The Importance of Teaching Ancient Greek Language in Speech Rehabilitation

Aggeliki Georgiou Kompocholi
National and Kapodistrian University, Athens, Greece

This paper recounts the process by which a severely brain-damaged adult student, after a terrible car accident, taught herself to read and write Ancient Greek, and in so doing, improved her ability to read and write in Greek. Initially, Evangelia’s reading and writing were very slow and difficult; memory and word finding challenges were her constant companions. Numerous studies by Greek and foreign scientists have shown that the Ancient Greek language, besides being alive, is also therapeutic, since it has the possibility to heal various dysfunctions and learning difficulties. After nine months, the recovery process was so good that Evangelia found herself writing and reading more fluently in Greek. This paper seeks to contribute to our knowledge of how the Ancient Greek language has the possibility to heal various and serious speech and language disorders.

Keywords: teaching Ancient Greek, speech and language disorders, speech and language therapy, rehabilitation

The importance of learning ancient languages has been widely discussed internationally in the past few years. Studies in ancient languages (Latin and Ancient Greek) support the thesis that knowledge of such languages contributes in many ways to the psychological and mental development of primary and secondary education students (Griffin, 2006, pp. 561-574; Crivellato & Ribatti, 2007, pp. 327-336). Ancient Greek is one of the oldest written languages on earth, bearing a long linguistic tradition. It has been the basis of the European civilization and, naturally, it has fundamentally affected other languages and cultures. According to a theory by the British classicist professor Eric Havelock, based on Plato, the ancient Greek alphabet led the Greeks to conceive various abstract concepts; thanks to the unique way the mind of those using it was stimulated1. Theatre, Philosophy, Arts, and Democracy experienced spectacular growth (Solmsen, 1961, pp. 169-197; Manuli & Vegetti, 1977). It is indicative that the APA (American Philological Association) founded the American Center for Classics Research and Training in 2011. In England as well, the program “The Iris Project-Greek in schools” was met with notable success. It was implemented in 2010-2011 in primary schools of the eastern Oxford area, in students ranging from 7 to 10 years old, and it continues in more schools since there has been surprising

---

1 The scientific findings supporting Havelock’s theory are the following: (1) Broca’s area, which is usually located in the left hemisphere of the brain and the area responsible for speech production, was more stimulated by the use of the Greek alphabet, which is the first alphabet that assigned symbols to vowels. (2) The human brain was radically redefined. (3) The above changes that occurred by using the Ancient Greek language, have led the ancient Greeks to the need to communicate via art and speech (Havelock, 1986, pp. 134-150).
improvement, even concerning the children’s everyday vocabulary\(^2\). In Australia, on the other hand, the university researcher Kate Chanock in her paper “Help for a Dyslexic Learner From an Unlikely Source: The Study of Ancient Greek” (Literacy, 2006), described how she helped a learner of English with dyslexia through ancient Greek, without any previous planning (Chanock, 2006, pp. 164-170).

In Greece particularly, a published scientific research by the team of the Greek psychiatrist Ioannis Tsegos, showed that the measurable indicators of verbal intelligence and deductive thinking were accelerated across a group of 25 non-dyslexic children, who were taught Ancient Greek through accepted methods for two hours per week, between the ages of 8 and 12. An important part of the research by Mr. Tsegos and his team took place in Elliniki Agogi, an educational institution whose aim is to teach ancient Greek to students of both primary and secondary education, as well as adults (Τσέγκος, Βεκιάρη, & Παπαδάκης, 2005). I have been working in this institution as a teacher of ancient Greek language and literature since 1999, and there, on January 2014, the parents of a young girl came to meet me to ask me to help with her speech rehabilitation, after a serious head injury in a car accident. The doctor treating her, the neurosurgeon Dr. Nikos Michalainas insisted that learning ancient Greek would critically improve her speech. The young woman, whose name is Evangelia Drosou, 25 years-old today, was having sessions with a specialized speech therapist.

I taught and I teach ancient Greek in a way which is very interesting to me, through the words and their philosophical meaning. And I believed that this was enough to love that language. What it offered and it continues to offer are intellectual treasures. Until the moment I met that girl who, with courage and will to live, asked me to teach her this language not for educational but for therapeutic purposes. That car accident deprived her of so many of the things taken for granted in our lives, and almost took her own life away, her ability to move, which she recovered, and the ability to speak, which she regains. With her, I realized the importance of that language for the brain functions and I made many interesting scientific observations, in a study that is underway. These interesting scientific recordings are what I am citing in this study.

The first lesson with her begun with simply pronouncing the seven vowels of the ancient Greek language, assigning the proper length to each one. Scientific research has suggested the influence of syllabic lengthening on semantic processing in spoken languages (Magne, Astesano, Aramaki, Ystad, Kronland-Martinet, & Besson, 2007, pp. 2659-2668). We know that in Greek the long vowel \(\omega\) (\(\omega\)) has double pronunciation length than that of the short vowel \(\alpha\) (\(\alpha\)) even though they both correspond to the sound /o/. Afterwards, we started a play on Greek words “\(\omega\)μως” (which means but) and “\(\omega\)μος” (which means shoulder), where I pronounced each word with the proper length in sentences, asking my student to discover which word I was using each time. This game continued in the next lessons with the rest of the vowels, and we also discussed the ancient Greek ways of intonation and stress at the same time. My goal was for her to understand how to articulate the words and their dynamic, while I was preparing her for her first rhythmic recitations of verses, since we are all aware of the innate human tendency towards rhythm and melody and, it is not by chance that, in every literature poetry precedes prose.

Rhythm is essential to the understanding of speech. Human beings have universally engaged in rhythmic musical activities such as drumming, dancing, singing, and playing musical instruments since the ancient times. In recent years, researchers have begun to explore the therapeutic potential of rhythm in speech and language.

\(^2\) For further information see: http://irisproject.org.uk/index.php/the-iris-project/projects/greek-in-schools.
rehabilitation. A number of studies have demonstrated the importance of rhythm or sound envelope in speech comprehension (McGurk & MacDonald, 1976, pp. 746-748; Turner & Pöppel, 1983, pp. 277-309; Van Peer, 1990, pp. 259-275; Manzoni, 1998, pp. 103-152; Kotz & Schwartze, 2010, pp. 392-399).

The first poem I gave her to learn by heart was the brief ancient Greek children’s poem below: “Παῖς εἰμί, πόδες χεῖρες κεφαλή, ὦ τα, ρίνα, ὄφθαλμοι” (which means that I am a child, legs, arms, head, ears, nose, eyes). The poem’s rhythm helped her memorise it, given the fact that, in the first teaching sessions, learning something by heart was a difficult task for her. I repeated what we had done in every lesson, before we moved on to new information. Memory is one of the core components of human cognition and science claims that mnemonic training reshapes brain networks to support superior memory (Musacchia, Strait, & Kraus, 2008, pp. 34-42; Müller, 2017, pp. 1227-1235). We started with small poems, impromptu dialogues in ancient Greek and adapted Aesop’s fables which were her favourite (Manzoni, 1998, pp. 103-152; Jusczyk, 1999, pp. 323-328; Kallery & Psilos, 2004, pp. 291-311; Kollias, 2015, pp. 96-103). She found their different topics enjoyable and pleasant. The texts were recited in Attic Greek, many times however, my student’s speech diverted in previous periods of the ancient Greek language, and she used characteristics of Doric or Aeolic Greek without realising it (Horrocks, 1997). For example, the word σελήνη (moon) (Attic dialect) was easier for her to pronounce as σελάνα (Doric dialect), with a clear, open -a- (/a/) or as σελάννα (Aeolic dialect) with a brief pause in -a- (/a/), before pronouncing the double -νν- (/nn/). This was very useful educationally speaking since it did not foster a feeling of making a mistake, even if something was pronounced in a different way. If we take into account that the Attic dialect is subsequent to the Doric and the Aeolic ones, this gave me a first hint about the language of the texts I should be using by placing the emphasis on the Doric and the Aeolian dialect. To me, the fact that I could teach her Theocritus or Sappho and that their language could easily be recited by my student, something that satisfied and encouraged her, was a true revelation.

The next step after rhythm was melody. Scientists have discovered that music can modify the brain at both functional and structural levels. Such neural changes can impact several domains, but one domain seems to be particularly influenced by music—namely, language. Music and language seem to share special features that allow music to improve and shape language processing (Menon & Levitin, 2005, pp. 175-184; Schlaug, Norton, Marchina, Zipse, & Wan, 2010, pp. 657-665).

The first song my student sang had improvised music, and it was the new year wishes Homer had composed, included in the Souda dictionary. The carols begin with the phrase “θύραιαν ανακλίνεσθε” (that is, doors open so that everything good can come in). The following text is very complicated phonologically, with a difficult combination of vowels and consonants, which however was easier for my student to render than recite. In fact, she couldn’t recite it before she had sung it several times, and this was a guide for me on how to teach her complicated texts. We first sang them, with improvised, simple melodies, and then my student memorized them (Κατσαρός, 2002, p. 837).

In the first six months, our topic was mainly Aesop’s fables. After a two-month pause, due to the summer holidays, on September 2014, we restarted our lessons. Aesop was her favourite writer, and so were the ancient children’s songs and lullabies. Gradually, however, I started to add texts by lyric and tragic poets, easier at first, more complicated afterwards, with more and more complicated combinations of vowels and consonants. She had already visited her doctor, who had noticed a significant improvement in her speech quality, and of course
so important work her speech therapist did. What her doctor noticed however, was the ease with which she used the verb in a sentence and greater verbal ability. Then, on September 2014, we began a period which I have termed “brainstorm”, that is a continuous bombarding with ancient Greek literary texts of increasing difficulty and complexity, containing different types of ancient verb conjugation. It was an experiment whose ending I could not foresee, which lasted for five months, on a twice-a-week basis (instead of lessons once a week, as we did till then). And yet… after that five-month trial period there was a notable change in the type of texts she found interesting and which she could understand and accept. Not Aesop anymore, only segments of ancient Greek tragedy, Aristotle and lyric poems instead; no simple myths about animals, but allegorical myths, like the allegory of the platonic cave, and novellas like the narrative about Candaules’s wife by Herodotus (Clarke, 1963, pp. 1-14; Clarke & Standard, 1973, pp. 130-148; Gross, 1995, pp. 245-250). At that period, she became interested in writing, which had been very limited till then, since she found extended writing tiring (Allopenna, Magnuson, & Tanenhaus, 1998, pp. 419-439). And I really only then started to teach her writing, beginning with hieroglyphs and Linear B, moving gradually to teaching ancient alphabets (Chalchidic, Corinthian, soloneanetc), copying texts and then to written answers to reading comprehension questions (Bennett & Emmett, 1972, pp. 55-72; Hooker, 1980; Brice, 1990, pp. 86-88; Palaima, 2012). I taught her—I should repeat—in ancient Greek and it was very interesting to observe an upward trend in my student’s verbal and audiovisual abilities and functions. The study is of course underway, although some of the results have already been presented in a workshop by the Ministry of Education’s Secondary Education Department. In this study there is a very brief—a sample I dare say—reference of the whole project which I hope will soon be completed.

Conclusion

The writer carried out this study, whose purpose was to examine the possible effects of learning ancient Greek on someone’s cognitive skills and functions, such as perception and memory. The findings lead to the conclusion that Ancient Greek has therapeutic potential for promoting recovery from speech and language dysfunctions. Although clinical studies are limited to date, this type of learning may act preventively in the occurrence of certain learning difficulties, as well as therapeutically, in cases where these difficulties have already occurred.

References

Allopenna, P., Magnuson, J., Tanenhaus, M. (1998). Tracking the time course of spoken word recognition using eye movements: Evidence for continuous mapping models. Journal of Memory and Language, 38, 419-439.
Bennett, E. L. (1972). Linear B sematographic signs. Acta Mycenae, 1, 55-72.
Brice, W. C. (1990). Speech and writing in the early aegan. Kadmos, 29, 86-88.
Chanock, K. (2006). Help for a dyslexic learner from an unlikely source: The study of Ancient Greek. Literacy, 40(3), 164-170.
Clarke, E. (1963). Aristotelian concepts of the form and function of the brain. Bulletin of the History of Medicine, 37, 1-14.
Clarke, E., & Standard, J. (1973). Aristotle on the anatomy of the brain. Journal of the History of Medicine and Allied Sciences, 18, 130-148.
Crivellato, E., & Ribatti, D. (2007). Soul, mind, brain: Greek philosophy and the birth of neuroscience. Brain Research Bulletin, 71, 327-336.
Griffin, C. (2006). Research and policy in life-long learning. International Journal of Lifelong Education, 25(6), 561-574.
Gross, C. G. (1995). Aristotle on the brain. Neuroscientist, 1, 245-250.
Havelock, E. (1986). The alphabetic mind: A gift of Greece to the modern world. Oral Tradition, 1(1), 134-150.
Hooker, J. T. (1980). *Linear B: An introduction*. Bristol: Bristol Classical Press.

Horrocks, G. (1997). *Greek: A history of the language and its speakers*. London: Longman.

Jusczyk, P. W. (1999). How infants begin to extract words from speech. *Trends in Cognitive Sciences (Regul. Ed.)*, 3, 323-328.

Kallery, M., & Psilos, D. (2004). Anthropomorphism and animism in early years science: Why teachers use them, how they conceptualize them and what are their views on their use. *Research in Science Education*, 34(3), 291-311.

Kōtσσαρός, Β. (2002). Σουίδα, ΒυζαντινόΛεξικό. Θεσσαλονίκη: Θύραθεν.

Kollias, O. (2015). Anthropomorphism, Aesop’s fables and their use in lifelong learning and vocational training by awakening participants’ memes. *Journal of Higher Education Theory and Practice*, 15(2), 96-103.

Kotz, S. A., & Schwartze, M. (2010). Cortical speech processing unplugged: A timely subcortico-cortical framework. *Trends in Cognitive Sciences*, 14, 392-399.

Lerdahl, F. (2001). The sounds of poetry viewed as music. *Annals of the New York Academy of Science*, 930, 337-354.

McGurk, H., & MacDonald, J. (1976). Hearing lips and seeing voices. *Nature*, 264, 746-748.

Magne, C., Astesano, C., Aramaki, M., Ystad, S., Kronland-Martinet, R., & Besson, M. (2007). Influence of syllabic lengthening on semantic processing in spoken french: Behavioral and electrophysiological evidence. *Cerebral Cortex*, 18, 2659-2668.

Manuli, P., & Vegetti, M. (1977). *Cuore, sangue e cervello. Biologia e antropologianelpensiero antico*. Milano: Episteme Editrice.

Manzoni, T. (1998). The cerebral ventricles. The animal spirits and the dawn of brain localization of function. *Archives Italiennes de Biologie*, 136, 103-152.

Menon, V., & Levitin, D. J. (2005). The rewards of music listening: Response and physiological connectivity of the mesolimbic system. *NeuroImage*, 28, 175-184.

Müller, N. (2017). Mnemonic training reshapes brain networks to support superior memory. *Neuron*, 93(5), 1227-1235.

Musacchia, G., Strait, D., & Kraus, N. (2008). Relationships between behavior, brainstem and cortical encoding of seen and heard speech in musicians and non-musicians. *Hearing Research*, 241, 34-42.

Palaima, T. (2012). *Linear B*. The Oxford Handbook of the Bronze Age Aegean Edited by E. H. Cline.

Parbery-Clark, A., Strait, D. L., & Kraus, N. (2011). Context-dependent encoding in the auditory brainstem subserves enhanced speech-in-noise perception in musicians. *Neuropsychologia*, 49, 3338-3345.

Penfield, W., & Roberts, L. (1959). *Speech and brain mechanisms*. Princeton, NJ: Princeton University Press.

Sofos, K., & Papadakis, N. (2005). Η εκδίκηση των τόνων Η επίδραση των αρχαίων ελληνικών και του μονοτονικού στην ψυχοεκπαιδευτική εξέλιξη του παιδιού. Αθήνα: Εναλλακτικές Εκδόσεις.

Van Peer, W. (1990). The measurement of metre: Its cognitive and affective functions. *Poetics*, 19, 259-275.