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Why Jesus used Parables?

Jesus' teachings from the Cognitive and Constructive psychology viewpoint

Abstract

Six of Jesus' long teaching sessions as reported in the Gospel according to Matthew were read on the basis of cognitive and constructive psychology and Aristotelian rhetoric. The following question was posed: "What kind of mnemonic tools Jesus used in his talks to enhance retention?" The texts show, first, that Jesus used a wide variety of mnemonic tools. Second, using theories from cognitive and constructive psychology and classical rhetoric, it is evident that these mnemonic tools were effective. Third, there seem to be some techniques which are common to all six of these talks; namely, the expression of extreme values, the expression of counterparts, Argument, the expression of opposites and the weighing of important matter. Fourth, Jesus seems to use specific techniques in certain speeches; there are no parables in the speeches such as the "Commissioning" or the "Sermon on the Mount". Fifth, examples of shorter sequences of Jesus' teachings show that in one sentence there can be over ten different mnemonic triggers to help the audience store the message in their memory.

Keywords: Cognitive Psychology, Constructive Psychology, Educational Psychology, Rhetoric, Mnemonics, Retention, Jesus, Teaching, Cognitive Linguistics

1. Introduction

We have all experienced lessons, talks, speeches, sermons, or presentations where we don't remember anything but the arrival and departure of the speaker – if that. On the other hand, we have all experienced talks, speeches, sermons, or presentations which were inspiring, empowering, and moving; we came across new ideas, we remember some phrases and stories – we may even be able to repeat word for word some segments of what was said in the speech. Certainly a good speaker has either been trained in or uses natural rhetorical methods – where a poorer one stumbles even with simple and basic things. A good talk touches our feelings – either positive or negative ones – where a dull talk consists mainly of semi-important matters served in a way that is as dry as dust. A good presentation challenges us intellectually and emotionally where a dull and meaningless presentation makes no impact on our mind and feelings. Thus we can very easily distinguish between these two extremes.

But what can we learn from (one of) the best teachers ever – Jesus of Nazareth, a rabbi and travelling sage (see, e.g., Bivin 2005; Köstenberger 1998; Stein 1995, 3). In the modern “third quest for the historical Jesus” paradigm (see critical works of, for example, Borg, Crossan, and Funk,¹ and, e.g., Meier 1999; Evans 2006, 2007; Holmén 2007) Jesus is generally regarded as a prophet and teacher (see, e.g., Herzog 2005; Harik 2001). The fact that Jesus was a teacher in the Gospels is so obvious that it is not difficult to find tens or even hundreds of books² and articles concentrating on the topic of “Jesus as Teacher.” Some recent publications under the topic of “Jesus as Teacher” are, for example, Burbules (2004), Donahue (2005), Evans (2006, 2007), Freeman (2001), Harik (2001), Herzog (2005), Hinsdale (2009/1895), Kevane (2005), Lane (2005), Parr *et al.* (2004), Robbins (2009), Stott *et al.* (2008), Yieh (2004), and Zannoni (2008).

Though many of the “Jesus as Teacher” publications are written for counseling or for sermons there are myriads of pages of scientific texts of Jesus' teaching characteristics. These publications cover different aspects of theological streams and socio-cultural aspects as well as educational and psychological viewpoints. The teaching and teacher characteristics of Jesus have been explored at in terms of Redaction criticism (e.g., Bornkamm 1956/1995; Syreeni 1987; Uro 1987), Narrative criticism (e.g., Neiryneck 1972; Kingsbury 1988; Howell 1990; Yieh 2004), Archaeological criticism (e.g., Evans 2006, 2007; Crossan & Reed 2001), Textual criticism (e.g., Neiryneck, Verheyden & Corstjens 1998; Dormeyer 1992), Literary criticism (Crossan 1984; Yieh 2004), the Rabbinic tradition (e.g., Sigal 2007; Young 1998, 2007a, 2007b; Gerhardsson 1998, 2001, 2004; Köstenberger 1998; Byrskog 1994), Socio-Rhetoric (e.g., Robbins 2009), Socio-culture (e.g., Donahue 2005), Meditative-hermeneutics (e.g., Freeman 2001; Banerjee 2000; Eagle 2008), Education (e.g., Burbules 2004; Stein 1995; Dillon 1995; Horne 1998/1945; Bennion 1980), and Psychology (e.g., Watts 2007a; Burtis 1981). However, it is difficult to find educational psychology viewpoints in these publications. In his recent book *Jesus and Psychology* (Watts 2007a) Watts

¹ See the works of, for example, Marcus Borg in <http://www.westarinstitute.org/Fellows/borg.html>; John Dominic Crossan in <http://www.johndominiccrossan.com/Resume/Pages/Publications.htm>; Robert W. Funk in http://en.wikipedia.org/wiki/Robert_Funk.

² Alone in the Books/Google site one can find over 17,000 publications with the keywords ‘Jesus Teacher’. Of course, most of the books are different printings of the same book. However, among the titles one can easily find tens of different volumes, too.

suggests that it is valuable to approach the Gospels from the psychological viewpoint (Watts 2007b) and points out various psychological *meanings* in Jesus' teachings (Watts 2007c). Meggitts (2007) shows that there are relevant psychological studies of the historical Jesus. Savage (2007) compares Jesus' actions with modern methods of psychological therapy, and Abell (2007), Stevenson (2007), and Day (2007) show what kind of psychological factors lie behind our understanding and processing of the Gospel narratives. It is notable that none of these writers address Jesus' teachings in terms of cognitive or constructive educational psychology.

Jesus is claimed to be an effective teacher (see, e.g., Yieh 2004, 328) and some teaching methods, such as the use of metaphors and parables (Yieh 2004, 254; Stein 1995, 15, 33, Young 1989) are regarded as the main, or characteristic, form of his teaching.³ However, there does not seem to be much, if any, literature that analyses *what made* Jesus' teaching *effective*. This article concentrates on Jesus' teaching from the modern **educational psychology** viewpoint: What kinds of cognitive and constructive, as well as rhetorical triggers did Jesus use in his talks? Cognitive and constructive triggers can be regarded as tools used to enhance the retention of the listeners; that is, mnemonic tools to remember what was said (see, e.g., Bafile 2005). When it is relevant, also cognitive linguistic viewpoint is handled.

According to the Gospels, Jesus gave several very long talks and had discussions with his students and indeed crowds of people – sometimes thousands of listeners. Still his students and audiences memorized huge sections of his talks and created a cathedral out of the bricks he left behind. After one of his most famous, classical, and analyzed talk (see, e.g., Syreeni 1987; Davies 1964, 1966) – The Sermon on the Mount in Matthew (Mt 5:3–7:27) – the crowds were said to be “*amazed at the way he taught*” (Mt 7:28 also Mt 22:33). In the gospel according to John the guards of the High Priest explained why they had come without Jesus with the words “*Nobody has ever talked like this man*” (John 7:46). What made Jesus so different? What kinds of methods did Jesus use to capture his audience and make them remember his stories and teachings? The question is tackled here by studying the cognitive and logical, semantic and narrative, and rhetorical and emotional mnemonic tools Jesus used in the six main talks documented in the gospel according to Matthew: namely, the Sermon on the Mount (Mt 5:3–7:27), Commissioning (Mt 10:5–42), the Sermon on the Boat (Mt 13:1–51), the General sermon (Mt 18:3–36), the Speech to the Pharisees and Scribes (Mt 21:28–23:39), and the Olivet Discourse (Mt 24:04–25:46).

Some characteristics of Matthew's text as well as the methods used in the study are discussed in Chapter 2. The characteristics of Jesus' talks are discussed in Chapter 3 from the viewpoint of cognitive psychology (Chapter 3.1), constructive psychology (Chapter 3.2), and Aristotelian rhetoric (Chapter 3.3). In Chapter 4 the intense use of mnemonic tools is illustrated by analyzing a short segment of each of the six talks. Finally, in Chapter 5 some lessons are crystallized: what can a modern speaker learn from Jesus?

2. Matthew as a text and source

The main source for analyzing Jesus' speeches is the Gospel according to Matthew. There are three other canonical documents available, too: the Gospels according to Mark, Luke, and John.

³ Stein (1995, 7–32) provides a list of Jesus' main teaching methods; namely, the use of Overstatement, Hyperbole, Pun (or Word play), Simile, Metaphor, Proverb, Riddle, Paradox, A Fortiori, Irony, The Use of Questions, Parabolic or Figurative Actions, Poetry (several kinds of Parallelisms), and Parables. Yieh (2005, 254) lists Aphorism, Metaphor and Parables as the most characteristic of Jesus' methods.

These are supplemented by several non-canonical collections of Jesus' talks and sayings. Matthew has, however, some characteristics which make it educationally more interesting than the other writings. First, its canonicity makes Matthew a more tested text and more known to the average reader than other non-canonical texts, such as the later Gospel according to Thomas which includes purely the teachings of "Jesus" and which is quite widely debated in the recent literature (see, e.g. Dundenberg 2006; Uro 1998, 2003). Compared to Matthew, Thomas is thought to be a much younger product – Matthew is more original and nearer the original historical person, the un-trained rabbi Jesus, a travelling sage.

Secondly, Matthew is interesting from the educational viewpoint. Stern (1992, 4, 16), among others, reminds us of the fact that the style and wording of Matthew is more Jewish than the other Gospels; several Jewish customs are not explained but are implicitly expected to be known. Matthew tells the Gospel narrative mainly to Jews who were interested in learning and familiar with rabbinic teaching customs (Metsämuuronen 2009). There are several long segments of Jesus' talks in Matthew which can be used as a basis for analysing Jesus' characteristics as a teacher and speaker.

Thirdly, from the educational viewpoint Matthew gives another plausible picture of Jesus as a teacher. There are many examples of Jesus' teaching methods, practices, and his reactions towards his students, and so on. For example, Matthew hints interestingly that Jesus delivered the same topics to different audiences using a slightly different wording – as a good teacher should do. For example, the famous "Matthew effect" is told two times; first in a shorter version in Matthew 13:12 and the whole story in Matthew 25:14–30. Another example is the moral teaching in Matthew 5:29–30 which is repeated in Matthew 18:8–9. A third example is the reaction of Jesus towards the Pharisees with a reference to Jonah, once in a short version and once with an explanation in Matthew 12:39 and 16:4. Thus from the viewpoint of educational psychology Matthew is a good source for the study.

Fourthly, an old – though definitely not completely convincing – tradition claims that Jesus' student Matthew collected and wrote down Jesus' talks and sayings (*logos tou Kuriou*) quite early; according to the Church Fathers Eusebius, Irenaeus, and Papia, perhaps round 60 AD. The historian Eusebius writes in his *Church History* that the Church Father Papia (ca. 130-140 C.E.) said that, "Matthew wrote the oracles [Jesus' words] in the Hebrew language, and every one interpreted them as he was able" (Eusebius III 39:16). Irenaeus (ca. 180 C.E.) wrote that "Matthew also issued among the Hebrews a written Gospel in their own language, while Peter and Paul were evangelizing in Rome and laying the foundation of the Church," (Irenaeus III 1:1) which happened around 60 C.E. It is possible that the disciple Matthew collected some kind of Hebrew "Urevankelium" which may have been a basis for other writers as well as for the later editor of the Gospel according Matthew as we know it today.⁴

The challenge presented by Matthew, as well as the other Gospels too, is that only fragments of Jesus' talks and teachings are collected. It is highly improbable that the students manipulated Jesus' teachings on purpose – they remembered them accurately as was the custom in the oral literature, as has been noticed by Metsämuuronen (2009), Gerhardsson (1989, 2001, 2004), and Byrskog (1994). However, contemporary exegetics of Matthew (see, e.g., Redaction critics

⁴ It is perhaps worth noting that nowhere in the Gospel according to Matthew it is mentioned who wrote the book. However, at no stage in early history is any other person than Matthew mentioned as the writer. It is possible that the final edition in Greek was done by an unknown (Christian) scholar, a scribe, because there are many explicit discussions between Jesus and scribes in the book.

Bornkamm 1956/1995 and Syreeni 1987 and Textual critics Neiryneck, Verheyden & Corstjens 1998; Dormeyer 1992) have seen the fingerprints of a later redactor, or redactors, in compilations of the Gospels. Thus, if the purpose is to create an image of Jesus' effectiveness as a speaker there are two challenges. First, we miss the real authentic atmosphere of Jesus' teaching sessions and hence we cannot actually say much about Jesus' moves, mimicry, and intonations during the teaching sessions and discussions. In the best case we have only the contents, the way of wording the teachings, and the result of the teachings. Second, it is a challenge that only a portion of the speeches from myriads of teaching sessions has been documented in the Gospels – and those portions are not necessarily in an authentic order though the main lines may be clear. Fragmented structure is evident in, for example, Matthew 15:32 where Jesus says that the crowds “*have been with me for three days*” – but Matthew doesn't report any talks or speeches during these three days. That Jesus didn't spoke anything during these days was probably not the actual fact. The same thing happens in Matthew 14:13–15 where the crowds have been with Jesus all day – no talks are reported. Also the most famous talk, the Sermon on the Mount (Mt 5:3–7:27), only lasts twenty minutes when recorded on an audio tape. It seems quite short time, and it would surely have been a waste of time to walk to the mount and back for listening a speech of twenty minutes. Therefore it is highly probable that during these days the students and the crowd heard more things than what is documented in Matthew.

The six talks are read through the prism of educational and psychological theories. The primary concern is not whether the text is a product of a historical Matthew, Jesus' student, or a later redactor who worked on the basis of the historical Matthew. Actually it is not necessarily important matter to which extent the talks are *Ipissima Verba Jesu* – actual words of historical Jesus. These texts have in any case profoundly affected the thinking, moral and ethical concepts, as well as later educational practices of Christian countries. Moreover, in the later Christian secondary orality (see Ong 1982) way of mediation of the Bible this view of the Gospel according to Matthew became one of the dominant one. In any case, it *is* possible that Jesus really said the very words that are reported in Matthew (though possibly they were originally in Hebrew/Aramaic). Because of the collective remembering process (see, e.g., Dunn 2003, 2005, 2007) it would be most improbable that the talks were invented by a later writer.⁵ Thus it really is possible that we have in these long talks in Matthew the condensed versions of *Ipissima Verba/Vox Jesu*, though obviously this cannot be proved or disproved. Opinions vary from a minimalist to a maximalist position; the former believing that no speech really took place and, for example, the Sermon on the Mount in Matthew is a compilation of Jesus' primary teachings put together by a later redactor from earlier source material, and the latter believing that this material *in facto* refers to real historical events (though most probably condensed, cf. John 21:25).

The excerpts used here come from the Good News Bible (The Bible Societies, Collins/Fontana 1976). When it comes to literal wording, Young's literal translation (1898) is used. The primary Greek text used is an interlinear Greek Novum text “Textus receptus” by Erasmus of Rotterdam (1516) which is based on an old Byzantine text, in which some alternative reading

⁵ Also Bauckman (2007, 346) – on the basis of relevant psychological literature – concludes that “*the memories of eyewitnesses of the history of Jesus score highly by the criteria for likely reliability that have been established by the psychological study of recollective memory*” and “*we can exclude the frailties and distortions of memory to a large extent*”.

possibilities have been added on the basis of Wescott and Hort New Testament (1881). All are available on-line.⁶

3. Reflections of Constructivist Learning Theories, Rhetoric, and Cognitive Psychology and Jesus' Teachings

3.1 Cognitive Psychology, Cognitive Triggers, and Jesus' teachings

The basic intellectual properties of humans have not changed much – if at all – during the last 2,000-5,000 years. One can assume that there are certain mental operations which are common to a modern man and ancient man. Thus it is possible to make inferences about the intellectual processes of the listeners of Jesus' talks using modern vocabulary and concepts. Both cognitive linguistics (from Chomsky 1957⁷) and cognitive psychologists (from Miller 1956 and Broadbent 1958) have tried to explain the "mind", or mental processes, in a man – cognitive linguistics from the (more or less) semantics viewpoint and psycholinguistics from the neural viewpoint. Both share the basic tenet that at least part of the human linguistic ability is innate, and that language is embedded in the overall cognitive capacities of man (see Geeraerts 1995, 111). Also the basic theories (or at least their foundations) of the storage and retrieval, or memory and retention, of linguistic data are shared. Though this presentation comes much closer the cognitive psychology than cognitive linguistic – some bridges are tried to built during the text also to the cognitive linguistics.

For more than 50 years starting from Miller (1956), Broadbent (1958) and Neisser (1967) cognitive psychology has tried to understand the universal computational laws of human brain. Cognitive psychology has been intensively working, for example, with the memory (e.g. Baddeley 2000, 2003; Engle 2002; Poldrack & Packard 2003; Conway *et al* 2003; Ullman 2004; Conway *et al* 2005; Squire 2009). Basic theories of human mind claim that human long-term memory can be divided into two: declarative and procedural (or non-declarative) memory (see, e.g. Squire, 2009). Declarative memory concerns things that can be brought to mind and declared, facts that can be explicitly stated. Procedural memory, on the other hand, stores motor and cognitive skills and habits and its contents cannot be put into words (Poldrack & Packard 2003; Ullman 2004; Squire 2009). Declarative memory can be further divided into semantic and episodic (or narrative) memory (see, e.g., Tulving 1983; Bruner 1986, 1990). According to Tulving (1983, 9), semantic memory is connected to knowledge concerning the world – it is independent of the identity of the person and of personal history. Episodic memory consists of store of memories of personal events and actions. The content of semantic memory is something the individual *knows* whereas the content of episodic memory is something the individual *remembers*. The units of semantic memory are facts and concepts, whilst the units of episodic memory are events and episodes. The semantic memory is organized with concepts and episodic memory is organized in time. In

⁶ The conclusions wouldn't be much – if at all – different if used more critical Nestle-Aland edition. It just was much more convenient to work with on-line version.

⁷ Of course the history of cognitive linguistics goes much further than to Chomsky (see historical review of Wildgren 2003). However, he is seen as revolutionary in the postwar American linguistics who "programmatically introduced creativity, generativity and transformation into the static world of the patterns of usage uncovered by descriptive techniques" as Wildgren puts it.

addition to the long-term memory systems, the capacity to hold a small amount of information in an active state is called short-term memory (originally proposed by Miller 1956, see also Baddeley 2003; Miyake & Shah 1999).

Cognitive models assume that retention and retrieval can be explained by co-operation between working memory and long-term memory. According to Tulving and Schacter (1990), declarative memories are best established by using active recall combined with mnemonics and spaced repetition. A basic doctrine of human-learning and memory research is that repetition of material improves its retention. A quite recent experiment in language learning (Karpicke & Roediger 2008) challenged this tenet: The experiment showed that delayed recall is optimized, not with repeated studying sessions, but with repeated *testing* sessions. The result was, however, very soon re-interpreted by Lasry, Levy, and Tremblay (2008). They hypothesized that repeated testing (that is, retrieval of the memory) may lead to multiple traces to the memory, which facilitate recall. Lasry and colleagues suggested that the new interpretation would lead to a new framework for explaining the effectiveness of frequent in-class assessments in pedagogies such as Peer Instruction. In any event, these kinds of findings might prompt us to ask the hypothetical question, did Jesus test his students and ask them repeatedly to recall what was learned? Or from the viewpoint of Lasry and his colleagues', we could ask what the effect of collegial memorizing and discussion of the teaching of Jesus was. On the basis of heuristics of Karpicke and Roediger, and Lasry and his colleagues, one can propose that these kinds of strategies would have improved the retention.

One interesting feature connected with repetition in Jesus' talks is the use of structural repetition. In structural repetition the same topic, word, or concept is repeated in the same way or in a slightly modified way in the same sentence or after an interval of a few sentences. This kind of technique can easily be found in Jesus' talks. A brilliant example of this can be found at the beginning of the Sermon of the Mount where nine times (3 x 3) the teaching starts with the same phrase: "*Happy are ... Happy are...*" (Mt 5:3-11). Similarly the Sermon continues with a structural repetition of the phrase "*You are like salt... You are like light*" (Mt 5:13-14). In Matthew 5:27: "*Even the tax collectors do that... Even the pagans do that*" and in 6:14-15: "*if you forgive – your Father will forgive ... if you do not forgive – your Father will not forgive*" we find the structural repetition inside the sentence. In some cases the structural repetition occurs after several verses as in Matthew 24:27, 37 and 39: "*The Son of Man will come like...*" (Young's literally: "**so shall be also the presence of the Son of Man**").

Though cognitive psychology has been criticized by constructive psychologists (see e.g. Bruner 1985, 31; see also Chapter 3.2) and by cultural psychologists (e.g., Schweder 1991, 73), it may open some doors to understanding how the human mind actually works at the neural level. Taylor's (1984, 223) point seems relevant when he reminds us that the constructivists also think that there has to be a common biogenetical and personal developmental ground in our minds – otherwise it would be impossible to communicate with each other. Taylor (1984, 212) argues that in Bruner's thinking (see Chapter 3.2) the language skill, that is, our thinking is based on biological factors but this biological capacity requires cultural expression. This comes quite near the idea of cognitive linguistics that language is both embodied and situated in a specific environment. According to Bruner (Bruner 1983, 164; 1986, 114), we use language to communicate, to order things, to construct realities, and to differentiate between things. From this point of view, such

cognitive linguistic-logical operations, that is, triggers of cognitive processes such as **connecting**, **differentiating**, **comparing**, and **ordering** things, or **constructing realities** can be thought to be universal triggers to save information (semantic memory), stories and experiences (episodic memory) in our mind. The challenge concerning these connectors is that though they are universal, they are also, in a way, language and syntax specific; the source text (the Gospel according to Matthew) is a Greek translation of the original language. However, in many or most cases we can assume that the original expressions have been quite literally translated to Greek. In some cases the original Hebrew counterpart can be guessed easily because of a direct connection to either Hebrew Bible or rabbinic oral literature. In this presentation the Greek words are usually used as examples. It may be possible to recover the Hebrew/Aramaic counterparts but that is not the aim of the presentation. A substantial part of the rest of the presentation is based on these triggers. Thus some words of them may be appropriate.

A simple linguistic trigger for **connecting things** in English is “and” or “or” (“X and Y”; “X or Y”). We can connect a whole variety of things, for example, “black *and* white”. In this example *two* colors are connected (connecting identical things), *separate* colors are connected (connecting different things), and metaphorically *opposite* colors are connected (connecting two extremes). It depends on the situation and the intellectual level of the listener as to what he/she hears and understands. In the Greek version of Matthew and very typical to Jesus’ way of speaking is a trigger *kai*, “and”: for example, in “*happy and glad*” (Mt 5:12), “*Law and Prophets*” (Mt 7:12), “*grew up and choke the plants*” (Mt 13:7), “*prophets and God’s people*” (Mt 13:17), “*worries and love for riches*” (Mt 13:22), “*he goes and sell*” (13:44, 46), “*They will cry and grin*” (Mt 13:50), “*tax collectors and prostitutes*” (Mt 21:31) and so on. Sometimes it is translated with “or” as in “*black or white*” (Mt 5:36). This “expression of doubles” is quite similar as an another indicator of oral transmission, the “expression of three things”, say, Triples, which is a common mnemonic method in narratives (see Chapter 3.2).

Two simple triggers for **differentiating** and **comparing things** in English are “like” and the more complicated “but” (“X is [like] A but Y is [like] B”). The triggers “like” and “as” are used for simile in a positive expression and for discrimination in a negative expression. One can discriminate whole variety of things from each other, for example, “*Don’t be like those but like these.*” Here the connector “but” differentiates things on two levels: separating two things from each other (nominal discrimination) and separating *opposite* things from each other (ordinal discrimination). Some examples of a differentiating “but” in Jesus’ talks are “*You are like salt for all mankind. But if salt loses...*” (Mt 5:13), “*You have heard ... but now I tell*” (5:22), “*When you pray, do not be like the hypocrites... But when you pray...*” (Mt 6:5–6), or “*If the people welcome you... But if they don’t welcome you...*” (Mt 10:13). A general comparison can be made in Greek with several words. Sometimes a general comparison is made with the Greek trigger *houtōs*, “the same way”. For example, “*The same way your light must shine before people*” (Mt 5:16), “*That is how my Father in heaven will treat every one of you unless you forgive your brother*” (Mt 18:35), and “*In the same way, on the outside you appear good to everybody, but inside...*” (Mt 23:28). Sometimes the comparison is quite explicit, like in “*I compare him to a wise man*” (Mt 7:24 literally⁸), “*Do not be like them*” (Mt 6:8), and a “*teacher of the Law ... is like the owner of the house*” (Mt 13:52 literally). The straight comparative “more” is quite easy to detect in the speeches: “*it is easier for the land of*

⁸ The literal translation (Young’s Literal) is used when the English translation is very dynamic, and thus the original linguistic triggers are hidden.

Sodom...” (Mt 10:15 literally), “*it would be better...*” (Mt 8:6, 8), “[shepherd] *feels far happier over this one sheep*”, and “*if your righteous is not more than of the teachers of the Law*” (Mt 5:20 literally).

Some simple ways to make **order** in concepts and things are first, to separate the counterparts in a nominal way without any specific connector: “big – small” or “light – heavy.” Another way is to use explicit **comparative** comparison such as “bigger – smaller” or “lighter – heavier”. A third way to order things is to use **superlatives** such as “highest – smallest” or “lightest – heaviest”. A fourth way is to use general expressions of (ultimate) **extremes** such as “many”, “all”, “always”, or “in the end.” This kind of comparison, ordering, and extreming is very typical of Jesus’ teaching. One can even say that there are two features that are most characteristic of Jesus’ teaching style. The two most frequent mnemonic tools used in Jesus’ speeches are **Expressions of extreme values** and **Expressions of counterpart**. The categories are quite similar – in many cases it is difficult to make a distinction between them. Examples of pure extremes without twinning to include “*great reward*” (Mt 5:12), “*least point*” and “*smallest detail*” (Mt 5:18), “*least in the Kingdom*” (Mt 5:19), “*last penny*” (5:26), “*don’t use any vows*” (5:34), “*be perfect*” (Mt 5:48) to mention just a few. Pure expressions of counterparts include, for example, “*Body – clothes*” (Mt 6:25), “*you – birds*” (Mt 6: 26), “*receive – give*” (Mt 10:8), and so on. Extreme counterparts (combined) are very common in Jesus’ talks: “*good seed – bad seed*” (Mt 13:25), “*smallest seed – biggest plant*” (Mt 13:32), “*good fish – worthless fish*” (Mt 13:48), “*life – eternal fire*” (Mt 18:8), “*on earth – in heaven*” (Mt 18:19), “*foolish girls – wise girls*” (Mt 25:2), and so on.

The last set of cognitive triggers addressed here are – the list is not exhaustive – the connectors for **constructing knowledge**. One simple set of connectors for this purpose are “because of”, “for”, “thus”, and “therefore” which are connector for an argument (“X is B because of Y”). Jesus uses the word *gar* – “because” or “for” – more than 40 times in the six main speeches in the Gospel according to Matthew. It really is one of the striking characteristics of his teaching.

One can conclude that it is very easy to find such universal cognitive triggers as defined on the basis of Bruner’s ideas in Jesus’ talks. These basic mnemonic tools are used mainly to construct realities in a linguistic and most probably unconscious way. A critical listener noticed that the triggers suggested in this section were raised on heuristic grounds and they lack evidence of validity. The heuristics should be taken as a proposal for more rigorous study of their real meaning in learning and retention. It may be possible to conduct simple sets of experiments to see whether using these kinds of triggers intensively enhances retention or not.

3.2 Constructivist learning theories and Jesus’ Teachings

One of the most well-known living authorities in modern learning theories – Jerome Bruner – has tackled the issue of learning from several perspectives (Bruner 1962, 1976, 1983, 1984, 1985, 1986, 1990a, 1990b, 1996; Feldman *et al.* 1990). His impact on the constructivist view of learning is perhaps the most important. The basic idea of the constructivist learning paradigm is that learning is an active, social process in which a student constructs new ideas or concepts based on his/her current knowledge. One of the basic principles of constructivist education is that learning reinforces itself in a spiral way; new things are learned by building on the previous experiences.

Jesus seems to use this kind of principle quite often: he built on what was already known. For instance, one of the famous examples of Jesus' teaching – the Sermon on the Mount – includes a long sequence of phrases starting with the expression “*You have heard that... but now I tell you...*” (Mt 5:21, 27, 31, 33, 38, 43). In many cases Jesus also connects his teaching to common concepts from everyday life: the kingdom of heavens (note: in plural in Matthew) is variously like a farmer (Mt 13:24-30), like mustard seed (Mt 13:31-32), like yeast (Mt 13:33), like a treasure in field (Mt 13:44), like a trader and a fine pearl (Mt 13:45-46), or like fishermen and fishermen's nets (13:47-50).

According to Bruner (1986, 11), humans have two cognitive modes of thinking: paradigmatic or logical-scientific, and narrative (compare with the previously mentioned semantic and episodic memory). With both these modes individual experiences are organized and given meaning, and problem solving is explained and ordered (Bruner 1986, 11; 1996, 39, 130). In the logical-scientific mode we try to explain the physical reality with the tools of, for example, logic, mathematics, and sciences (Bruner 1996, 39). With narrative thinking we explain human behavior and psychic reality – we are willing to create connections between different facts. The logical-scientific mode is based on the formal and functional structures of sentences whereas the narrative mode is focused on the affective and functional structures of sentences; in the narrative mode intentions, goals, subjective experiences, and the characteristics of individual are the main focus (Bruner 1986, 50; 1990a, 710). Where logical-scientific thinking is based on empirical evidence and logical proofs, narrative thinking is based on segments of “not truth”, “truth-likeness”, and “verisimilitude” (Bruner 1985, 97). Even though a story might not be “true” in a strict sense (like Jesus' parables), it still can be charmingly truthful and credible (Bruner 1985, 113) – the criteria for narrative thinking is whether something is lifelike and has a real-life sense (Bruner 1986, 11).

Jesus' teachings include both the logical and the narrative mode. The **narratives** seem to be one of the main characteristics of his teaching: “*Jesus used parables to tell all these things to the crowds; he would not say a thing to them without using a parable*” (Mt 13:34). Of course the expression is a hyperbola itself – Jesus used also hard logic when arguing with the Pharisees and the scribes (e.g. Mt 12:3-8, 25-29, 15:1-9, 21:23-27, 22:15-22). Interestingly Jesus also mixes these modes. For example, when the Pharisees asked for a justification for picking ears of corn and eating them on the Sabbath in Mt 12:3-4, Jesus told them a story from the Hebrew Bible of the great king David who had eaten bread despite the fact that only God and priests were allowed to do so. With the story Jesus implicitly used two **logical arguments**. First, if in the holy Bible there is an example of this kind of illegal act, why are the Pharisees angry? Second, the rabbinic *kal v'chomer* argumentation (Hebrew “light and heavy”) was very familiar to Pharisees (see e.g. Stern 1992, 32): if David had broken the written (and most holy) law, how much more permissible it is to break the less holy oral law. Another aspect of logical argument is the fact that in Jewish culture in the beginning of the Common Era references to the *Tanakh*, the Hebrew Bible, as well as to the *Mishna* (the Oral Law, the older layer of the Talmud) were taken extremely seriously. All the children had to be taught to understand and remember by heart the *Torah*, the Law given by God (Deut 6:6–9). Thus when Jesus referred to the Hebrew Bible either explicitly (as in Mt 5:12, 17, 21, 27, 31, 33, 42, 43, 7:12, 13:14-15, 18:15, 16, 18, 22, 21:42, 44, 23:2, 5, 16, 35, 38, 39, 24:15, 31, 37, and 38) or implicitly⁹ it was considered by the listeners as same kind of

⁹ There are myriads of possible implicit connections with and connotations concerning the Hebrew Bible in Jesus' speeches. For example, familiar to the listeners were surely such frequent expression as “*Kingdom of*

argument as in the modern day hard-fact-data: it is difficult to argue against it (see also Chapter 3.3 and the Aristotelian *logos* argument)

The main cognitive tools for narrative thinking are the **metaphor**¹⁰ and the **story** – and especially a logically plotted story. Metaphor (from the Greek *metaphora*, “to carry over”, “to transfer”) differs from simile (say, X is *like* Y – or X is *as* Y) by drawing a direct comparison between two interesting different things without the connectors “like” or “as”. In a metaphor, God *is* King, Father, or Shepherd: so, for example, in the famous Psalm 23, “The Lord *is* my Shepherd”. Bruner assumes (1976, 66) that with the surprise produced by a metaphor it is possible to reveal new connections between things; metaphors are used to re-organize and understand human experiences in a new way (Bruner 1983, 205). In narrative thinking the metaphoric richness and possible contradictions are just as important as the incident to which the metaphor refers (Bruner 1985, 104–105). Another cognitive tool in narrative thinking is the plot (Bruner 1986, 39). With the plot – logical connection of incidents – it is possible to create a temporal synthesis of actions, goals, and intentions in the story. The plot coins the complexity of the incidents and creates a coherent story. According to Bruner (1990b, 53), a good story is open to different interpretations because it leaves things slightly vague –different listeners or readers would fill in the gaps with their own experiences and knowledge.

One characteristic of Jesus’ teaching is the use of narratives – such as parables, stories, or visual images. It is good to remember that scribes and rabbis also used narratives (or *mashal*, *meshalim* in the plural, see Gerhardsson 2004, 267) in their teachings. Some researchers have reminded us that in the *Talmud* the *meshalim* of rabbis are always told in Hebrew (Notley, Turnage & Becker 2005, 238; Flusser 1989; Young 1989, 51–52, Buth ja Kvasnica 2005, 58). The famous teacher Hillel was an exception, but he was an emigrant from Babylon, and not been born in a Hebrew-speaking area (Young 1989, 54). Jesus explained his reason for using **parables** in quite a disturbing way connecting it to Isaiah 6:9-10: “*the reason I use parables in talking to them [to crowds] is that they look, but do not see, and they listen, but do not hear or understand*” (Mt 13:13). The real reason for his use of parables is obscure: was it to hide the fundamental message beneath the surface, or was it rather to make point by using a simple story. In any event, all the listeners, from children to scribe, certainly got something from the parables and stories – depending on their intellectual capacity. There are 19 narratives in the six speeches: the parable of the two house builders (Mt 7:24-27), of the sower (13:3-8), of the weeds (13:24-30), of the mustard seed (13:31-32), of the yeast (13:33), of the hidden treasure (13:44), of the pearl (13:45-46), of the fishermen’s nets (13:47-50), of the lost sheep (18:10-14), of the servant owing money (18:23-35), of the two sons (21:28-31), of the tenants in the vineyard (21:33-39), of the wedding feast (22:2-14), of the whitewashed tombs (23:27), of the fig tree (24:32), of the faithful and the unfaithful servant (24:45-51), of the ten girls (25:1-12), of the three servants (25:14-30), and the narrative of the final judgment (25:31-46).

Heavens” (in Hebrew *malkhut-haSammayim*, note, in plural), “*Shepherd*” (referring to the famous Psalm 23: “*The Lord is my Shepherd*”), “*King*” (referring to the throne of David and prophesies of a coming *messiah* King), “*Heaven and earth*”, or “*Son of Man*” (in Hebrew *ben-adam* referring possible 1. Henok written some decades before Jesus’ time, and in Aramaic *bar-enosh*, referring possibly to the Daniel 7:13–14).

¹⁰ Though here mainly constructivist Bruner is used here as the main source it is good also to remember cognitive linguistic Lakoff’s remarkable work in the use of metaphors (Lakoff & Johnson 1980, Lakoff 1993).

Jesus also used **metaphors** and **similes**: God is a King (Mt 22:2-14), a vineyard owner (Mt 20:1-13, 21:33-42), a man with two sons (Mt 21:28-31), or a rich man (Mt 25:14): these all are metaphors. But “*the coming of the Son of Man is like what happened in the time of Noah*” (Mt 24:37) is a simile. Another mnemonic tool in narratives is to combine three things together, in say, Triples (compare with the previously mentioned Doubles). In the six speeches in Matthew studied here there are several **triples** for memorizing the teaching or story. Starting from the Sermon on the Mount there are, for example, “*trial – Council – Hell*” (Mt 5:22), “*good things – prayer – fasting*” (Mt 6:1-18), “*birds don’t sow – gather – put in barns*” (Mt 6:26), “*what to eat – drink – dress*” (Mt 6:31), “*ask – seek – knock*” (Mt 7:7), “*rain – river – flood*” (Mt 7:25), and so on. Sometimes the Triple has been intensified by adding a gradual increase or decrease in number, value, or some other feature; for example, “*privately – two persons – whole church*” (Mt 18:15-17), “*altar – temple – Heavens*” (Mt 23:20-22), “*gold – silver – copper*” (Mt 10:9), “*good soil gives 100 – 60 – 30*” (Mt 13:8), and “*five – two – one talents*” (Mt 25:15).

One can conclude that Jesus used teaching methods which seem to be the most effective from today’s contemporary constructive psychology viewpoint. Another question is *how frequently* Jesus used these individual constructivist mnemonic tools in different speeches and whether his techniques differ from other teachers of the period. These questions are not, however, handled in this presentation.

3.3 Aristotelian rhetoric and Jesus’ teachings

Bruner and his colleagues (Feldman *et al.* 1990, 220) connect logical thinking and narrative thinking with classical Aristotelian rhetoric. They remind us that in Aristotelian rhetoric the cognitive processes of the mind are divided into two types: the emotional and the rational. Aristotle in his “Rhetoric” (Aristotle 1926) identifies three well-known types of rhetorical “proof”, or modes of persuasion, that is, ways of convincing the listener: *ethos*, *pathos*, and *logos* where *ethos* and *pathos* fall in the emotional, or narrative, mode and *logos* falls in the rational, or logical, mode.

*Ethos*¹¹ refers to the character and credibility of the speaker – how the speaker can make him or herself believable. Aristotle broadens the original meaning of the word (of moral competence) to encompass expertise and knowledge. Though Aristotle expressly remarks that *ethos* can be achieved only by what the speaker says, it seems that in practice the appeal of the speaker is also based on the (known or assumed) expertise of the speaker. In modern rhetoric this kind of *ethos* could be reached by introducing a speaker in such a way as to increase his or her competence, for example, “Mr John Doe, *PhD*”.

From the Jewish authorities view-point Jesus seemed to lack *ethos*: they did not take him as a serious teacher, or rabbi, because he had “*never had any training*” (John 7:15). This means a lack of formal Rabbinic education in a *Beit Hammidrash* (Evans 2006, Bivin 2005, Metsämuuronen 2009). On the other hand, Jesus seems to have created huge *ethos* in the minds of the crowds: no one could find anything immoral in his behavior: “*The chief priests and the*

¹¹ from the root of *ēthicos*, meaning “moral, showing moral character”.

whole Council tried to find some false evidence against Jesus to put him to death; but they could not find any" (Mt 26:59-60). Some years after Jesus' death his student Peter said: "[Jesus] went everywhere, doing good and healing all..." (Acts 10:38), which undoubtedly was the reason why such large crowds followed him (Mt 4:25). People said after the Sermon on the Mount that "he taught with authority" (Mt 7:29). The closest students really thought that Jesus was something special: the Son of God (Mt 14:33), the Messiah (Mt 16:16, John 1:41), a Breaker of the laws of nature (Mt 14:18), a Healer and Miracle maker (Mt 15:31), a Rabbi (Mt 26,25; Mark 9:5), The one with Words of eternal life (John 6:68) – Jesus had real *ethos* among the crowds and among his students.

*Pathos*¹² is used to alter an audience's view by appealing to their emotions. *Pathos* appeals to the emotions by using metaphors, stories, and amplification of matters. It can also be conjured by the passion of the speaker or the number of emotional items included. Yet again it can be achieved by, for example, weighting an important matter, introducing peculiar or new ideas to the audience, or by giving a hyperbola. The stronger the *pathos* the more effect. This kind of hook is a rhetorical device to attract the attention of the audience and to make them want to listen to the rest of the speech. These "hooks" can also be a series of intriguing questions or number of other devices to leave the listener wanting more. Aristotle discusses a large variety of feelings such as, for example, anger, calmness, hate, fear, courage, shame, shamelessness, pity, jealousy, joy, and scorn.

While it might be a common perception that Jesus was a serious man, the early texts reveal a large variety of shades in his character as a teacher. Jesus was not afraid of **showing his feelings** while teaching: 12 times in Matthew (18:7x2, 23:14, 15, 16, 23, 25, 27x2, 29, 24:19) he woes for some person or group ("Woe to that man..." Mt 18:7, Literal). Jesus is also not afraid of **creating negative emotions** in his listeners: the hands are cut (Mt 18:8), eyes are thrown away (Mt 5: 29), feet are cut off (Mt 18:9), evil ones will burn in Gehenna (Mt 23:33) and they will cry and grind their teeth (Mt 13: 42, 50, 22:13, 24: 51, 25:30). On the other hand Jesus uses **humor**: there can be a log in one's eye (Mt 7:3, 4) or a camel in one's mouth (Mt 23:24) or in an eye of a needle (Mt 21:24), one can owe someone a sum worth of 200,000 year's salary and still say that he will pay it all back (Mt 18:24), and the Pharisees are ridiculed in several ways (Mt 6:16, 23:14-32), which made the Pharisees and scribes angry and most probably made the crowds amused. Another kind of *pathos* was raised by **activating the audience** with a rhetorical question or with another type of contact to audience. In the six speeches studied there are 26 verses with a direct **Rhetorical question**: in Mt 5:46 (two times); 6:23, 25, 26, 27, 28, 30; 7:3, 4, 9, 11, 16; 10:25, 29; 18:12 (three times), 33; 21:28, 31, 40, 42; 23:17, 19 and 24:45. Some examples of these are "why should God reward you...?" (Mt 5:46), "isn't life worth more than food?" (6:25), "do you look at the speck in your brother's eye...?" (7:2) Typically, **contact to directly addressing the audience** manifests in Jesus' talks as a challenge to the audience like "listen!" (in Mt 5:38; 13:18 twice; 21:33), "watch out...!" (or "be aware" 6:1; 7:15; 10:17), "see!" (10:16; 13:3), "pray to God!" (24:20), "be on your guard!" (24:42; 25:13, literally "be awake!") or "do not think..." (in 5:15; 10:34). Sometimes it may be a direct question where an answer is expected: "Do you understand these things?" (Mt 13:51), "Which one of the two did what his father wanted?" (21:31), or "what will he do to those tenants?" (21:40). Jesus also challenged the audience by addressing them collectively such as "you have heard" (Mt 5:21, 27, 31, 33, 38, 43). Also such collective addresses as "You snakes!", "You sons of snakes!" (Mt 23:33), "You hypocrites!" (23:14, 15, 23, 25, 27), "You fools!" (23:17, 19), or "You blinds!" (23:16, 17, 19, 24) would certainly get the audience's attention. Still another way the raise the pathos found in Jesus' talks is by **attaching more weight to an**

¹² from the root of *pathos*, meaning "feeling", "to feel", "emotion".

important matter. A typical phrase in Jesus' talks is "surely I say [to you]" (Greek *amen legoo*) when giving more weight to an important lesson or idea. In these six speeches the expression occurs 20 times (Mt 5:18, 5:26, 6:2, 6:5, 6:16,10:15, 10:23, 10:42, 11:11, 13:17, 18:03, 18:13, 18:18, 18:19, 21:31, 23:36, 24:34, 24:47, 25:40, 25:45). Another kind of expression to weight an important matter in Jesus' talks is "see" or "remark" or "mark my words" (Greek *idū*). It occurs six times in these speeches (Mt 10:16, 11:8, 13:3, 23:34, 38, and 24:25). It is obvious that Jesus had real *pathos*.

*Logos*¹³ in Aristotle means the use of reasoning to construct an argument. This reasoning could be either deductive (generally accepted propositions lead to a specific conclusion) or inductive (specific cases such as examples – historical or hypothetical – are used to lead to a more general conclusion). An argument based on *logos* needs to be logical. In modern rhetoric *logos* implies to use of numbers or another mathematical or scientific data. It is harder to argue against a *logos* argument because data sets are usually difficult to manipulate. This kind of "hard fact", or *logos*, argument may make the speaker look prepared which enhances *ethos*: the speaker can be trusted.

Jesus used quite a variety of different logical tools in his argumentation. There are at least four different types of logical reasoning connected to the logical-scientific mode in learning in Jesus' talks: Argument, Conclusion, so-called *Kal v'chomer* reasoning (or *A Fortiori*) discussed earlier, and references either to the Hebrew Bible or Oral tradition. The category Argument contains **pure arguments** with the simple connectors "because" or "for". This kind of light argumentation is used very frequently by Jesus. The Greek word used here is *gar* meaning "because" or "for". However, in English some varieties of wording are used and sometimes the connector is not even translated. For example, in Matthew 6:8: "Do not be like them [for (*gar*)] your Father already knows what you need", in Matthew 10:26: "Don't be afraid of people [for (*gar*)] whatever is covered will be uncovered", or in Matthew 18:10: "See that you don't despise any of these little ones [for (*gar*)] their angels in heaven... are always in the presence of my Father". As already discussed in Chapter 3.1 the word *gar* alone is used over 40 times in the six speeches. Another, specific type of argument, is **to come to a conclusion**. This is indicated by the specific triggers of "so" or "then" as in "This, then, is how you should pray:" (Mt 6:9) or "So do not worry" (Mt 6:34). The distinction between the two categories Argument and Conclusion is very fine. A third way of constructing an argument or of reasoning is the so-called rabbinic ***Kal v'chomer* type of reasoning** (in Hebrew "light-heavy" reasoning, or in Latin *A Fortiori* reasoning). The logic in *Kal v'chomer* reasoning in Jesus' talks is that if it applies to a lighter element (like birds or flowers), then how much more will it apply to a heavier element (like men). These can be found explicitly in nine verses (Mt 6:25, 26, 30; 7:11, 10:25, 31, 23:17, 19, 23). A fourth kind of argument was discussed earlier in Chapter 3.2; in the Jewish culture in the beginning of the Common Era **references to the *Tanakh***, Hebrew Bible, as well as to the *Mishna* (the Oral Law, later part of the Talmud) were taken as the same kind of argument – and even more binding – as that supported by modern-day, hard-fact data; there was no way to argue against it. Jesus frequently referred to the Hebrew Bible (see, Mt 5:12, 17, 21, 27, 31, 33, 42, 43; 7:12, 13:14-15, 18:15, 16, 18, 22; 21:42, 44; 23:2, 5, 16, 35, 38, 39; 24:15, 31, 37, and 38) as well as to the oral literature. Thus, Jesus had real *logos*.

¹³ from the root *logos* meaning either "sentence, saying, oration" or "action, work" from the verb *legō*, "to count, tell, say, or speak".

One can conclude that from the rhetorical point of view Jesus had great *ethos*, *pathos* and *logos*. His students most probably were willing to and capable of remembering what he had said because he had real *ethos* among them. Jesus used a wide variety of form of *pathos* and *logos* in his teaching. All these together imply that, indeed, Jesus used effective mnemonic tools in his talks.

4. Intensive use of mnemonic tools in Jesus' teachings

With a more careful exploration of the teaching segments and talks in Matthew, quite a lot of mnemonically intensified segments can be found. Two types of mnemonically intensive concentrations can be found: first, in a longer segment the number of different mnemonic tools indicates the mnemonic richness of the speech, and second, in shorter segments the number of mnemonic tools reveals how many mnemonic triggers there are in a short segment to help their storage in the memory. Here the latter is discussed in more depth. However, some indications are also given to the mnemonic richness of the longer segments.

Jesus used a wide range of mnemonic tools in all his speeches: though some of the mnemonic tools may characterize the speech (for example, the intensive use of parables is found only in two talks out of the six), the variety of minor tools in each speech is notable in Jesus' teachings. The Sermon on the Mount is exceptionally loaded with different mnemonic tools compared to the other five speeches. It can be said to be the mnemonically richest speech of the six. On the other hand the Sermon on the Boat is mnemonically the least rich speech. The obvious reason for the more restrained use of *different* mnemonic tools in the Sermon on the Boat is that it is fully-loaded with longer narratives (stories and especially plotted stories, see Bruner 1986, 39; Bruner 1990b, 53, see Chapter 3.2) which themselves carry intensive mnemonic tools and which therefore do not necessarily need a wide variety of other mnemonic tools.

Another form of the intensive use of mnemonic tools is the number of them included in shorter sequences of teaching and talk. One can reasonably assume that the more mnemonic tools condensed into a phrase or a brief sequence of teaching, the more mnemonically intensive it is and hence the more probable it is that the phrase or piece of teaching is stored in the episodic or semantic memory. There are several sections or pieces of teaching in Jesus' talks where it is easy to detect the intensified use of mnemonic tools. Here one such intensified sequence of teaching (a sentence) from each speech is explored to illuminate the phenomenon in more detail.

In the **Sermon on the Mount** one can find several mnemonically condensed sections. Matthew 5:18 illustrates the idea (according to Young's literal translation): "*for, verily I say to you, till that the heaven and the earth may pass away, one iota¹⁴ or one tittle¹⁵ may not pass away from the law, till that all may come to pass.*"

1. The sequence starts with a phrase typical of Jesus: *amen legoo*, "Surely/Verily I say" and thus **Weighting the important matter** (Rhetorical trigger - *Pathos*).

¹⁴ Iota is the smallest letter in Greek, parallel to the Hebrew word *Yud* (י)

¹⁵ Or "a small character, a graphical mark", in Greek *keraiā* refers to Hebrew *Kotz*, a small mark which makes the difference between the letters. For example, the letters *Daled* ד and *Resh* ר look the same – the only difference between the letters is the *Kotz*, small mark. Also the letters *Beit* ב and *Kaf* כ look the same – only the *Kotz* differentiates them from each other (Stern 1989, 28).

2. The opening is intensified with *gar*, “because” or “for”, literally *amen gar legoo*, “For, verily I say”, and thus there is an **Argument** (Rhetorical trigger - *Logos*).
3. “I say to you”¹⁶ is a **Direct address to the audience** (Rhetorical trigger - *Pathos*).
4. “The heaven and the earth”¹⁷ is an **Expression of doubles** (Cognitive trigger).
5. “The heaven and the earth” is an **Expression of counterparts** (Cognitive trigger).
6. “The heaven and the earth” is heavily used in the Jewish Bible starting from the very first verse (Gen 1:1), thus it includes a strict **Reference to the Bible** (Constructive trigger)
7. “The heaven and the earth” is an **Expression of extreme values** (Cognitive trigger).
8. “iota or tittle” is an **Expression of doubles** (Cognitive trigger).
9. The reference to the Hebrew *Yud* and *Kotz* (see footnotes 10 and 11) reminds the audience of their own writing style and letters; thus, the teaching was **Connected to concepts from everyday life** (Constructive trigger).
10. The reference to the Hebrew *Yud* and *Kotz* is, if the listener is not reading or writing every day, a **Reference to what already was known or learnt** (Constructive trigger).
11. The explicit symbolic meaning of *Yud* and *Kotz* in the Law refers to the need to follow even the smallest order in the Law, which refers to **Connecting teaching with a common concept** (that is, eating, clothing, washing, ETC. practices) **from everyday life** (Constructive trigger).
12. “The law” is a direct **Reference to the Bible** (Constructive trigger).
13. “One iota”, that is, the “*smallest* letter”, or *Yud*, or “*only one iota*”, refers to the **Expression of extreme values** (Cognitive trigger)
14. “*All*” refers to an **Expression of extreme values** (Cognitive trigger).

It seems that the verse carries at least 14 mnemonic triggers which helped in enhancing retention and remembering the sequence.

In the speech of **Commissioning** an exemplar verse of mnemonically highly intensive sequence of teaching is Matthew 10:16 (Young’s literal translation): “*Lo*¹⁸, *I do send you forth as sheep in the midst of wolves, be ye therefore wise*¹⁹ *as the serpents, and simple*²⁰ *as the doves.*”

1. The sequence starts with “*Lo*”, or “Listen!” or “See!”, that is, **Activating the audience** (Rhetoric trigger – *Pathos*).
2. “*I do send you*” (emphasizing *I*) may – because of its great *ethos* – have produced empowering emotions in the closest 12 students, and thus it may fall into category of **Producing positive emotions** (Rhetoric trigger – *Pathos*).
3. “*I do send you*” (emphasizing *you*) is a **Direct address to the audience** (Rhetoric trigger – *Pathos*).
4. “*You ... as sheep*” is a direct **Comparison** (general) (Cognitive trigger).
5. “*Sheep*” and “*wolves*” refer to **Connecting teaching with a common concept from everyday life** (Constructive trigger).
6. “*Wise as snakes*” is a **Comparison (general)** (Cognitive trigger).

¹⁶ In Greek *amen gar legō hymin*

¹⁷ This expression occurs 48 times in the Hebrew Bible (Young’ literal) in the format “heaven and earth” and 7 times in format “the heaven and the earth”.

¹⁸ *Lo!*, or Listen! or See!, Greek *idou*

¹⁹ wise or sly, Greek *phronimos*

²⁰ simple or clean, Greek *akeraios*

7. “Simple as doves” is a **Comparison (general)** (Cognitive trigger).
8. “Wise – simple” is an **Expression of counterparts** (Cognitive trigger).
9. “Sheep – wolves” is an **Expression of counterparts** (Cognitive trigger).
10. The idea “wise as snakes²¹” may be a surprising idea for a good follower of Jesus, and thus it may fall into the category of a **Peculiar idea (for a listener)** (Cognitive trigger).
11. “Sheep – wolves” can be seen as an **Expression of extremes** (Cognitive trigger).
12. “Snakes *and* doves” is an **Expression of doubles** (Cognitive trigger).

Thus there can be found at least 12 mnemonic triggers to make the audience remember what was said.

An example from the **Sermon on the Boat** can be found in Matthew 13:44 (Young’s literal translation): *“Again, the reign of the heavens is like to treasure hid in the field, which a man having found did hide, and from his joy goeth, and all, as much as he hath, he selleth, and buyeth that field”*.

1. The sequence starts with a small connector “Again”²² which is a **Reference to what already was known or learnt** (Constructive trigger).
2. “Heavens”²³ is widely used Hebraism and was a euphemism for God in Hebrew thinking (Stern 1992, 16) which is a direct **Reference to the Bible**²⁴ and to oral literature (Constructive trigger).
3. Because of the previous point, the expression “reign/kingdom of the heavens”²⁵ is a **Reference to what already was known or learnt** (Constructive trigger).
4. “Is like” is a strict **Comparison (general)** (Cognitive trigger).
5. “Treasure” and “field” refers to **Connecting teaching with a common concept from everyday life** (Constructive trigger).
6. “Treasure” refers to **Extreme values** (Cognitive trigger).
7. “Goeth – selleth – buyeth” is an **Expression of three things** (Constructive trigger)
8. “Selleth ... *all*” refers to **Extreme values** (Cognitive trigger).

Thus in this short sentence there can be found at least 8 mnemonic triggers to enhance retention and to make the audience remember what was said.

In the **General speech** an example of mnemonically highly intensive sequence of teaching can be found in Matthew 18:8 (Young’s literal translation): *“And if thy hand or thy foot doth cause thee to stumble, cut them off and cast from thee; it is good for thee to enter into the life lame or maimed, rather than having two hands or two feet, to be cast to the fire the age-during.”*

1. “Thy – thy – thee – thee – thee” refers to **Personal contacts with the audience** (Rhetoric trigger – *Pathos*).

²¹ Snakes were usually seen as having negative connotations because the story of Eve and Serpent in the Garden of Eden (Gen 3:1–6).

²² The Greek *palin*.

²³ The Hebrew *Shamayim*, note that though the word has a plural form the meaning is singular (literally Sham + Mayim, “where the waters are”. However, Matthew uses in the Greek Gospel the plural for of the word: *hē basileia tōn ouranōn* “the kingdom of heavens”).

²⁴ The term Heavens, *Shamayim*, occurs 566 times in the Hebrew Bible.

²⁵ The Hebrew *malkhut-haShamayim*.

2. “Hand” and “foot” connects the teaching to a **Common concept from everyday life** (Constructive trigger).
3. “Hand or foot” is an **Expression of doubles** (Cognitive trigger).
4. “Cut them off” produces disgust and thus it **Produces a negative emotion** (Rhetoric trigger – *Pathos*).
5. “Enter life – cast to the fire” is an **Expression of extremes** (Cognitive trigger).
6. “Enter life – cast to the fire” is an **Expression of counterparts** (Cognitive trigger).
7. “Lame or maimed” is an **Expression of doubles** (Cognitive trigger).
8. “Rather than” is an expression of **Comparison (specific)** (Cognitive trigger).
9. “To be cast to the fire the age-during” **Produces a negative emotion** (Rhetoric trigger – *Pathos*).
10. “Age-during” is **Expressions of extremes** (Cognitive trigger).
11. The whole idea can be taken as a **Hyperbola** (Rhetoric trigger – *Pathos*).
12. Because of exaggeration (point 10) the whole idea may have been taken (by some listeners) as amusing and thus it may be fall into the category **Humor** (Rhetoric trigger – *Pathos*).

Thus there can be found at least 12 mnemonic triggers to enhance retention and to make the audience remember what was said.

In the **Speech to the Pharisees and scribes** an example of mnemonically highly intensive sequence of teaching can be found in Matthew 21:31 (Young’s literal translation): “*Which of the two did the will of the father?*” They say to him, *‘The first.’* Jesus saith to them, *‘Verily I say to you, that the tax-gatherers and the harlots do go before you into the reign of God.’*”

1. The sequence starts with a reference to an earlier sequence of a parable. The sequence is actually the concluding part of the **Narrative** itself (Constructive trigger).
2. The sequence also includes an **Explanation of the narrative** (Constructive trigger).
3. “Two sons” and “the Father” connects the teaching to **Common concepts from everyday life** (Constructive trigger).
4. “Which of the two?” is a **Rhetorical question** (Rhetoric trigger – *Pathos*).
5. Because the audience replied to the question “Which of the two?”, this also falls also into category of **Activating the audience** (Rhetoric trigger – *Pathos*).
6. “Surely I say”²⁶ refers to **Weighting an important matter** (Rhetoric trigger – *Pathos*).
7. “Tax-gatherers and harlots” is an **Expression of double** (Cognitive trigger).
8. “Tax-gatherers and harlots” were hated and reviled groups in ordinary Judaism of the time, and thus just hearing the words **Produces negative emotions** (Rhetoric trigger – *Pathos*).
9. “Tax-gatherers and harlots do go before you” as an idea would **Produce negative emotions** (Rhetoric trigger – *Pathos*).
10. “Tax-gatherers and harlots [carrying the meaning of Sinners] – you” is an **Expression of counterparts** (Cognitive trigger).
11. “God” refers directly to a common concept from the Hebrew Bible and oral literature and thus, is a **Reference to what already was known or learnt** (Constructive trigger).

²⁶ In Greek *amēn gar legō*.

12. Because of point eleven the expression “the reign of God” connects a new thing to something known/learned earlier, thus, **Reference to what already was known or learnt** (Constructive trigger).

Thus there can be found at least 12 mnemonic triggers in the sequence to make the audience remember what was said.

In the **Olivet Discourse** an example of a mnemonically highly intensive sequence of teaching can be found in Matthew 24:30 (Young’s literal translation): “*and then shall appear the sign of the Son of Man in the heaven; and then shall all the tribes of the earth smite the breast, and they shall see the Son of Man coming upon the clouds of the heaven, with power and much glory.*”

1. “And then” and “and then” connects the narrative to a **Logical sequence** (Constructive trigger).
2. “And then” and “and then” refers to **Structural repetition** (Cognitive trigger).
3. “Son of Man” has several meanings in the Hebrew Bible²⁷ and thus the concept was a direct **Reference to the Bible** (Constructive trigger).
4. “Sign of the Son of Man” as a concept originates in the book in Daniel 7:13-14; thus it is a direct **Reference to the Bible** (Constructive trigger).
5. “All the tribes” is an **Expression of extreme values** (Cognitive trigger).
6. “Smite the breast” was a common way of expressing regret and thus it connects the teaching to a **Common concepts from everyday life** (Constructive trigger).
7. “All the tribes smite the breast” may be a **Hyperbola** (Rhetoric trigger – *Pathos*).
8. “All the tribes smite the breast” as an empowering idea may have **Produced positive emotions** in the nearest students (Rhetoric trigger – *Pathos*).
9. “Power and glory” is an **Expression of double** (Cognitive trigger).
10. “Power” and “glory” are **Expressions of extreme values** (Cognitive trigger).
11. “*coming ... with power and much glory*” as an empowering idea may have **Produced positive emotions** (Rhetoric trigger – *Pathos*).

Thus there can be found at least 11 mnemonic triggers in the sequence to make the audience remember what was said.

In conclusion one can say that Jesus used a large variety of mnemonic tools in his speeches. Examples of shorter segments of Jesus’ teachings show that in one sentence there can be at least 13 or 14 different mnemonic triggers to enhance retention and to encourage the audience to store the teaching in their memory.

²⁷ The Hebrew *ben-adam*, and the Aramaic *bar-enosh*. According to Stern (1989, 35), the concept means usually either 1) an ordinary son of an ordinary man, 2) a typical man, 3) someone taught to be as man, 4) a man, or 5) someone, “John Doe”. The term occurs 117 times in the Hebrew Bible. With the specific meaning of Messiah it originates in Daniel 7:13–14 and in 1. Henok. The term is used 91 times in the New Testament – it is used 86 times in the four Gospels and most cases are in Matthew (31 times).

5. Discussion – What can we learn from Jesus?

This study has concentrated on the cognitive, constructive, and rhetorical mnemonic tools used in the six speeches of Jesus in the Gospel according to Matthew. The speeches consist of fragments and segments of teachings and talks. On analysis quite a variety of mnemonic tools and methods for enhancing retention was found. This chapter discusses two theories produced by the results: a substantial theory that Jesus was an effective speaker (Chapter 5.1) and a more formal theory about what we can learn from Jesus (Chapter 5.2).

5.1 Mnemonically effective speech – How did Jesus do it?

In Chapter 3.1, was hypothesized that for Jesus to be a good and effective teacher the affective and formal components – emotions and logics – would have to be well balanced in his teachings. His teachings should include formal and functional sentences as well as intentions, goals, episodes, and subjective experiences, and feelings. The evidence from the six speeches in the Gospel of Matthew shows that, indeed, Jesus seems to have been an effective teacher. On the basis of the evidence and the study design it is not, however, known whether he could be said to be the best teacher of all. Anyhow he seems to have used a wide variety of mnemonic tools.

As a conclusion to Chapters 3 and 4 one can try to form a substantial theory as to what kind of teacher and speechmaker Jesus was in terms of the mnemonic tools that he used. It is good to note that the biblical audience was used to store the speeches in their minds better than today's audiences (see, e.g., Metsämuuronen 2009, Gerhardsson 2001, 2004). On the other hand, it is worth noting that Jesus had real *ethos* as understood by Aristotelian rhetoric: the close twelve students (disciples) really thought that it was worth following and listening to this teacher. Peter said in Matthew 16:16: "*You are the Messiah, the son of the living God*"; the students took the words of Jesus as the Word of God and most probably handled the information with great piety (see Gerhardsson 1998). It is evident on the basis of Matthew 13:36–43, 13:18–23, and 16:9 that the students didn't always understand Jesus' teaching. However, they most probably wondered about and talked to each other about these teachings and thus – as suggested by Lasry and colleagues (2008), see Chapter 3.1 – they probably improved their retention of his words.

On the basis of Chapters 3 and 4 some conclusions can be made.

1. As a whole, Jesus used a wide variety of mnemonic tools in his teachings and talks.
2. On the basis of cognitive and constructive psychology and classical rhetoric it is evident that Jesus used very effective tools. From the modern educational psychology viewpoint he used methods that enhanced the narrative memory and the logical-scientific memory. He also used the tools of classical rhetoric: *ethos*, *pathos* and *logos*. He also used smallscale cognitive and verbal methods to enhance the retention of the message.
3. There seem to be some techniques which are common to all of Jesus' speeches. These are the Expression of extreme values, the Expression of counterparts, Argument, the Expression of opposites and the Weighting of important matter. It can reasonably be interpreted that these methods constituted the general style of Jesus' speeches. It is also possible that some of these

tools were common to all speakers at the time. Without a comparison with some other contemporary religious speaker and teacher it is hard to say anything conclusive on this issue.

4. Certain mnemonic techniques were used in certain speeches. This can be deduced from the fact that though narratives are used frequently, in practice they are found in particular speeches; for example, there are no parables in the speech of Commissioning or in the Sermon on the Mount. Thus it seems that Jesus selected certain mnemonic tools for certain purposes.
5. The study of the mnemonic intensity of the Jesus' teachings show that in one sentence there can be over ten different mnemonic triggers to help the audience store the teaching in their memory.

5.2 What can we learn from Jesus as an effective speaker?

We lack the real authentic atmosphere of Jesus' teaching sessions and hence we cannot actually say much about Jesus' moves, mimicry, and intonations during these teaching sessions and discussions. In the best case we have only the contents, the way of wording, and the long-lasting results of the teachings. When it comes to the result of the teachings, ordinary fishermen and tax-collectors, of "*men of no education*" (Acts 4:13), became spiritual leaders and teachers for thousands of Jews and European pagans (non-Jews, *goyim*), the closest students (disciples) had the courage to die for the message they received, and as the result we now have the most widespread religion and longest lasting sustainable social structure in the world, the Church. From this perspective and on the basis of the empirical section we can be quite sure and convinced that Jesus was an effective speaker and teacher. When it comes to content, we know that only a portion of what was taught was saved in the four Gospels. At the conclusion of the Gospel according to John this is crystallized as follows: "*Now, there are many other things that Jesus did. If they were all written down one by one, I suppose that the whole world could not hold the books that would be written*" (John 21:25). However, it is most probable that the most memorable, general content of the teachings were transmitted to the next generation and to the Church.

At this point a critical question has to be asked: are the mnemonic tools Jesus used in his talks substantial, that is, specific tools for a specific audience at a specific ancient time, or are they formal, that is, are they applicable also to a modern speaker? One part of the answer is that most probably Jesus used such expressions and methods which were typical for the era in which he lived. He was born into a Roman-Hellenic culture – albeit in a rebellious and religiously unique Jewish area. He heard Jewish parables (or rabbinic *meshalim*, see Gerhardsson 2004) and teachings in the school and in the synagogue (see, Metsämuuronen 2009). He would have had to use such phrases and wordings which were typical of his audience so that the listeners would understand him. Thus some of the local linguistic and religious specialties may be substantial. On the other hand, when thinking of Jesus' speeches from the cognitive and constructive psychology viewpoint we can argue that there has to be some universal elements in Jesus' talks. Otherwise we, as constructs of the modern world, could not understand his ideas, as Taylor has pointed out (Taylor 1984).

We can perhaps suggest the following ten lessons that a modern speaker can learn from Jesus' talks:

- 1) **Do not be afraid of using extreme expressions in the speech.** This is the most characteristic feature of Jesus' talks. Such expressions as "no one", "all", "small(est)", "larg(est)", "great", "least", "last", "any", and "most" are exemplars of the extreme wording Jesus used in his talks. The expression of extreme values is an intentional (or unconscious) small scale exaggeration. The rationale for using extreme values is that it is a way to make things look twisted, like caricatures, so that the essence of the thing can be seen and understood more clearly. It helps us to create narratives. Hence the extreme expressions go straight to our episodic memory.
- 2) **Do not be afraid of using narratives in the speech.** This certainly is one of the features for which Jesus is famous. If you use narratives – parables, plotted stories, or true stories – there is no need to use a wide range of other mnemonic tools. This is evident if one compares two of Jesus' speeches: the Sermon on the Boat is full of narratives whilst the Sermon on the Mount has no narratives, at least in the form of parables. The rationale for using narratives is that they go straight to our episodic memory.
- 3) **Do not be afraid of using counterparts in the speech.** Jesus frequently used counterparts such as "good seed – bad seed", "smallest seed – biggest plant", "good fish – worthless fish", "life – eternal fire", "on earth – in heaven", "foolish girls – wise girls", "one is taken – one is left", and "faithful – lazy". Like extreme values counterparts are also small scale exaggerations which make things look like caricatures so that the essence of the thing can be seen and understood more clearly. The effect is even stronger if you can combine extreme values and counterparts as extreme counterparts. Counterparts help to create narratives in our mind. Hence they go straight to our episodic memory.
- 4) **Do not be afraid of creating emotions in the audience and showing emotions to the audience during the speech.** Jesus wasn't afraid of producing negative emotions: he used horrifying examples and harsh wordings which created disgust, fear, anger, and sadness. On the other hand Jesus used a lot of humor and he also created positive emotions such as a sense of empowerment, comfort, security, and safety. Jesus wasn't afraid of creating caricatures and even ridiculed some archaic types of persons (like some Pharisees), which can be taken as creating both negative and positive emotions. The rationale for producing emotions is that they go straight to the narrative mind and thus, to the episodic memory.
- 5) **Do not be afraid of using structural repetition in the speech.** If you do not use narratives, structural repetition may be a good alternative. Jesus frequently repeated the same topic, word, or concept either in exactly the same way or in a slightly modified version in the same sentence or a few sentences later in the speech – however he didn't use this tool much when narratives were told. Examples of structural repetition are "*Happy are those... – Happy are those...*", "*You are like salt – You are like light*", "*even the tax collectors do that – even the pagans do that*", and "*if you forgive – your Father will forgive*". The rationale for repetition comes from a classical tenet of constructive psychology: repetition enhances retention in the semantic memory.
- 6) **Do not be afraid of using doubles and triples in the speech.** These were some of the most used mnemonic tools in Jesus' talks. Jesus used such doubles as "*happy and glad*", "*Law and Prophets*" "*he goes and sells*", "*cry and grin*", "*tax collectors and prostitutes*", and such triples as "*what to eat – drink – dress*", "*ask – seek – knock*", "*rain – river – flood*", and intensified triples (with a gradual increase or decline in number, value, or some other feature) such as "*privately – two persons – whole church*", "*altar – temple – Heavens*", "*gold – silver – copper*", "*good soil gives 100 – 60 – 30*", and "*five – two – one talents*".

Triples are a widely used tool in folklore and in oral narratives. Hence, the rationale for using doubles and triples is that they enhance retention in the episodic memory.

- 7) **Do not be afraid of connecting new things to something the audience already knows or to common concepts from everyday life in the speech.** Jesus referred frequently to common concepts familiar with his audience such as general ingredients, animals and plants, the household and the family, farming and shepherding, and religious habits. The rationale for connecting a new thing to something already known comes straight from constructivist psychology: we construct our knowledge-base by building what is new on top of what we already know.
- 8) **Do not be afraid of directly addressing the audience during the speech.** Jesus directly addressed his audience by saying “you” – in either the plural or the singular, like “*Would any of you*”, “*you have heard*”, “*I say to you*”. It is also used in a more intense way like “*If your hand or your foot makes you lose your faith, cut it off and throw it out of you.*” and “*If your eye makes you lose your faith, take it and throw it out of you.*” Jesus also used rhetorical questions or other tools to activate the audience with triggers such as “listen”, “watch out...”, “be aware”, “see”, “be on your guard”, “be awake”, or “do not think...”. The rationale for directly addressing the audience or activating the audience is that the audience becomes a part of the narrative. Hence the audience receives a personal experience that will go straight to the narrative mind and episodic memory.
- 9) **Do not be afraid of making arguments and reasoning in the speech.** Jesus used several types of logical reasoning: giving arguments, making conclusions, basing his teaching on sources which were generally accepted and valued (in his case to the Hebrew Bible or to oral literature), and using a specific rabbinic form of reasoning called *kal v'chomer*. One simple word Jesus used very often is “because” or “for”. The rationale for logical arguments and reasoning is that our logical-scientific or paradigmatic mind and hence, our semantic memory, operates in logical operations.
- 10) **Do not forget that there are lots of other things to remember than just the mnemonic tools in a speech.** First, you have to have something new to say – using old facts and clichés does not excite the audience unless you modify them (“*You have heard – but I say to you*”). Second, you need to win over your audience – if you do not have *ethos*, you need to create it. A few miracles would help – or at least something which shows that you are an expert or experienced in the area under discussion. Third, obviously you need to speak clearly and fluently to be heard – it may take some time until you are ready to speak to five thousand men and a few thousand women and children without loudspeakers. Fourth, you need to mediate your message so that it is suitable for the intellectual level of your audience – even God needs to make himself understood. The list is not, of course, exhaustive; basic books of rhetoric are still worth studying.

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