. Which thinking skills are obtained by acquiring and applying the religious concept 'image of God' and pursuing a narrative dialogue regarding this concept?

Method

The developed teaching material has been tested in seven Dutch senior grade classes preparing pupils for studies at a university of applied sciences. To conduct this research, permission has been granted in 2019 by the Ethics Review Board of the Tilburg School of Catholic Theology of Tilburg University. All data were used pseudonymously and the available facilities of Tilburg University are used for the data storage.

The teaching material concludes of five regular fifty-minute lessons. In lessons 2 to 5, the last ten minutes of the lesson are set aside to complete the questionnaires about the executed exercises. A total of thirty-five lessons are taught; by the regular teachers. There are four teachers: three teachers teach two classes each, the fourth teacher the remaining class. Classes range in size from nineteen to thirty students. In total, there are one hundred and seventy-five pupils.

The data consists of separate words and texts²⁷, and are the primary and secondary reflections of the students and the reflections of the observers (e.g. the participating teachers, not executing the lesson they are observing). Since it is studied whether during the lessons the students go through a development from the acquisition of a certain religious concept to the

²⁷ Matthew B. Miles, A. Michael Huberman, Johnny Saldaña, *Qualitative Data Analysis: A Methods Sourcebook* (3d. edition; Thousand Oaks: Sage, 2014), 10-11.

conducting of a narrative dialogue, and the students are compared with each other, the design is a case study.²⁸ Each student is a case and these cases are compared with each other in order to make statements about the possible use of cognitive semantics within RE. From each class six students are selected: two students with the highest grade point average (GPA) for RE, two students whose GPA is average and two students with the lowest GPA. As a consequence, the total number of cases is 42.

Questionnaire

The execution of the exercises can be considered as the primary reflections of the students, the completed questionnaires their secondary one. Students were asked whether they understood Gen. 1:1-2:3 better by indicating the structure of the text and/or by answering questions about the story. Students were also asked whether they were able to answer the questions in the exercises ‘exegetical reading’ and ‘mystery’ about the meanings of the concept ‘image of God’ and whether they were able to apply this concept in the exercise ‘concepts to work with’. Besides, they were asked whether doing the exercises ‘exegetical reading’ and ‘mystery’ resulted in more sympathy for (the meaning) of Gen. 1:1-2:3. Moreover, they were asked whether they entered into a narrative dialogue with the text and whether they changed their opinion about the question ‘who is humankind?’. Finally, they were asked how their teacher supported them in doing the exercises and which thinking skills they obtained in each exercise. Observers were asked whether the students were able to do the exercises ‘exegetical reading’ and ‘mystery’ and as a consequence acquired the meanings of the concept ‘image of God’. Observers were also asked whether the students were able to apply the concept ‘image of God’. Furthermore, they were asked how the teacher supported the students, which thinking skills were reached by the students and how the support of the teacher contributed to this.

Initial analysis: Individual results

Descriptive findings for all 42 participants are available in Table 2 (topics are presented in questionnaire order). According to the table, 30 of 42 students were able to acquire the principle of Cognitive Grammar that the meaning of a word is determined by its users. Furthermore, a large group was able to acquire the different meanings of the concept ‘image of God’ and the related concepts ‘the worship of images’ and ‘the prohibition to make graven images’ fully or partly by executing the exercises ‘exegetical reading’ and/or ‘mystery’. Most of the students were able to apply the obtained concepts correctly to the mentioned religious world-views by doing the exercise ‘concepts to work with’. Part of the students could apply them to our culture. When they were asked to give their own opinion, one student made use of Gen. 1:1-2:3.

Approximately half of the students stated that a better understanding of the creation story was achieved through noting the structure of the text or answering some questions about the story in the exercise ‘exegetical reading’. One third of the students declared to have more sympathy for (the meaning of) the text as a result of doing the exercises. During the exercise ‘essay’ the majority of the students entered into a dialogue with the text. Eleven of 42 students changed their opinion about the question of life ‘Who is humankind?’. The explanation of one

²⁸ See Robert K. Yin, *Case Study Research: Design and Methods* (5th edition; Thousand Oaks: Sage, 2014), 16-17.

of the students shows, however, that he changed his mind about another element of the story. Moreover, of these 11 students, six declared to have entered into a dialogue with the text, whereas five declared they didn't enter into a dialogue.²⁹

Table 2. Descriptive data matrix.

	Variables	students																				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
acquisition CG, concept																						
Exegetical Reading worksheet	Cognitive Grammar	0	1	1	0	1	1	1	1	0	-	1	0	1	1	0	1	1	1	1	1	1
	concept image of God	1	0	-	1	1	0	1	1	-	1	0	-	1	1	1	1	1	1	1	1	0
Exegetical Reading questionnaire	Cognitive Grammar	1--	1	1	1--	0+	-	1	-	1	1#	1	0	1	1	0	1	1	1	1	1	1
	understanding: structure	1	1	0	1	0	-	0	-	1	1	0	1	1	0	0	1	1	0	1	0	1
	understanding: questions	0	1	-	1	1	-	0	-	-	1	0	1#	0	1	0	0	1	0	0	1	0
Mystery worksheet	1-3 meanings of concept	1	0,5	0,5	1	0,5	-	1	1	0,5	1	-	0	1	1	1	0,5	1	1	0	0	0
applying concept																						
Concepts to work with worksheet	1-3 applying concept	1	1	-	1	1	-	-	1	1	1	-	-	1	1	1	1	1	1	0,5	0,5	1
	applying our culture	1	1	-	1	0	-	-	1	1	1	-	-	1	1	1	1	1	1	0	0	0
	using Gen. 1:1-2:3	0	0	-	0	0	-	-	0	0	1	-	-	0	0	-	-	0	0	-	-	0
narrative dialogue																						
Essay	describing creation	1	1	1	1	1	-	1	-	1	-	1	1	-	1	1	1	1	-	1	1	1
	describing creation humankind	1	1	0	1	1	-	1	-	1	-	1	1	-	1	0	1	1	1	-	1	1
Essay questionnaire	understanding by ER, M	0	0	1	1	1	-	0	-	0	0	0	1	1	1	0	1	0	-	1	1	0
	entering dialogue	1	1	1	1	1	-	0	-	1	1	1	0	1	1	0*	1	0	-	0	0	1
	change of opinion	0	0	0	1	1	-	0	-	1	1	0	1	0	0	0	0	0	-	1	1	0
students																						
	Variables	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
acquisition CG, concept																						
Exegetical Reading (ER) worksheet	Cognitive Grammar	1	1	1	1	1	1	-	-	1	1	0	0	1	1	1	1	0	0	1	1	1
	concept image of God	1	0	1	1	1	1	1	-	1	1	0	-	-	1	1	1	1	-	-	1	0
Exegetical Reading questionnaire	Cognitive Grammar	1	-	1	1	0+	1	1	1#	0#	0+	0+	0	0	-	1	1	0+	-	-	1	-
	understanding: structure	1	-	1	1	1	0	0	-	0	1	1	1	1	-	1	0	0	-	-	1	-
	understanding: questions	1	-	1	1	1	1	1	1	0	1	0	0	0	-	1	0	1	-	-	1	-
Mystery (M) worksheet	1-3 meanings of concept	1	-	0,5	1	1	1	1	0,5	0,5	1	0,5	0,5	0,5	1	0,5	1	1	-	-	1	-
applying concept																						
Concepts to work with worksheet	1-3 applying concept	1	-	0,5	1	1	1	1	1	0,5	1	-	0,5	1	0,5	1	1	1	1	1	1	1
	applying our culture	1	-	0	0	1	1	1	1	0	1	-	0	0	1	1	1	0	-	0	1	1
	using Gen. 1:1-2:3	0	-	-	0	0	0	0	-	0	0	-	0	0	0	0	-	0	-	0	0	-
narrative dialogue																						
Essay	describing creation	0	1	1	1	1	1	1	-	1	1	1	0	1	1	-	-	0	-	1	1	1
	describing creation humankind	1	1	1	1	1	1	1	-	1	1	1	1	0	-	-	1	-	-	1	1	1
Essay questionnaire	understanding by ER, M	0	0	0	-	0	0	1	-	0	0	0	1	0	-	0	-	0	-	1	1	0
	entering dialogue	1	0	1	0	0*	1	0	-	1	1	1	0	-	1	-	-	0	-	0	1	1
	change of opinion	0	0	0	1	1	0	0	-	1*	1	0	0	-	0	-	0	-	0	-	0	0

Note: - = Variable is missing; * = Discrepancy answer closed question and explanatory note of the student; # = Student has answered question about (part of the) exercise he did not do; + = Student states he did not understand the principle of Cognitive Grammar, worksheet exercise shows otherwise; -- = Student states he understands the principle of Cognitive Grammar, worksheet exercise shows otherwise.

Comparative case study

As said before, 11 of the 42 students changed their opinion about the question of life ‘Who is humankind?’.³⁰ Ten out of these 11 students were able to acquire the concept ‘image of God’ in the exercise ‘exegetical reading’.³¹ Six of them outlined that both indicating the structure of the text and answering the questions, led to a better understanding of the text.³² The total number of students who hold this opinion was 12, which means that half of them have changed their opinion about the question ‘Who is humankind?’. Eight out of 11 students were able to acquire one or several meanings of the concept ‘image of God’ by doing the exercise ‘mystery’.

Five out of 11 students stated that they have gained more sympathy for (the meaning of) the creation story. The total number of students who gained more sympathy was 13, which means that a relatively large group who has more sympathy, has changed its opinion.

²⁹ However, one of these five students clarified that he has thought about the story. In the questionnaire, entering into a dialogue is described as thinking about the story.

³⁰ As explained before, one student changed his mind about another element of the story.

³¹ The remaining student noted the concept after doing the exercise. The acquisition of the concept took place later.

³² However, one of the students didn't answer the questions about the text.

However, two out of 11 students declared that they gained a better understanding of the text by doing the exercise ‘exegetical reading’ and also gained more sympathy for (the meaning of) the text by doing the exercises ‘exegetical reading’ and ‘mystery’.

Results supplementary questions

Several higher order thinking skills could be reached by doing the exercises. Table 3 presents an overview of these thinking skills and which were actually reached.

Table 3. Exercises mapped against intended and attained highest thinking skills

Exercise	Highest thinking skill which could be reached	Results
Exegetical reading	analyse	Understand: 25 v/d 42 Analyse: 16 v/d 42
Mystery	analyse	Analyse: 35 v/d 42
Concepts to work with	evaluate	Evaluate: 23 v/d 42
Essay	create	Create: 30 v/d 42

The expected thinking skills could actually be attained by doing the exercises and almost all the students reached that specific thinking skill that was required in order to do the exercise properly. Only with the exercises 'mystery' and 'essay' some pupils didn't achieve the relevant thinking skill. The students who indicated that by doing the exercises 'exegetical reading' and 'mystery' they gained more sympathy for (the meaning of) the creation story, always achieved the thinking skill needed to do the exercise well. This also includes the pupils who indicated that their opinion on the question ‘Who is humankind?’ has changed. In both cases there is one exception, as there was one pupil who didn't come to an analysis during the exercise ‘mystery’.

Due to the support of the teacher, the students were able to do the exercises. Some intervention strategies were used more often than others by the teachers, and some strategies were used specifically for certain exercises. It is also striking that 11 of the 18 observed lessons involved scaffolds that had not been established prior to the study. In 10 cases this concerned: student questioning. There is, however, no relation between the scaffolds offered and gaining more understanding of (the meaning of) the text and/or revising one's own opinion. The pupils to whom one or both of these aspects apply, received no more or less support than the other pupils.

It was also investigated how the scaffolds contributed to the highest thinking skill reached. With the exercise ‘exegetical reading’ the students understood the text better, because the teacher asked questions to the students and/or answered questions from the students. This enabled the students to analyse the text more effectively. Teacher's support was necessary for the exercise 'mystery' to make the step from categorising the given information to formulating an answer. There were also students who needed support with categorising. We conclude that the teacher's help was necessary to be able to solve the mystery and reach the level of analysis.

Discussion and conclusions

It is noteworthy that, despite the attempt to discuss the historical and cultural context of the creation story, a number of students, according to the completed questionnaires, don't see the text as a particular human product from a particular time, but as a text to be taken literally. Thus, they may not be familiar with the value religious texts, to which we referred to in our introduction. This seems to correspond with the second stage of faith that James Fowler distinguishes. At this stage, referred to as Mythic-Literal Faith, stories and symbols are taken literally.³³ This can explain why these students don't enter into a dialogue with the text on their own: they reject it in advance, as they don't see its value.

Since the exercise 'essay' was designed to bring about a narrative dialogue, most students actually entered into a dialogue. Therefore, learning from religion was achieved. However, the students didn't start this dialogue on their own and the text didn't exhort to reflect upon its meaning, although the students had read and discussed the text extensively in the exercises that were done earlier. Thus, there seems to be no relation between the questions of life of the students and the possible answers given by the text. Nor did any student indicate that reading the text has led to any new questions. This contradicts Roebben's conviction that there is not only a relation between the questions asked by the students and the answers given to these questions by the religious text, but that new questions and new spiritual experiences also arise in young people when they read a religious text.³⁴ A possible explanation for this could be that some students didn't have enough comprehension for the text; since approximately one third of the students had more sympathy for (the meaning of) the text due to the exercises 'exegetical reading' and 'mystery'.

In the questionnaires, two students refer to their religious background, Christianity and Islam, respectively. Because of their affinity with religious texts, one might expect more sympathy for the text from these students. However, this is not the case. Furthermore, both students kept their own vision. The student with a Christian background replied to the question whether the exercises had led to more sympathy: "I am a believer, my father is a pastor and theologian, so my view of Bible in general is fixed." The student entered into a dialogue with the text and noted: "I have changed almost nothing, because that is not allowed by my religion, I have just transcribed the story in modern language." The student who designated herself as Muslim, didn't gain more sympathy for (the meaning of) the creation story: "I didn't learn many new things." Instead of writing an essay, she submitted the creation story from her own tradition, while stating: "I have chosen this creation story because I am a Muslim myself and I would rather not make up a creation story myself. So this is the creation story that I believe in myself." This is in line with one of the perspectives distinguished by Carl Sterkens in relation to interreligious learning, namely auto-interpretation of a religious tradition other than one's own.³⁵

Based on the results, the conclusion can be drawn that, since a large group of students was able to acquire the principle of Cognitive Grammar, the principle of hermeneutics as religious thinking skill can be addressed in RE. Furthermore, the concept 'image of God' and the

³³ Cornelia Gijsberta Maria Vergouwen, "Een hemelsbrede gelijkenis: Geloofsopvoeding in godsdienstsociologisch perspectief" (proefschrift Katholieke Universiteit Nijmegen, Kampen: Kok, 2001), 86-88.

³⁴ Roebben, *Inclusieve godsdienstpedagogiek*, 34, 42, 43.

³⁵ Carl Sterkens, "Multireligiositeit als voorwaarde voor effectief interreligieus onderwijs? Empirische resultaten vanuit een sociaal-constructivistisch perspectief," in *Interreligieus leren op de basisschool: Perspectieven op vakontwikkeling en schoolontwikkeling* (red. Chris A.M. Hermans, Budel: Damon, 2005), 70.

related concepts ‘the worship of images’ and ‘the prohibition to make graven images’ are suitable to discuss in class.

In the exercise ‘exegetical reading’ students have interpreted the creation story using exegetical principles. There is a positive influence of the use of exegesis here, since about half of the students stated that indicating the structure of the text or making questions about the text, resulted in a better understanding of the story. However, 12 students rated both elements as positive. It is unclear why this number of students is relatively small. The expectation was that by means of cognitive semantics the students would have more sympathy for (the meaning of) the text and thus would enter into a dialogue with the text more easily.

Approximately one third of the students declared to have more sympathy for the text. On the one hand this result is disappointing as we would have liked more sympathy of all of the students, but on the other hand it can be argued that the principle of *Cognitive Grammar* is a religious thinking skill that can be of importance in the context of learning from religion.

As said before, 11 of 42 students changed their opinion about the question of life ‘Who is humankind?’.³⁶ Twelve students declared that both indicating the structure of the text and answering the questions, led to a better understanding of the text.³⁷ Of six of them, their opinion about the question ‘Who is humankind?’ has been changed. Moreover, 13 students claimed to have more sympathy for (the meaning of) the text by doing the exercises. Five of them have changed their opinion about the question ‘Who is humankind?’. This suggests coherence, as we see that changing one’s mind about the question ‘Who is humankind?’ is relatively more often preceded by the opinion that through exegesis one has a better understanding of the creation story and/or has more sympathy for (the meaning of) the text as a result of cognitive semantics. However, there is a contradiction, since five out of 11 students outlined that they didn’t enter into a dialogue into the text, although their exercise ‘essay’ shows otherwise. Why they have indicated this, can’t be explained by the data available.

This empirical research shows that due to implemented exercises, especially developed for in the classroom, a biblical text can be meaningful for adolescents. In line with Gruber³⁸ we corroborate that instead of searching for the one correct interpretation, a spatial rereading of the reception history of *Dei Locis Theologicis* offers an analytic tool to show that “[ecclesial] practices are at work everywhere”.³⁹

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³⁶ As explained before, one student changed his mind about another element of the story.

³⁷ As said before, one of the students didn’t answer the questions about the text.

³⁸ See Judith Gruber, “The maps and tours of theological knowledge: reading Melchior Cano’s *Dei Locis Theologicis* after the spatial turn,” in: *Contested spaces, common ground. Space and power structures in contemporary multireligious societies* (eds. U. Winkler, L.R., Fernandez, O. Leirvik, Leiden: Brill, 2017), 71.

³⁹ Michel de Certeau, *The practice of everyday life* (Berkeley: University of California, 1984), 121.

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