



The Music of Language – eBook 4

Understanding the Helen Doron English Methodology

The Power of Language

Throughout the ages, great thinkers in philosophy, science, and the arts have been fascinated by the power that language holds in the development of human potential. As human language developed, so did the human brain; as the brain evolved, language vocabulary increased, leading to the ability to think in increasingly complex abstract concepts. In the field of linguistics, many theories have been proposed over the years to articulate this connection between language and the human experience. The Sapir-Whorf Hypothesis (also known as the linguistic relativity principle) states that cultural concepts shape language, which in turn shapes thought and behaviour.¹ While linguistic relativity remains a debated topic, linguists, sociologists and psychologists all agree that language development is irrevocably linked to the actualisation of human potential.

Today, language mastery remains one of the clearest indicators of intellectual ability. Until recently, academic performance was linked solely to the ability to read, write, and even speak at a high level of proficiency. Even now, with the understanding of other types of intelligence, traditional education still relies heavily on linguistic skill as a measure of a student's overall aptitude.

Brain Development

Within the last 20 years, research has improved the understanding of the role that early language acquisition has on overall brain function and development.² Before the popularisation of Jean Piaget's theory of cognitive development in the 1950s, it was believed that infants were passive creatures, taking in very little from their environment. Mainstream education practices began to change, yet the starting age remained the same; despite the theories presented by Piaget and his peers, education remained built on the faulty premise that children below a certain age were not capable of learning.³ Yet the data now shows that

a person's intellectual capability is shaped not just from their genetic makeup, but from the extremely early brain stimulation that leads to the creation of neural pathways. As more neural pathways are added, the potential for storing and retrieving information is increased. To put this in some perspective, most brain growth occurs during infancy; by age one, the brain has doubled its birth volume and attained 60% of its ultimate adult size.⁴ This is the basic foundation for mental capability that determines so many things: how a child will succeed in school; how an adult will adapt to a new job; how an individual will be able to absorb new information throughout an active lifetime.

In fact, this is not a phenomenon restricted to humans; ultra- early stimulus is crucial in many other species. For example, dog trainers start working with newborn puppies, tickling their foot pads and holding them in inverted positions (both of which stimulate the growth of additional neural pathways). This intensive programme to develop 'super dogs' has led to some of the most extraordinary canine assistance dogs available.





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Even more compelling is the body of evidence suggesting that the lack of early language development leads to extreme limitations in brain functions. Those rare ‘raised-by-wolves’ cases (that is, children raised without sufficient human interaction) result in adults who suffer from stunted speech capability and serious developmental problems. These cases show that adults who were deprived of strong mother-tongue language development may never be able to handle the basic mother tongue, let alone the simplest abstract thought, such as basic mathematics or logic reasoning.

Intellect alone is certainly no measure of life success (one has only to look at the number of Mensa members who are alcoholics or taking antidepressants!). However, a child whose brain has been prepared for intellectual development does have a distinct advantages in life; this child has the tools to continue learning, and therefore the possibility of achieving wonderful things. Intellect opens doors, both in academic achievement and in professional development. When combined with emotional stability and fulfilment, we have a winning combination.

Many parents are taking advantage of this new understanding of infant brain development, and investing the time and effort needed to stimulate their children’s growing brains. In recent years, teaching preverbal children rudimentary sign language has become in vogue. And rightly so. Since infants develop the fine muscles in their hands before they develop those required for speech, simple signing allows the child to communicate basic needs, and reduces infant frustration and aggression, as well as priming the child for later communication. In addition, research indicates that infants who learnt sign language later perform better at school language tests, even after the grade two.⁷ Another encouraging trend is prenatal learning — the idea that foetal stimulation through music and speech can help produce smarter, more gifted, and better adjusted babies.⁸ All of these methods are built on a common premise; namely, that early stimulation allows the brain to develop more neural pathways, thus allowing improved cognitive functioning as the child develops. Whatever the method, the logic (and the attraction) is clear. Parents want to give their children every possible advantage.

One of the pioneers in stimulating infant brain potential was Glenn Doman, the founder of the Institutes for the Achievement of Human Potential. His work with brain-damaged and developmentally-disabled children produced results that were judged ‘impossible’ by traditional doctors and educators. Doman was a pioneer who held that brain growth was a dynamic and ever-changing process, which directly contradicted the accepted theory of the time. Many of the brain-damaged children who entered his institutes graduated healthy and often gifted. A few parents even wrote books about the long, but worthwhile process in which so-called “vegetable” children were saved by Glenn Doman’s simple but very focused premise of the ability to speed up brain development in children aged up to the age of 6 and the physical and mental techniques he developed. Doman went on to apply his findings to training programmes to better utilize the potential for healthy children. His programmes on teaching early reading, mathematics, physical excellence and more, apply the same principles of stimulation to increase the development of neural pathways, i.e., that the frequency, intensity and duration of the stimulation much be increased.





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How Language Acquisition Works

Language is stored and processed in two specific areas of the brain: Wernicke's area (in the left temporal lobe), and Broca's area (in the left frontal lobe). While all language is stored in these areas, there is a distinct separation between the mother tongue and a later-acquired language. In true bilingualism, where both languages are learned at infancy or in early childhood, both languages inhabit the same space within Broca's area. However, if the second language is acquired later, even if it is mastered to a high level of proficiency, it is stored and processed in a different space within Broca's area.⁹ For example, if a native French-speaking university student decides to study Russian, all the Russian "coding" ends up spatially separated from the French coding.

Mother-tongue language is virtually hard-wired into the brain. Even individuals who are quite fluent in a second or third language will automatically revert to their mother tongue in times of stress.¹⁰ Critical concepts, such as counting, remain irrevocably linked to one's mother tongue throughout life.

Both of these phenomena may be due to the unique nature of mother-tongue language acquisition. Soaked up at a time when the brain is busy laying the foundation for learning, mother-tongue language is permanently coded into the brain.

So how do children actually learn their language? For the initial period, the infant appears to be passively absorbing sounds from the parents and others in the immediate area. In reality, the infant's brain is already actively analysing the language and preparing for future speech development. Eventually, associations are made between the sound and a meaning, either a concrete noun (such as bottle) or a more complex, intangible concept (such as hunger). In this natural immersion environment, the infant is not expected to study grammar, understand linguistic structure, master pronunciation, learn to read and write, or any of the kinds of skills associated with formal language training. The infant is absorbing the audio data, much as a sponge soaks up water.

Language acquisition is far more complex than just audio input. Infants are exposed to exaggerated enunciation, pitch, cadence, and even facial expression. Adults speaking directly to infants commonly (and quite unconsciously) slip into the kind of baby talk known as motherese. Speech is slowed, emotional content amplified and a sing-song cadence adopted. The adult 'pulls faces' (makes exaggerated facial expressions). Together, this captivates the infant's attention. It stimulates the infant to respond; the speaking adult is rewarded with gurgles, smiles, arm and leg movements, and other signs of a happy, engaged baby.

Visual stimulation plays a role in helping an infant make these early associations. Infants deprived of enough variety in visual stimulation may suffer from developmental difficulties.





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The Benefits of Bilingualism

When adults are surveyed about the value of learning another language, most respond in terms of immediate personal benefit, such as greater marketability or professional opportunities, or in terms of less tangible benefits, such as increased respect for and awareness of other cultures. But the true benefits of learning an additional language are far broader than that.

When comparing bilingual and monolingual children, bilingual children often outperform their monolingual peers in surprising ways:

- They exhibit more creativity.
- They excel at problem solving.
- Their oral and written communication is richer and more inventive.
- They display a better grasp of grammar.
- They score higher on certain intelligence tests.

More surprisingly, some distinctions can be seen at a very early age. Research shows that infants raised in a bilingual environment show cognitive gains over their monolingual-environment age peers. They learn faster (that is, they adapt more quickly to new stimuli).¹³ It is the very exposure to a second language that appears to be stimulating neural pathways and enhancing cognitive capabilities at this age. In fact, bilingual children show consistent advantages in processing both verbal and non-verbal information. There is now evidence that suggests that being bilingual may slow the brain's aging process.

The Attraction of English

Consistently over the past twenty years (1990 to the time of this publication in 2010), when asked what second language would be most helpful for their children, the overwhelming number of parents (who are not themselves mother tongue English speakers) choose English. By the mid-20th century, English had become the dominant language for business and science.¹⁵ In today's global market, English remains the lingua franca for doing business, participating in geographically-distributed technology development programmes, or even sharing the latest research.

And while Mandarin Chinese remains the most commonly spoken mother-tongue language on the planet, English is, at present, one of the most widely spoken. This includes those who speak but are not native-speakers of English, who use it to communicate for work, leisure or travel purposes.

An added lure is English-language entertainment media, exporting thousands of movies, TV shows and personalities. More and more people are exposed to English entertainment; subtitles are useless for very young children, and the overwhelming bulk of programming is never dubbed into other languages. That leaves non-English-speaking viewers out in the cold.





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The advent of the World Wide Web has accelerated the English boom. While much Web content is available in other languages, English content (particularly in entertainment) still dominates. The yurt-dwelling Mongolian nomad or the ice-bound Lapp may now have a satellite link and suddenly be exposed to English, English, English.

The Failure of Traditional Second-Language Training

In many countries, the importance of a second language is well understood and supported by the government through the public school curriculum. In most countries today, children begin to study English at about age eight (just a few years ago, the average age was ten or eleven). Mandatory testing at various stages towards the end of high school (sixth form) includes tests in English comprehension and composition. Any student wishing to continue studies in medicine, science or technology is required to score well in English. In fact, securing a place to study anything at the university level is quite difficult without adequate English proficiency.

This system underscores the importance placed on English.

Ironically, teaching English (or any second language) in this kind of classroom situation is doomed to failure for a number of reasons:

- Students are expected to master all aspects of a language (reading, writing, speaking, understanding, grammar and phonics) simultaneously.
- Students do not get enough individual speaking time.
- Students do not receive enough direct feedback.
- Pronunciation suffers.
- Inhibition leads to failure.
- Traditional education models focus on correction.

The Students are expected to master all aspects of a language simultaneously. Rather than first absorb the sounds of a language, the way a baby soaks up its mother tongue, a ten-year-old child was expected to hear sounds, look at symbols (letters) that may be from an entirely different alphabet, learn abstract rules of grammar that are counterintuitive and confusing, and somehow juggle these distinct brain activities all at once. Listening, comprehension, reading, writing and (often the most painful) oral reproduction of these new and alien sounds are all different skills; so different, in fact, that they stimulate different areas of the brain.

Shai recalls his experience in grade 4. “The teacher drew a picture of a sheep on the blackboard. Next to it, she wrote ‘sheep’ and said the word. I had no idea what she was doing. I lived in a very urban area — we didn’t have sheep wandering around in our neighbourhood. I couldn’t make the mental leap between that simplistic chalk cartoon and a real animal. As for the word, I didn’t even recognize those marks as letters. And the sound?”





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What was this woman doing? There were simply too many things all at once for me to cope with.” Shai didn’t recognize the letters as his mother tongue (Hebrew) uses a different alphabet.

The situation has improved, and Shai’s children will be (at least partially) spared that stress, as children in Israel and Europe now receive a year of oral-only English instruction before being introduced to reading and writing. This change in practice is due in large part to the influence of Helen Doron English, promoting proper methodology for teaching spoken language for over twenty-five years now. This change is an example of a bottom-up, grassroots initiative, as the parents exposed to this teaching method in the private market began to demand better quality in the school classroom. Through watching their children succeed in Helen Doron English classes, the parents developed an increased awareness of early education options; this awareness, in turn, forced the school system to implement some changes.

It is important for children to first tune their ear to the language (by hearing it), then speak, and only then read and write. This is the natural progression of things in the mother tongue. This should be the order of learning in the second, third or fourth language. Moreover, the younger the child is, the better he or she will learn.

Additional social and political factors encourage early language courses. For example, the European Union issued a White Paper in 1995 that boldly stated the need for EU children to learn two foreign languages in kindergarten to support multiculturalism. This was followed by numerous other papers over the years, culminating in Piccolingo in 2009 — a campaign of the European Union to develop foreign language awareness and skills in children of preschool age.

Helen Doron English was the first method in the field promoting spoken language as a pre-requisite for reading and writing. Furthermore, recent research of reading and writing all show the importance of absorption of the phonology of the language in order for the student to read and write well. In English, for example, children who have had a lot of nursery rhymes read to them do better in reading and writing later on.

Students do not get enough individual speaking time. Learning to speak a language involves a sophisticated and subtle interplay of vocalising and hearing. We hear ourselves and adjust our efforts dynamically. But in most classroom situations, students are asked to repeat or recite in groups. This makes it difficult for the teacher to hear an individual student’s voice, but even more damaging, it makes it very difficult for the student to hear his or her own voice. One-on-one speaking time is extremely limited. It is quite common that a small handful of ‘star’ students end up dominating whatever individual speaking time is available. The shy and unsure students fade into the background and may go through years of classes without having the opportunity of hearing themselves speak English.

Students do not receive enough direct feedback. In a typical classroom with 30 to 40 students, teachers don’t have time to work one-on-one; students are expected to repeat things in groups, allowing the more verbally timid to feign participation. Even in wealthier





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school systems with advanced language labs and multimedia training, students may work without a teacher directly monitoring their progress. Compare this to the amount of direct feedback and interaction that an infant and toddler receives from parents. In the often impersonal atmosphere of overcrowded classrooms, many students are able to skate through years of language classes without ever achieving a minimal level of fluency.

Pronunciation suffers. A further problem is the shortage of native speakers. Often, the teacher's example upon which students must model their efforts is flawed to begin with. In many countries, English may be taught by teachers who are not themselves mother-tongue English speakers. Their heavily accented English does nothing to help students master correct pronunciation. If a student is lucky enough to have a mother-tongue English speaker as a teacher, there is still no consistency. With accents ranging from the broadest South African Afrikaans to the roughest Texas twang, some teachers find that their students fail to understand vocabulary that had been mastered in the previous school year. Teachers hailing from all over the UK and the US (with their myriad of accents), from Canada, Australia, New Zealand, and Zimbabwe, all add to a messy polyglot of language instruction. There is no 'BBC English' or 'American Standard Broadcast English' that acts as a neutral benchmark. Even supporting multimedia materials often feature non-native English speakers.

The lack of consistency in accent is a minor problem compared to the daunting liability of late-start acquisition. The ability to correctly enunciate the sounds of a language are set well before age eight. There is no genetic predisposition that determines, for example, that a Japanese adult cannot distinguish between English l and r sounds properly. Research shows that Japanese babies can clearly differentiate between these sounds, and only lose the ability once they begin to be verbal in their mother tongue.

Other fundamental linguistic elements, such as mouth shape or the exact placement of the tongue on the palate, are set at a very early age. After age six, the brain's aptitude for language acquisition is severely reduced.¹⁶ While the rare adult can learn to mimic a correct accent in another language, it requires intensive vocal coaching, a rare gift for language, and the willingness to expend a significant conscious effort.

Remember that baby talk? Those early, preverbal infant sounds are the way the child is naturally and painlessly preparing mouth and tongue positions to mimic the sounds of the native language.

Inhibition leads to failure. More than any other subject, older students are more likely to be shy, or even fearful, of trying to speak in a language classroom. Again, due to larger class sizes and a lack of emphasis on verbal skills, students can successfully matriculate without being able to make themselves clearly understood in even the simplest sentence. As written tests emphasize reading comprehension and writing ability, school systems throughout the world churn out graduates who can read English at a high school level (or better), but are not able to ask for directions or order in a restaurant.

A Russian engineer approached Bob, a writer in the same company, with a question about Microsoft Word. He wanted to understand the purpose of a design element that he





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referred to as a chore. Bob, a mother-tongue English speaker, was stumped. “I kept thinking of anchovies or ‘a chore’, like a task, and trying to figure out what Leonid could be talking about. I finally got up and walked with him back to his computer. There on the screen was a highlighted anchor mark.” Leonid was capable of reading and understanding fairly sophisticated technical material in English, but had no clue how to pronounce many simple, yet irregularly-spelled, English words.

This intense second-language awkwardness is fodder for stand-up comics, but it is painful to observe. The discomfort of the speakers, in turn, leads to greater trepidation in each new class of students. “Will I be laughed at, too?” they think.

Performance anxiety is not unique to language classes, but it is more visibly apparent there than in any other single subject. Repeated failure to wrap one’s tongue around a tricky, foreign sound, or to dredge up the vocabulary with the correct syntax, causes many students to develop an aversion to language classes.

Traditional education models focus on correction. Education in the Western world places a heavy emphasis on rote memorisation. A student’s success is often dependent on the ability to regurgitate facts. Feedback is generally limited to correction; that is, pointing out what is wrong in homework or on a test. With the emphasis on finding mistakes, language students (already suffering from performance anxiety) are conditioned to fear correction every time they open their mouths.

Brenda relates, “When I first started working in a French environment, I understood about 70% of the conversations around me, and I was able to express myself with some fluency. But the company secretary started correcting me every time I made a mistake. It was as if a giant vulture was perched on that desk, just waiting to pounce. Within a week, I became totally tongue-tied. I found myself trying to avoid speaking French altogether. I felt embarrassed, awkward and stupid. What saved me was a new engineer who started working at the company later that same week. She made an effort to befriend me, and we would sit together at lunch time. What a sweet woman! She was completely non-judgmental about my mistakes. She only paid attention to what I was saying, not how I was saying it. We had real conversations! I forgot about my fear and my awkwardness, and just talked. It was so exhilarating. But as soon as that secretary would point out my mistakes, my fluency would take an immediate tumble again.”

When a competent professional adult feels this way, imagine how the problem is exacerbated in children and teenagers!

These six reasons all combine to work against the acquisition of successful, fluent language skills. The proof is in the pudding. Mediocre English test scores in many countries underscore the fundamental failure of this traditional education method for teaching second languages.

