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We are very pleased to bring to our readers the four compelling articles that comprise the third issue of the Hellenic Journal of Music, Education and Culture. The four authors featured here present works that explore important topics on music education and culture.

As you will see from the articles, we have colleagues from diverse cultural and international settings who are reporting and discussing their research and practice. Articles are in English or Greek to reflect the origins of the journal and also to facilitate its potential impact in the symbiotic development of the research communities, both within and outside Greece. We hope that you enjoy the journal contents and that you will take an opportunity to contribute in the future.

Our first peer-reviewed paper, in Greek, is Eleftheria Boulgari's and George Sitotis's "Music's relationship with the function of memory of primary school children. Contemporary study in Attiki". The authors present a case study of a small sample of students in a primary school of the area of Attiki, Greece. First, they take into account previous research findings; more specifically, a project which took place in countries other than Greece since 1993 and concerned with the relationship that Mozart's music has – more specifically, listening to sonata K.448 – with the learning ability of students (the so-called 'Mozart Effect'). Their case study followed procedures quite similar to those of other researchers: (1) they had these students listening to Mozart's sonata K.448; (2) they also had them listening to a contemporary popular song; and (3) they taught them a song which the students performed. Their conclusions are that learning a song and listening to a popular song arouses positive feelings in these children and this results in a better short-term memory of numbers.

Our second peer-reviewed paper is Christina A. Georgiou's "Perspectives of music publishing in the twenty-first century: the death of the editor?" The article addresses crucial questions regarding the pros and cons of implementing recent technological advances in

music publishing, identifying the current pitfalls, as well as the promising perspectives of their application. The article attempts to provide a new, working definition of the roles of those affected by such changes in the field of music publishing: from the promoters of new technology to the publishers; from the music editors to contemporary users at all levels; from amateurs and students to teachers and academics. In short, the author discusses how this new technology can be a promising tool in the promotion of research, knowledge and dialogue. As she claims, as digital and online resources, formats and systems progress further, more and more options will become available to those with access to this technology and, ideally, these will further promote evolution, knowledge and unprecedented opportunities for those who make use of them critically and wisely.

In respect to music, the process of producing the twenty-first century's first large-scale, music-related digital editions and archives can be informed by the recent attempts in creating literature- and art-related digital archives. The outcome should not simply involve the preservation and the archiving of information and of the editions already available; it should enhance and promote what has diachronically proven to be the most crucial element of editing and interpretation: the continuation of dialogue.

Moving on to Greek issues in music culture, Georgia Kondyli's "Callas: the conflict about Epidaurus", explores situations that are intimately related to Maria Callas' concerts in Herodium and Epidaurus. The internationally known soprano had left Greece in 1945 to go to the United States, and hadn't been back since. She returned to Athens in 1957 to inaugurate the Festival with two performances at the Herodium in 1957. This paper critically describes the events which took place at the Athens Festival and, in 1959, in the Epidaurus Festival; all these are seen in relation to the current political and artistic establishments and developments in Greece of that time.

The last paper is Mannion, Sanatullova-Allison and Sanatullov's "Applying the theory of linguistic relativity to music: an initial exploration". This paper investigates the application of the theory of linguistic relativity, which holds that language and culture are mutually reflective and generative, to the relationship between music and culture. Since both language and music are

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communicative devices and often affect one another, this paper compares and contrasts these two cultural products, as well as suggesting implications for further exploration of the interface of these two universal social constructs and the human cultures which produce them.

The authors suggest that language and music are essentially human, and research is beginning to suggest that one, if not both, of these functions has a biological precedent. The two, however, manifest themselves in culturally distinct ways, with prosodies and lexicons, grammars and syntaxes, which vary from one group of people to the next.

Finally, they claim that understanding the relationship between music and culture is more crucial now than ever before – researchers can come to understand where a people had been, where they are now, and what the future may hold for them.

We are most grateful to the authors of these papers.

GRAHAM WELCH and ANASTASIA SIOPSI



Η σχέση της μουσικής με τη λειτουργία της μνήμης σε παιδιά πρωτοβάθμιας εκπαίδευσης. Σύγχρονη έρευνα στην Αττική.

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Ελευθερία ΒΟΥΛΓΑΡΗ & Γεώργιος ΣΙΤΩΤΗΣ

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ΠΕΡΙΛΗΨΗ /Η σχέση που έχει η μουσική του Μότσαρτ, και πιο συγκεκριμένα η ακρόαση της σονάτας Κ.448, με τη γνωστική ικανότητα μαθητών και σπουδαστών (Mozart Effect) έχει αποτελέσει αντικείμενο μελετών και ερευνών στο εξωτερικό από το 1993 μέχρι και τις μέρες μας. Η ιδιαίτερη αποτελεσματικότητα της συγκεκριμένης σονάτας επιδοκιμάστηκε και αποδοκιμάστηκε από διαφορετικούς ερευνητές. Στο παρόν άρθρο θα αναφερθούν αναλυτικά οι έρευνες των προηγούμενων ετών, καθώς και τα αποτελέσματα της εγχώριας έρευνας σε μικρό δείγμα μαθητών πρωτοβάθμιας εκπαίδευσης που διενήργησαν οι συγγραφείς. Θα πραγματοποιηθεί λεπτομερής παρουσίαση των αποτελεσμάτων και θα αναδειχθεί η σχέση της μνήμης των μαθητών με α) την ακρόαση της συγκεκριμένης σονάτας του Μότσαρτ, β) την ακρόαση ενός σύγχρονου δημοφιλούς τραγουδιού, και γ) την εκμάθηση και φωνητική εκτέλεση ενός τραγουδιού.

Λέξεις - Κλειδιά: Mozart Effect, μνήμη, σύγχρονη έρευνα, συναίσθημα

1. ΕΙΣΑΓΩΓΗ-ΠΡΟΛΟΓΟΣ

Στο κείμενο που ακολουθεί θα εξεταστούν διάφορες έρευνες που έχουν διενεργηθεί γύρω από τη συμβολή της μουσικής ακρόασης και της μουσικής εκπαίδευσης, λειτουργίες άρρηκτα συνδεδεμένες μεταξύ τους ώστε να μελετηθούν παράλληλα, στην ανάπτυξη και βελτίωση της μνήμης, της προσωρινής χωρικής λογικής (Spatial-temporal reasoning), της χωροχρονικής αντίληψης (Spatial-time intelligence), της χωρικής αναγνώρισης (spatial-recognition), της γνώσης και της μάθησης. Επίσης θα παρουσιαστεί η συμβολή της μουσικής ακρόασης και μουσικής εκπαίδευσης στις διανοητικές ικανότητες και το δείκτη νοημοσύνης των ατόμων, αλλά και στο συναίσθημα.

Θα ακολουθήσουν τα αποτελέσματα της εγχώριας έρευνας που διενήργησαν οι συγγραφείς σε μικρό δείγμα μαθητών πρωτοβάθμιας εκπαίδευσης και θα αναδειχθεί η σχέση της βραχυπρόθεσμης μνήμης των μαθητών με διάφορα είδη μουσικών ερεθισμάτων.

2. ΘΕΩΡΗΤΙΚΟ ΥΠΟΒΑΘΡΟ

Ο Gardner μέσα από την θεωρία του για τις οκτώ διαφορετικές ευφυΐες, μία από τις οποίες είναι και η μουσική, που τελικά συντελούν στην ικανότητα αντίληψης και αντίδρασης ενός ατόμου στα διάφορα ερεθίσματα που προσλαμβάνει από το περιβάλλον του, δημιουργεί σημαντική βάση για την αναγκαιότητα της μουσικής εκπαίδευσης (Gardner, 1993· Χρυσοστόμου, 2007), ενώ σύμφωνα με τον Eisner οι τέχνες γενικότερα ενεργοποιούν λειτουργίες της σκέψης που μπορούν να βοηθήσουν το άτομο στη βελτίωση της καθημερινότητάς του, αφού προάγουν τη δημιουργικότητα, την δυνατότητα επίλυσης προβλημάτων και τον αυτοέλεγχο (Χρυσοστόμου, 2006· Οικονομίδου-Σταύρου, 2007). Σύμφωνα με τον Bruner η διδασκαλία της σκέψης για την αναγνώριση και επίλυση προβλημάτων πρέπει να γίνεται μέσα από πολλά γνωστικά πεδία και στόχος αυτής της διδασκαλίας είναι να μπορούν οι μαθητές να χρησιμοποιήσουν τις γνώσεις που πήραν μέσα από το σχολείο και σε εξωσχολικά περιβάλλοντα (Bruner, 1960· Χρυσοστόμου, 2006· Χρυσοστόμου, 2007b).

Λαμβάνοντας υπόψη ότι η μουσική ακρόαση αποτελεί σημαντικό και αναπόσπαστο μέρος της μουσικής εκπαίδευσης, οι συγγραφείς θεωρούν ότι οι έρευνες που αναφέρονται στα οφέλη της μουσικής ακρόασης θα πρέπει να μελετηθούν παράλληλα με τις έρευνες που αναφέρονται σε αυτά της μουσικής εκπαίδευσης, θεωρώντας ότι η μουσική ακρόαση αποτελεί στην ουσία το πρώτο μάθημα, την εισαγωγή δηλαδή στη μουσική εκπαίδευση.

2.1 Mozart Effect

Το 1993 μία ερευνητική ομάδα αποτελούμενη από τους Gordon Shaw, Frances Rauscher και Katherine Ky δημοσίευσε στο έγκυρο μουσικό περιοδικό «Nature» που εκδίδεται στην Καλιφόρνια, μία έρευνα σχετικά με τη σχέση που έχει η μουσική του Mozart και πιο συγκεκριμένα η ακρόαση της σονάτας του Mozart K.448, με την γνωστική ικανότητα μαθητών και σπουδαστών (Hallam, 2009· Harvey, 1997). Αυτή η δημοσίευση πυροδότησε σειρά πειραμάτων μέχρι και σήμερα, κάποια από τα οποία στέφθηκαν με επιτυχία ως προς την απόδειξη της συμβολής της μουσικής ακρόασης και εκτέλεσης στην μάθηση, ενώ άλλα δεν έτυχαν της ίδιας επιτυχίας (Chabris, 1999· Hetland, 2000a· Σακαλάκ, 2004· Hallam, 2009). Οι τομείς στους οποίους έχει ερευνηθεί και σε κάποιες περιπτώσεις αποδειχθεί ότι η συγκεκριμένη μουσική έχει βοηθήσει τους μαθητές και σπουδαστές είναι η μνήμη, η προσωρινή χωρική αντίληψη (spatial-temporal reasoning), χωρική απεικονιστική αντίληψη (spatial-recognition reasoning), ο δείκτης ευφυΐας, καθώς επίσης η συμπεριφορά των ατόμων (Elias, 2007· Rauscher, 1997· Rauscher, 2000· Shinn, 2007).

2.2 Μνήμη

Στις μέρες μας η μουσική χρησιμοποιείται σε όλο τον κόσμο σαν άριστο εκπαιδευτικό εργαλείο για την βελτίωση της μνήμης και άλλων μαθησιακών διαδικασιών (Harvey, 1997). Ψυχολόγοι στο Hong Kong (Ho et al., 2003) κατέληξαν στο συμπέρασμα ότι η ενασχόληση με τη μουσική κατά τη παιδική ηλικία των ατόμων μπορεί να βοηθήσει στις επιδόσεις τους σε τεστ



προφορικής μνήμης σε σχέση με τους συνομηλίκους τους, οι οποίοι δεν έχουν ασχοληθεί με τη μουσική εκμάθηση κάποιου οργάνου (Σουφλέρη, 2004). Πιο συγκεκριμένα, βρέθηκε ότι η μνήμη για τις λέξεις ήταν αυξημένη κατά 16% σε αγόρια που είχαν λάβει μουσική εκπαίδευση τουλάχιστον 6 ετών πριν από την ηλικία των 12, έναντι άλλων που δεν είχαν λάβει μέρος ποτέ σε κάποιο μάθημα εκμάθησης μουσικού οργάνου. Δηλαδή, όταν τους ζητήθηκε να ανακαλέσουν λέξεις που τους διάβαζαν από μία λίστα, οι μουσικά εκπαιδευμένοι μαθητές είχαν πολύ καλύτερη απόδοση. Επίσης παρατηρήθηκε ότι η περιοχή του εγκεφάλου που βρίσκεται πίσω από το αριστερό αυτί (παρεγκεφαλίδα) και σχετίζεται μεταξύ άλλων με την επεξεργασία της μνήμης είναι μεγαλύτερη στους μουσικούς (Peretz, 2003· Δημητρίου, 2006· Σακαλάκ, 2004). Παρόμοιες έρευνες έχουν δείξει ότι παιδιά κατάφεραν μέσω ετήσιων μαθημάτων μουσικής να βελτιώσουν τη μνήμη τους (Ellis, 2005), όπως η έρευνα του Wilson που αναφέρεται συγκεκριμένα σε παιδιά που είχαν ασχοληθεί με τη μουσική εκτέλεση (Mickela, 2007a). Όλα τα παραπάνω απορρέουν από τη σχέση που έχει η μουσικότητα με το λιμβικό σύστημα, δηλαδή το μηχανισμό σύνδεσης αισθητηρίων ερεθισμάτων και οργανικών αντιδράσεων (Τζελέπη, 2008· Χρηστίδης, 2001), το οποίο εμπλέκεται μεταξύ άλλων και με τη μνήμη (Robertson, 2007). Στα πειράματα και τις έρευνες που πραγματοποιήθηκαν για να μελετήσουν το Mozart effect και τη σχέση του φαινομένου με τη μνήμη χρησιμοποιήθηκε η Σονάτα Κ. 448 για δύο πιάνα σε Ρε μείζονα του Mozart.

2.3 Προσωρινή Χωρική Αντίληψη (Spatial-Temporal Reasoning), Χωροχρονική Αντίληψη (Spatial-Time Intelligence) και Χωρική Αναγνώριση (Spatial-Recognition)

Οι έρευνες οι οποίες συνδέονται άμεσα με το Mozart effect αποδεικνύουν αδιάψευστα ότι η μουσική ενασχόληση είτε γίνεται μέσω της εκμάθησης μουσικού οργάνου είτε μέσω μαθημάτων τραγουδιού, μπορεί να αυξήσει σε μεγάλο ποσοστό την προσωρινή χωρική αντίληψη σε παιδιά και μεγάλους και την μόνιμη χωροχρονική αντίληψη, σε μικρότερο όμως ποσοστό. Το γεγονός αυτό προέρχεται από το ότι μουσική και χωροχρονική αντίληψη χρησιμοποιούν αμφότερες το δεξί ημισφαίριο του εγκεφάλου και μάλιστα παρατηρούνται κοινά νευρολογικά χαρακτηριστικά μεταξύ τους (Colwell, 2002· Chudler, 2007· Robertson, 2007).

Σε συνέχεια του παραπάνω πειράματος, η Frances Rauscher ανακάλυψε ότι προκάλεσε την αύξηση της χωρικής ευφυΐας (Robertson, 2007· Hallam, 2009) σε μη μουσικούς κατά 17% (Robertson, 2007). Στο πείραμα συμμετείχαν τριανταέξι φοιτητές οι οποίοι χωρίστηκαν σε 3 υποομάδες όπου η πρώτη άκουσε για δέκα λεπτά μόνο την Σονάτα του Μότσαρτ, η δεύτερη μια κασέτα χαλάρωσης και η Τρίτη δεν άκουσε τίποτα. Οι φοιτητές έπρεπε σύμφωνα με τη δοκιμασία δανεισμένη από το τεστ νοημοσύνης Stanford-Binet να «ξεδιπλώσουν» νοερά και να επιλέξουν τη μορφή που θα έπαιρνε ένα κομμάτι χαρτί το οποίο είχε διπλωθεί πολλές φορές και κοπεί σε διάφορα σχήματα με ψαλίδι.

Τα αποτελέσματα έδειξαν ότι οι φοιτητές που άκουσαν για δέκα λεπτά την Σονάτα του Μοzart παρουσίασαν προσωρινή αύξηση της χωρικής τους αντίληψης, που έπειτα από μέτρηση



του καθηγητή ψυχολογίας Russle Fernald από το Stanford, ανέρχεται κατά μέσο όρο τουλάχιστον 10 μονάδες ψηλότερα από ότι πριν ακούσουν την συγκεκριμένη Σονάτα, αν και τα αποτελέσματα είχαν διάρκεια 10-15 λεπτών (Elmore, 2004· Σακαλάκ, 2004· Chudler, 2007· Shinn, 2007· Ευαγγελοπούλου, 2007).

Μελέτη πάλι από τους Frances Rausher και Gordon Shaw στο Irvine University of California που παρουσιάστηκε το 1994 αυτή τη φορά όμως σε παιδιά προσχολικής ηλικίας που ημερησίως παρακολουθούσαν μαθήματα τραγουδιού για 30 λεπτά και εκμάθησης πληκτροφόρου μουσικού οργάνου για 10-15 λεπτά, αναφέρει ότι τα παιδιά αυτά παρουσίασαν κατά 80% υψηλότερη χωρική ικανότητα από τους μαθητές που δεν έλαβαν κανένα μάθημα μουσικής (Harvey, 1997· Mickela, 2007b· Gillman, 2005).

Υπάρχουν περίπου 15 ακόμα πειράματα παρεμφερή με τα παραπάνω, με δείγμα 700 παιδιών από 3-12 ετών, τα οποία έχουν πραγματοποιηθεί σε διάστημα από 4 εβδομάδων έως και 2 ετών. Τα πειράματα αυτά αναφέρουν τη συμβολή της ενεργής εκμάθησης μουσικού οργάνου στην προσωρινή χωρική αντίληψη, κυρίως στις ηλικίες 3-5 ετών και όταν τα μαθήματα είναι ατομικά (Hallam, 2009).

Βέβαια, υπάρχουν και έρευνες που τα αποτελέσματα τους ήταν απογοητευτικά και δεν κατάφεραν να αποδείξουν την ζητούμενη βελτίωση στις χωρικές ικανότητες των μαθητών μέσα από την ακρόαση της μουσικής του Mozart (Chabris, 1999· Hetland, 2000a· Hallam, 2009), όπως του Dr Kenneth Steele το 1999 και μιας άλλης ομάδας ερευνητών που πραγματοποίησε παρόμοιο πείραμα σε παιδιά 3-4 ετών. Τα παιδιά αυτά χωρίστηκαν σε 4 ομάδες και για 8 μήνες η μία ομάδα ασχολήθηκε με εκμάθηση εκτέλεσης πληκτροφόρου μουσικού οργάνου, η δεύτερη με μαθήματα τραγουδιού, η τρίτη με μαθήματα ηλεκτρονικών υπολογιστών και η τέταρτη δεν έλαβε κανένα επιπλέον μάθημα. Μετά τους 8 μήνες μόνο τα παιδιά που έλαβαν μαθήματα εκμάθησης μουσικού οργάνου παρουσίασαν βελτίωση στη προσωρινή χωρική αντίληψη (spatial-temporal reasoning) ακόμα και μετά τη λήξη των μαθημάτων (Steele, 1999· Hallam, 2009), αλλά καμία από τις ομάδες δεν παρουσίασε κάποια αλλαγή ως προς την χωρική απεικονιστική αντίληψη (Chudler, 2007).

Η εφημερίδα «Sunday Times» σε άρθρο της που δημοσιεύτηκε το 2010 παρουσιάζει μια ακόμα έρευνα σχετική με την αύξηση της χωρικής ικανότητας σε μαθητές. Η έρευνα αυτή των Susan Hallam και Glenn Shellenberg παρουσιάζει μια σημαντική διαφοροποίηση προς όλες τις προηγούμενες: μέσα στα δεκάλεπτα ακούσματα που έλαβαν οι 8.000 μαθητές 10-11 ετών, συμπεριλήφθηκε εκτός από την μουσική του Mozart, δημοφιλής μουσική και πιο συγκεκριμένα μουσική του βρετανικού συγκροτήματος «Blur». Τα παιδιά που έλαβαν μέρος στο συγκεκριμένο πείραμα πραγματοποίησαν διάφορα τεστ χωρικής μνήμης και όπως αποδείχτηκε παρουσίασαν καλύτερα αποτελέσματα σε αυτά έπειτα από δεκάλεπτη ακρόαση της μουσικής του δημοφιλούς συγκροτήματος «Blur» παρά της μουσικής του Μοzart (Passmore, 2010).



2.4 Συναίσθημα

Ο δρόμος για την ορθότερη ανάπτυξη και εκπαίδευση των παιδιών γίνεται μέσω των ευχάριστων εμπειριών και των συναισθημάτων. Είναι αποδεδειγμένο ότι τα παιδιά θυμούνται πολύ καλύτερα και για μεγαλύτερο διάστημα γνώσεις και έννοιες οι οποίες είναι διαποτισμένες με θετικά συναισθήματα. (Χρυσοστόμου, 2005).

Παρεμφερής είναι και η άποψη των Hallam και Schellenberg, των οποίων η έρευνα σχετικά με το Mozart effect έχει προαναφερθεί. Υποστηρίζουν ότι οι εγκεφαλικές δραστηριότητες των παιδιών ενισχύονται έπειτα από την ακρόαση της αγαπημένης τους μουσικής και αυτό έχει απόλυτη σχέση με το γεγονός ότι κατά τη διάρκεια της συγκεκριμένης ακρόασης παρατηρείται αύξηση στα επίπεδα αφύπνισης και συγκέντρωσης τους (Hallam & Creech, 2008: Hallam, 2009).

Δημοσιευμένο άρθρο απ΄ τον καθηγητή μουσικής ψυχολογίας Petr Janata στο περιοδικό Science το 2002 επιβεβαιώνει ότι η μουσική προάγει μεγαλύτερη σύνδεση μεταξύ δεξιού και αριστερού ημισφαιρίου του εγκεφάλου και ανάμεσα στις περιοχές του εγκεφάλου που ευθύνονται για τα συναισθήματα (Shinn, 2007).

2.5 Διανοητικές Ικανότητες – Δείκτης Νοημοσύνης

Η μουσική εκπαίδευση των παιδιών ενισχύει την νοητική τους ανάπτυξη αλλά και τις ικανότητες σκέψης. Παρόλο που αυτές οι έρευνες έχουν αμφισβητηθεί, σε πολλά πειράματα αποδεικνύεται ότι η μουσική κάνει τους ανθρώπους εξυπνότερους, αυξάνει τον δείκτη νοημοσύνης τους, βελτιώνει την απόδοση τους στα τεστ δεξιοτήτων (Elmore, 2004) και αυξάνει την ποσότητα φαιάς ουσίας του εγκεφάλου (Evangeli, 2001· Peretz, 2003· Winner, 2007). Ο Gardner με την θεωρία του για την πολλαπλή νοημοσύνη αναφέρει ότι η μουσική πράγματι αναπτύσσει τόσο τη μουσική νοημοσύνη όσο και τις υπόλοιπες νοημοσύνες (Gardner, 1993· Harvey, 1997·Χρυσοστόμου, 2006).

Η ομάδα των Rauscher & Shaw και των συνεργατών τους με την δημοσίευση της έρευνάς τους σχετικά με το «Mozart effect» παρουσιάζουν και αυτοί την στενή σχέση της μουσικής με κάποιες όψεις της ευφυΐας (Harvey, 1997). Στο πείραμα με τις 3 υπο-ομάδες από σύνολο 36 φοιτητών και τα τρία διαφορετικά ηχητικά ερεθίσματα που έλαβε η κάθε μία (Σονάτα Mozart, κασέτα χαλάρωσης ή απόλυτη σιωπή) πριν πραγματοποιήσουν τεστ μνήμης με αριθμούς, ο δείκτης νοημοσύνης των φοιτητών που άκουσαν Mozart βρέθηκε να είναι κατά 8-9 μονάδες υψηλότερος από των άλλων δύο ομάδων (Elmore, 2004· Ευαγγελοπούλου, 2007). Το ίδιο πείραμα όταν πραγματοποιήθηκε σε παιδιά σχολικής ηλικίας έδειξε ότι τα παιδιά είχαν ακόμα μεγαλύτερη πρόοδο από τους ενήλικες (Ευαγγελοπούλου, 2007).

Σε σειρά μελετών βασισμένων στη μουσική εκπαίδευση που πραγματοποιήθηκε από τους Altenmüller και Gruhn του 2000 αποδείχθηκε ότι η ταχύτητα διανόησης μουσικά εκπαιδευμένων παιδιών αντιστοιχούσε στη ταχύτητα διανόησης παιδιών μεγαλύτερης ηλικίας κατά δύο έτη (Gruhn, 2004).



Μελέτες αποδεικνύουν αύξηση του δείκτη νοημοσύνης κατά 10 έως και 20 βαθμούς σε παιδιά προσχολικής ηλικίας που λάμβαναν μαθήματα τραγουδιού, τα οποία όταν έφτασαν στην ηλικία των 15 ετών είχαν κατά πολύ ψηλότερη βαθμολογία έναντι των παιδιών που δεν είχαν λάβει μαθήματα τραγουδιού (Harvey, 1997).

Νεότερη έρευνα του E.Glenn Schellenberg αναφέρει επίσης την άμεση σχέση της μουσικής εκπαίδευσης σε παιδιά και νέους με την αύξηση του δείκτη νοημοσύνης (Schellenberg, 2006).

3. ΣΥΓΧΡΟΝΗ ΕΡΕΥΝΑ ΣΤΗΝ ΑΤΤΙΚΗ

3.1 Στοιχεία της Έρευνας

Ο συνολικός αριθμός των παιδιών που συμμετείχαν στην έρευνα ήταν 379. Ο τελικός αριθμός των παιδιών των οποίων οι επιτυχίες λήφθηκαν υπόψη ήταν 185. Οι ηλικίες των παιδιών που συμμετείχαν ήταν από 8 ετών (γ΄ δημοτικού) έως 11 ετών (στ΄ δημοτικού). Τα σχολεία στα οποία έγινε η έρευνα ήταν η Σύγχρονη Ελληνοαγγλική Αγωγή (ιδιωτικό σχολείο στο Μαρούσι Αττικής), το 3ο Δημοτικό Σχολείο Σαλαμίνας και το Δημοτικό Σχολείο Αμπελακίων (Σαλαμίνας). Οι εθνότητες των παιδιών που συμμετείχαν ήταν η Ελληνική, η Αλβανική, η Βουλγάρικη και η Ρουμάνικη. Η γλώσσα στην οποία έγινε η έρευνα ήταν η Ελληνική. Η έρευνα έλαβε χώρα τις πρωινές ώρες και πιο συγκεκριμένα από τις 08.15 έως τις 13.30. Η διάρκεια της έρευνας ήταν από την 30η Οκτωβρίου 2009 έως την 30η Απριλίου 2010. Ο αριθμός των παιδιών της ομάδας μουσικής ήταν 153 ενώ ο αριθμός των παιδιών της ομάδας ελέγχου ήταν 32. Η ομάδα ελέγχου συμμετείχε στην ίδια ακριβώς διαδικασία με την ομάδα μουσικής αλλά χωρίς ακρόαση στα διάφορα στάδια. Τα παιδιά που συμμετείχαν στην ομάδα μουσικής και στην ομάδα ελέγχου δεν είχαν καμία διαφορά μεταξύ τους. Φοιτούσαν στα ίδια σχολεία και είχαν τα ίδια κοινωνικά στοιχεία. Τα στοιχεία που προέκυψαν από την ομάδα ελέγχου χρησιμοποιήθηκαν έτσι ώστε να αφαιρέσουμε από τα αποτελέσματα της ομάδας μουσικής τις επιτυχίες που μπορεί να είχαν τα παιδιά της ομάδας μουσικής λόγω ανάπτυξης τεχνικών απομνημόνευσης.

3.2. Περιγραφή Διαδικασίας Έρευνας για την Ομάδα Μουσικής

Η έρευνα χωρίστηκε σε 4 στάδια. Τα παιδιά έπρεπε να θυμηθούν 12 μονοψήφιους αριθμούς που τους δόθηκαν φωνητικά από τους ερευνητές και να τους καταγράψουν ανάποδα, δηλαδή ξεκινώντας από τον 12ο και τελειώνοντας στον 1ο. Στο 1ο στάδιο οι μαθητές δεν άκουσαν κάποιο είδος μουσικού αποσπάσματος πριν τη συμπλήρωση. Στο 2ο στάδιο οι μαθητές άκουσαν το πρώτο μέρος της σονάτας για δύο πιάνα του Mozart K.V. 448 πριν τη συμπλήρωση. Στο 3ο στάδιο οι μαθητές άκουσαν το αγαπημένο δημοφιλές τραγούδι της τάξης πριν τη συμπλήρωση. Στο 4ο στάδιο οι μαθητές έμαθαν και τραγούδησαν το τραγούδι «Κηπουρός» του Βαγγέλη Γερμανού πριν τη συμπλήρωση της έρευνας. Σε κάθε στάδιο δίνονταν στους μαθητές 12 καινούργιοι αριθμοί έτσι ώστε να μην καταγράφεται η μακροπρόθεσμη μνήμη τους. Τέλος, οι αριθμοί δίνονταν από τους ερευνητές με σταθερή ταχύτητα, χωρίς τονισμό συγκεκριμένων αριθμών (π.χ. κατά ομάδες) και μετά το τέλος κάθε ακρόασης (όταν υπήρχε).



3.3 Περιγραφή Διαδικασίας Έρευνας για την Ομάδα Ελέγχου

Παρόμοια με την ομάδα μουσικής χωρίς καμία ακρόαση μουσικής.

3.4 Περιγραφή Διαδικασίας Ανάδειξης Αγαπημένου Δημοφιλούς Τραγουδιού Τάξης

Ζητήθηκε από τους μαθητές να γράψουν σε λευκό χαρτί το αγαπημένο τους τραγούδι, ελληνικό ή ξένο. Ύστερα από την καταγραφή όλων των προτιμήσεων των μαθητών αναδείχθηκαν τα 5 επικρατέστερα τραγούδια. Αυτά τα τραγούδια τέθηκαν σε ψηφοφορία σε κάθε τάξη, έτσι ώστε να αποφασιστεί το αγαπημένο τραγούδι της πλειοψηφίας των μαθητών κάθε τάξης. Τα 5 επικρατέστερα τραγούδια ήταν τα εξής: Tik Tok – Kei\$ha, Bad Romance – Lady Gaga, Hotel Room Service – Pitbull, This is our night – Σάκης Ρουβάς και Αν ήσουν θησαυρός – Γιάννης Πλούταρχος.

TAEH	ΤΡΑΓΟΥΔΙ	ТАЕН	ΤΡΑΓΟΥΔΙ
Ε1 ΑΜΠΕΛΑΚΙΩΝ	ТІК ТОК	Δ1 ΣΕΑ	BAD ROMANCE
Ε2 ΑΜΠΕΛΑΚΙΩΝ	HOTEL ROOM SERVICE	Δ1 ΣΕΑ	BAD ROMANCE
ΣΤ1 ΑΜΠΕΛΑΚΙΩΝ	TIK TOK	Δ2 ΣΕΑ	BAD ROMANCE
ΣΤ2 ΑΜΠΕΛΑΚΙΩΝ	TIK TOK	Δ2 ΣΕΑ	BAD ROMANCE
E1 3 ^{ου} δημοτικού	BAD ROMANCE	Ε1 ΣΕΑ	HOTEL ROOM SERVICE
E2 3 ^{ου} δημοτικού	BAD ROMANCE	Ε1 ΣΕΑ	BAD ROMANCE
ΣΤ1 3 ^{ου} δημοτικού	HOTEL ROOM SERVICE	Ε2 ΣΕΑ	TIK TOK
ΣΤ2 3 ^{ου} δημοτικού	TIK TOK	Ε2 ΣΕΑ	TIK TOK
Γ1 ΣΕΑ	BAD ROMANCE	ΣΤ1 ΣΕΑ	BAD ROMANCE
Γ1 ΣΕΑ	BAD ROMANCE	ΣΤ1 ΣΕΑ	HOTEL ROOM SERVICE
Γ2 ΣΕΑ	BAD ROMANCE	ΣΤ2 ΣΕΑ	BAD ROMANCE
Γ2 ΣΕΑ	BAD ROMANCE	ΣΤ2 ΣΕΑ	BAD ROMANCE

*Πίνακας 1: Κ*αταγραφή προτιμήσεων μαθητών

3.5 Δυσκολίες που Αντιμετωπίστηκαν

Οι δυσκολίες που αντιμετωπίστηκαν ήταν πολλές. Αρχικά, πολλοί μαθητές δεν μπόρεσαν να κατανοήσουν την κατεύθυνση καταγραφής των αριθμών και κατέγραφαν τους αριθμούς με τη σειρά που τους άκουσαν. Η συμμετοχή αυτών των μαθητών ακυρώθηκε. Επιπλέον, κάποιοι μαθητές δεν μπόρεσαν να κατανοήσουν καθόλου τη διαδικασία. Αυτό είχε σαν αποτέλεσμα στα



φύλλα τους να γράφουν πενταψήφιους αριθμούς κ.α. Επίσης, λόγω της ίωσης της γρίπης που ταλαιπώρησε τα σχολεία την περίοδο της έρευνας, διάφοροι μαθητές έλειψαν σε ένα από όλα τα στάδια της έρευνας. Για να θεωρηθούν τα αποτελέσματα της έρευνας αληθή, αναγκαστήκαμε να ακυρώσουμε τις συμμετοχές όλων αυτών των μαθητών. Τέλος, διάφοροι μαθητές προσπάθησαν να παρατυπήσουν και να καταγράψουν τους αριθμούς νωρίτερα του επιτρεπτού. Σε όλες αυτές τις περιπτώσεις, οι συμμετοχές των μαθητών ακυρώθηκαν.

3.6 Αριθμοί που Χρησιμοποιήθηκαν

Οι αριθμοί που χρησιμοποιήθηκαν φαίνονται στον πίνακα 2 σε κάθετες σειρές.

7	9	3	7	2	5
3	7	7	8	3	3
2	1	9	0	7	2
9	0	0	4	8	9
0	6	1	2	4	0
7	3	2	1	1	1
1	0	4	1	9	1
1	0	4	1	9	1
1	1	8	9	0	8
1	1	8	9	0	8

Πίνακας 2: Οι αριθμοί που χρησιμοποιήθηκαν

3.7 Φυλλάδια που Χρησιμοποιήθηκαν

Τα φυλλάδια που χρησιμοποιήθηκαν παρουσιάζονται στις εικόνες 1-6. Στις εικόνες 1 και 2 εμφανίζονται οι δύο πλευρές του φυλλαδίου που παρέλαβαν όλοι οι μαθητές ενώ στις εικόνες 3-6 παρουσιάζονται κάποια παραδείγματα συμπληρωμένων φυλλαδίων από τους μαθητές.



HeJMEC Vol. 3 | Η σχέση της μουσικής με τη λειτουργία της μνήμης σε παιδιά πρωτοβάθμιας εκπαίδευσης. Σύγχρονη έρευνα στην Αττική.

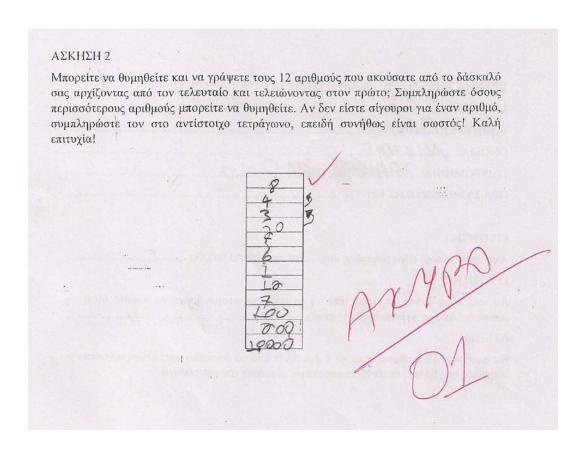
EXOAEIO:
ΕΠΩΝΥΜΟ:
ONOMA:
HMEPOMHNIA:
ΩΡΑ ΣΥΜΠΛΗΡΩΣΗΣ ΕΡΕΥΝΑΣ:
ΕΡΩΤΗΣΗ 1 Ακούσατε κάποιο είδος μουσικής σήμερα το πρωί; (NAI ή ΟΧΙ)ΕΡΩΤΗΣΗ 2
Αν ναί, πόσα λεπτά πέρασαν από τη στιγμή που σταματήσατε να ακούτε αυτή τη μουσική; (Αν όχι, αφήστε άδειο το κενό)
Θα ακούσετε 12 αριθμούς από το 0 έως το 9 από το δάσκαλό σας. Όταν τελειώσει ο δάσκαλός σας θα σας κατευθύνει παρακάτω. Ακούστε τον προσεκτικά.

Εικόνα 1

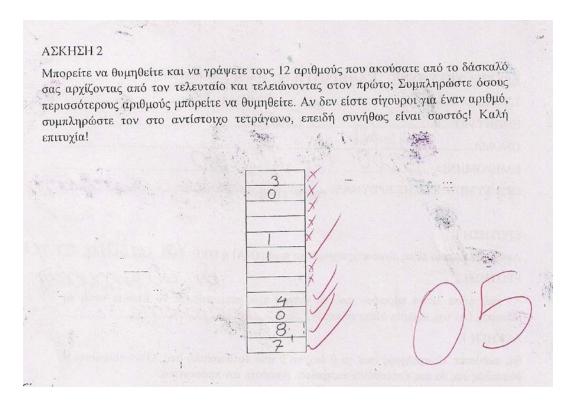
νιπορειτε να θ	υμηθείτε και να γράψετε το	ους 12 αριθμούς που ακούσατε από το δάσκαλό
σας αρχίζοντας τερισσότερους	ς από τον τελευταίο και τε αριθμούς μπορείτε να θυμ	ελειώνοντας στον πρώτο; Συμπληρώστε όσους ηθείτε. Αν δεν είστε σίγουροι για έναν αριθμό, άγωνο, επειδή συνήθως είναι σωστός! Καλή
		PA EYMINIPOERE SPEYNAE
		Laction
		una ca ventino atvantino polis orcado armitimo
		CH3MIO9
	A SECURE OF SECURE OF SECURE	Control of the contro
	The second secon	The same and the same of the s

Εικόνα 2



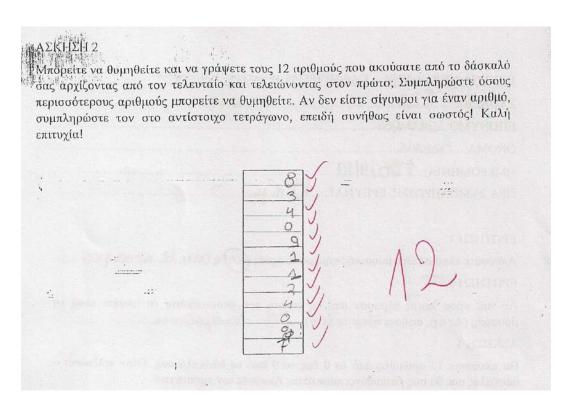


Εικόνα 3

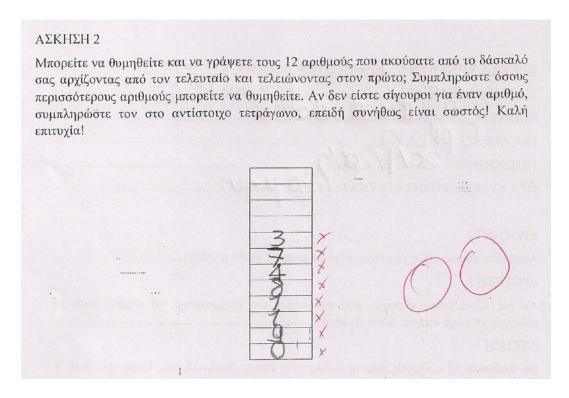


Εικόνα 4





Εικόνα 5

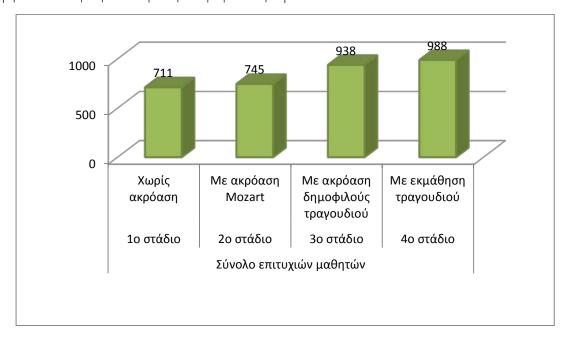


Εικόνα 6

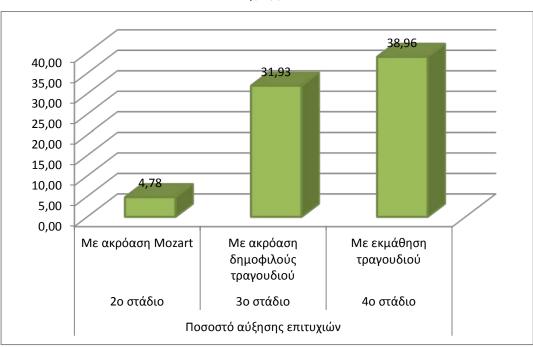


4. ΣΥΜΠΕΡΑΣΜΑΤΑ

Το σύνολο των επιτυχιών των μαθητών αυξήθηκε κατά 4,78% στο 2ο στάδιο της έρευνας ενώ η αύξηση αυτή στο 3ο και στο 4ο στάδιο ήταν 31,93% και 38,96% αντίστοιχα. Συμπερασματικά, καταλήγουμε ότι η μεγαλύτερη αύξηση εμφανίζεται στο 4ο στάδιο, αλλά παρατηρούμε μια μεγάλη απόκλιση στο ποσοστό αύξησης του 2ου σταδίου συγκριτικά με το 3ο και το 4ο. Συμπεραίνουμε λοιπόν ότι οι η προσωρινή μνήμη για αριθμούς των μαθητών λειτούργησε καλύτερα μετά την εκμάθηση του τραγουδιού.



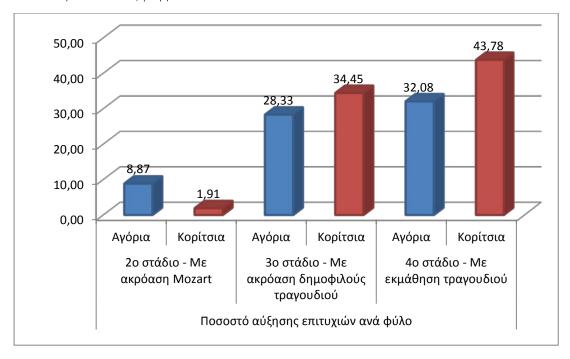
Διάγραμμα 1.



Διάγραμμα 2.

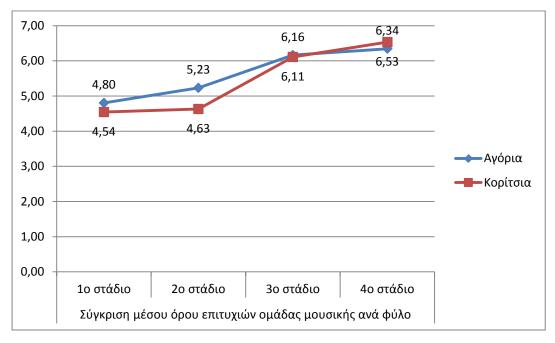


Τα αγόρια είχαν μια σταθερή αύξηση των επιτυχιών στα 4 στάδια της έρευνας σε αντίθεση με τα κορίτσια, τα οποία είχαν μείωση των επιτυχιών μετά την ακρόαση της σονάτας του Μότσαρτ αλλά τεράστια αύξηση μετά το 3ο και 4ο στάδιο.



Διάγραμμα 3.

Ο μέσος όρος επιτυχιών των αγοριών σημείωσε σταθερά ανοδική πορεία στα 4 στάδια της έρευνας σε αντίθεση με τα κορίτσια, όπου η αύξησή του στο 3ο και 4ο στάδιο ήταν πολύ μεγάλη, με αποτέλεσμα να ξεπεράσουν το μέσο όρο των αγοριών στο 4ο στάδιο.



Διάγραμμα 4.



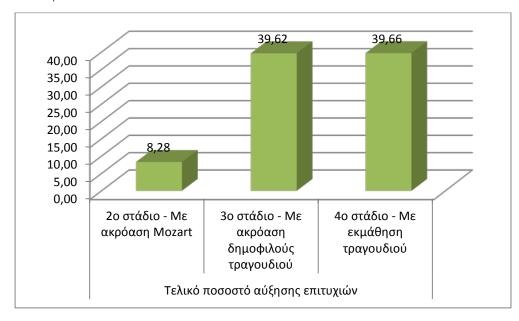
Η ομάδα ελέγχου παρουσίασε πτώση στις επιτυχίες του 2ου και 4ου σταδίου, ενώ στο 3ο στάδιο η πτώση της έφτασε το 7,69%.



Διάγραμμα 5.

Στα αποτελέσματα της έρευνας κρίθηκε σκόπιμο να λάβουμε υπόψη τα αποτελέσματα της ομάδας ελέγχου. Έτσι, αποφασίστηκε από τους ερευνητές στα τελικά νούμερα της έρευνας να εμφανίζεται η διαφορά ανάμεσα στην ομάδα μουσικής και στην ομάδα ελέγχου. Με αυτόν τον τρόπο κρίνουν οι ερευνητές ότι δεν λαμβάνεται υπόψη στα τελικά νούμερα η αύξηση των επιτυχιών λόγω συνήθειας, ότι δηλαδή επειδή η διαδικασία ήταν γνωστή πλέον στους μαθητές στο 20, 30 και 40 στάδιο.

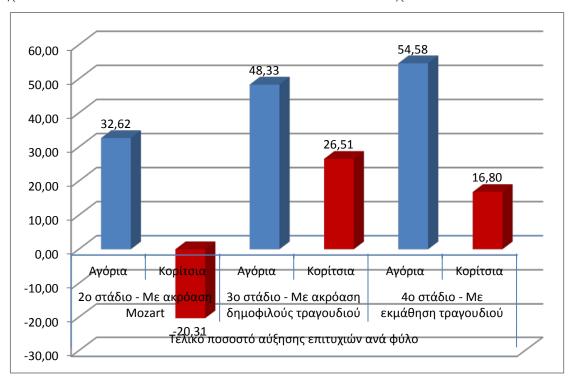
Το τελικό ποσοστό αύξησης των επιτυχιών ήταν 8,28% για το 2ο στάδιο, 39,62% για το 3ο στάδιο και 39,66% για το 4ο στάδιο.



Διάγραμμα 6.



Στα αγόρια παρατηρήθηκε σταθερά ανοδική πορεία στα τελικά ποσοστά αύξησης των επιτυχιών που έφτασε στο 4ο στάδιο στο 54,58%. Αντίθετα, στα κορίτσια παρατηρήθηκε μια μείωση της τάξης του 20,31% στο 2ο στάδιο, ενώ αύξηση παρουσιάστηκε στα τελικά ποσοστά επιτυχιών κατά 26,51% και 16,80% στο 3ο και 4ο στάδιο αντίστοιχα.



Διάγραμμα 7.

5. ΠΟΡΙΣΜΑΤΑ-ΣΥΝΟΨΗ

Συνοψίζοντας έπειτα από τις προαναφερθείσες μελέτες καταλήγουμε στο ότι με την εκμάθηση τραγουδιού και την ακρόαση δημοφιλούς τραγουδιού δημιουργούνται στα παιδιά της ευρύτερης περιοχής της πρωτεύουσας θετικά συναισθήματα με αποτέλεσμα την καλύτερη λειτουργία της βραχυπρόθεσμης μνήμης τους για αριθμούς.

Στα κορίτσια δεν δημιουργούνται θετικά συναισθήματα μετά την ακρόαση του έργου Κ.448 του Μότσαρτ, ενώ δημιουργούνται ιδιαιτέρως μετά την ακρόαση δημοφιλούς τραγουδιού αλλά και μετά την εκμάθηση τραγουδιού.

Τα αγόρια παρουσιάζουν μικρή διαφοροποίηση σε σχέση με τα διαφορετικά μουσικά ερεθίσματα που δέχονται, ανταποκρίνονται όμως καλύτερα σε μουσικά ερεθίσματα, όπως η εκμάθηση τραγουδιού και η ακρόαση δημοφιλούς τραγουδιού, ενώ παρουσιάζουν μικρή συναισθηματική διαφοροποίηση σε σχέση με τα διαφορετικά μουσικά ερεθίσματα που δέχονται.

Τέλος, καταλήγουμε στο ότι η ηλικία των παιδιών λειτουργεί αντιστρόφως ανάλογα με τη θετικά συναισθηματική ανταπόκριση σε διαφορετικά μουσικά ερεθίσματα.



6. ΒΙΒΛΙΟΓΡΑΦΙΑ

- Αποστολίδου, Κ. (2007). Τη γλώσσα μου έδωσαν ... μουσική: τρόποι αξιοποίησης της μουσικής στο μάθημα της γλώσσας. Στο 1° πανελλήνιο συνέδριο μουσικής αγωγής πρωτοβάθμιας εκπαίδευσης, Αθήνα, 15-17 Απριλίου 2005. Αθήνα: GUTENBERG
- Δημητρίου Α., Κοϊρανίδου Μ. Ν., Φιλίππου Μ., Χαραλάμπους Γ. (2006). Ο ρόλος της παρεγκεφαλίδας στο κεντρικό νευρικό σύστημα. Εγκέφαλος, Αρχεία νευρολογίας και ψυχιατρικής, Τόμος 45, Τεύχος 3, Αθήνα: Σύλλογος Εγκέφαλος
- Ευαγγελοπούλου, Τ. (2007). Η μουσική ως προϋπόθεση μάθησης. Στο 1° πανελλήνιο συνέδριο μουσικής αγωγής πρωτοβάθμιας εκπαίδευσης, Αθήνα, 15-17 Απριλίου 2005. Αθήνα: GUTENBERG
- Οικονομίδου-Σταύρου, Ν. (2007). Μια πρόταση για τη διδασκαλία του μαθήματος της μουσικής στην πρωτοβάθμια εκπαίδευση μέσα από το πρίσμα της θεωρίας του Gardner για τις πολλαπλές νοημοσύνες. Στο 1° πανελλήνιο συνέδριο μουσικής αγωγής πρωτοβάθμιας εκπαίδευσης, Αθήνα, 15-17 Απριλίου 2005. Αθήνα: GUTENBERG
- Παπαζαρής, Θ. (1999). ΜΟΥΣΙΚΗ ΜΑΘΗΣΗ ΚΑΙ ΕΚΠΑΙΔΕΥΣΗ. Αθήνα: ΕΚΔΟΣΕΙΣ ΠΑΠΑΖΗΣΗ
- Σακαλάκ, Η.(2004). Μουσικές βιταμίνες, στοιχεία μουσικής ιατρικής μουσικής ψυχολογίας. Αθήνα: Fagotto
- Σουφλέρη, Ι. (2004). Εξέλιξη μετά μουσικής. *BHMA SCIENCE [On line serial]*. Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα http://tovima.dolnet.gr/print article.php?e=B1f=14327&m=H07&aa=1
- Τζελέπη, Ε. (2008). ΜΟΥΣΙΚΟΘΕΡΑΓΙΕΙΑ. Ανασύρθηκε τον Αύγουστο του 2009 από την ιστοσελίδα <u>www.psychologynet.gr/article.php?item=52</u>
- Χρηστίδης, Δ.Α. (2001). Εφαρμογές Βιοανατροφοδότησης. Αθήνα: Έλλην.
- Χρυσοστόμου, Σ. (2006). *Η μουσική στην εκπαίδευση, το δίλημμα της διεπιστημονικότητας.* Αθήνα: Panas music ΠΑΠΑΓΡΗΓΟΡΙΟΥ-ΝΑΚΑΣ
- Χρυσοστόμου, Σ. (2007a). Μουσική εκπαίδευση: επιλογή ή αναγκαιότητα; Στο 1° πανελλήνιο συνέδριο μουσικής αγωγής πρωτοβάθμιας εκπαίδευσης, Αθήνα, 15-17 Απριλίου 2005. Αθήνα: GUTENBERG
- Χρυσοστόμου, Σ. (2007b). Οι θεωρίες μάθησης και η εφαρμογή τους στη μουσική εκπαίδευση. Στο Επιμορφωτικό σεμινάριο: δια βίου μάθηση: εκπαίδευση εκπαιδευτικών μουσικής αγωγής (φάκελος σημειώσεων), Αθήνα, Αύγουστος 2007. Αθήνα: Ε.Ε.Μ.Α.Π.Ε.
- Bruner, J. (1960). The Process of Education. Cambridge, Mass: Harvard University Press
- Chabris, C. (1999). A brief exposure to music does not increase intelligence. Nature, 400, 826
- Chudler,. (2007). *The musical brain.* Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα http://faculty.washington.edu/chudler/music.html
- Colwell R. (2002). *The new handbook of research on music teaching and learning.* New York: Oxford University Press
- Elias, M. (2007). *Music lessons may open the mind to math and science*. Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα <u>www.time4musicschool.com/openMind.htm</u>
- Ellis. (2005). *Benefits on teaching music to children: music and brain research.* Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα <u>www.edu-cyberpg.com</u>
- Elmore, K. (2004). *Music and intelligence*. Ανασυρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα http://voice.paly.net/view story.php?id=1903
- Evangeli, A. & Salleh, A. (2001). *Music matters*. Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα <u>www.abc.net.au/scince/news/stories/s291245.htm</u>



- Gardner, H. (1993). Frames of mind, the theory of multiple intelligences. U.S.A.: Basic Books
- Gillman, S. (2005). *Increase your intelligence with music.* Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα www.buzzle.com/editorials/4-5-2005-68163.asp
- Gruhn, W. (2004). *NEURODIDACTICS-A NEW SCIENTIFIC TREND IN MUSIC EDUCATION?* Στα πρακτικά του 16^{ου} Διεθνούς Συνεδρίου της ISME, Tenerife, Spain, 11-16 July 2004
- Hallam S. & Creech , A. (2008). Survey of musical future. London: Institute of Education, University of London
- Hallam, S. (2009, December). "The role of psychology in music education". *The psychologist magazine*, vol. 22, no 12, p. 1016-1017
- Harwey, A. (1997). *An intelligence view of music education.* Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα <u>www.menc.org/publication/article/academic/hawaii.htm</u>
- Hetland, L. (2000a). Listening to music enhances spatial-temporal reasoning. *Journal of Aesthetic Education*, 34(3-4), 105-148
- Ho Y.C, Cheung M.C. & Chan A.S. (2003). "Music Training Improves Verbal but Not Visual Memory: Cross-Sectional and Longitudinal Explorations in Children". *Neuropsychology*, vol.17, no 3, p. 439-450
- Jensen, Eric (2001). Arts with the brain in mind. USA: Association for Supervision & Curriculum Development
- Lee, Dennis J.& Chen, Yi, Schlaung, Gottfried (2003). *Corpus callosum: musician and gender effects.* Lippincott Williams & Wilkins, Inc.
- Leslie Brothers and Gordon Shaw (1989). Models of Brain Function. Cambridge: Cambridge University Press
- Mickela,T. (2007a). The foundation for music literacy presents how music can dramatically effect your child's development and life-time success. Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα www.pianowizard.com/pdfs/foundation-for-universal-music-literacy.pdf
- Mickela,T. (2007b). The foundation for universal music literacy presents why children who play music do so much better in school and other facts. Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα www.pianowizard.com/pdfs/foundation-for-universal-music-literacy.pdf
- Passmore, G. (2010, February). "Blur beat Mozart in IQ music chart". *The Sunday Times*. Ανασύρθηκε τον Απρίλιο του 2010 από την ιστοσελίδα http://entertainment.timesonline.co.uk/tol/arts and entertainment/music/article7017902.ece
- Peretz I. & Zatorre R. (2003). The cognitive neuroscience of music. Oxford: Oxford University Press
- Rauscher, F.H. (1997). A cognitive basis for the facilitation of spatial-temporal cognition through music instruction. In Verna Brummet (Ed.), *Ithaca Conference '96 Music as Intelligence: A Sourcebook*. Ithaca: Ithaca College Press
- Rauscher, F.H., & Zupan, M. (2000). Classroom keyboard instruction improves kindergarten children's spatial-temporal performance: A field experiment. *Early childhood research quarterly, 15 (2)*
- Robertson, P. (2007). *The music research institute articles presenting the case for music.* Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα <u>www.mri.ac.uk/</u>
- Schellenberg, E. Glenn (2006). Long-term positive associations between music lessons and IQ. *Journal of Educational Psychology. Vol 98(2)*
- Shinn, D. (2007). For increased brain growth, just add music? Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα www.chordpiano.com/articles-chord-piano/music-brain-growth-5.htm Winner, E. (2007). Effects of instrumental music training on brain and cognitive development in young children: a longitudinal study. Ανασύρθηκε τον Οκτώβριο του 2007 από την ιστοσελίδα www.dana.org/printerfriendly.aspx?id=4712
- Weinberger, N.M. (1996). "Sing, Sing, Sing". MUSICA Research Notes Volume III, Issue II
- Whitwell, D. (1977). Music learning through performance. Commissioned by Texas Music Educators Association



ΒΟΥΛΓΑΡΗ ΕΛΕΥΘΕΡΙΑ

(1980, Αθήνα). Η Βούλγαρη Ελευθερία πήρε το δίπλωμα πιάνο το 2002, το δίπλωμα σύνθεσης το 2007 και το δίπλωμα διεύθυνσης χορωδίας το 2010. Είναι τελειόφοιτος μεταπτυχιακή φοιτήτρια του Sheffield University στο τμήμα Psychology of Music. Έχει παρακολουθήσει σεμινάρια για την εκπαίδευση σε άτομα με ειδικές ανάγκες, παιδιά με μαθησιακές δυσκολίες και δυσλεξία. Έχει επιτελέσει πρόεδρος σε πάνελ σε σεμινάρια για το παιδικό τραγούδι και την χορωδία. Τον Οκτώβριο του 2008 ανήρτησε αφίσα στο Συμπόσιο για τις τρέχουσες τάσεις και δυναμικές της Σχολικής Ψυχολογίας στην Εκπαίδευση και στη Μουσική Παιδαγωγική στον Πειραιά. Τον Οκτώβριο του 2010 παρουσίασε τη μελέτη της με θέμα «Η συμβολή της μουσικής εκπαίδευσης και της μουσικής ακρόασης στην ανάπτυξη και διαμόρφωση του κεντρικού νευρικού συστήματος των μαθητών" σε διεθνές συνέδριο στο Μέγαρο Μουσικής της Αθήνας. Τον Ιούνιο του 2010 ήταν επιμορφωτής σε καθηγητές μουσικής εκπαίδευσης για τα νέα βιβλία μουσικής στην πρωτοβάθμια εκπαίδευση. Εργάζεται ως δασκάλα στην πρωτοβάθμια εκπαίδευση και διευθύνει τη Χορωδία Νέων του Δήμου Πεύκης. Είναι μέλος Εκπαιδευτικών της Ένωσης Μουσικής Αγωγής στην Πρωτοβάθμια Εκπαίδευση και θεμελιώδη μέλος της Πανελλήνιας Ένωσης Χορωδιών και Διευθυντών Χορωδίας.

ΣΙΤΩΤΗΣ ΓΕΩΡΓΙΟΣ

(1979, Αθήνα). Απόφοιτος του Τμήματος Μουσικών Σπουδών του Αριστοτελείου Πανεπιστημίου Θεσσαλονίκης. Έχει το δίπλωμα σύνθεσης και είναι εκπαιδευτικός μουσικής στην πρωτοβάθμια εκπαίδευση. Έχει παρακολουθήσει μαθήματα σύνθεσης με τον συνθέτη Θόδωρο Αντωνίου, μαθήματα διεύθυνσης χορωδίας και ορχήστρας με τον μαέστρο Γιώργο Αραβίδη ενώ έχει παρακολουθήσει το Διεθνές Σεμινάριο Κόνταϋ στο Κέτσκεμετ της Ουγγαρίας δύο φορές. Έχει γράψει μουσική για χορωδία, θεατρικό έργο, ντοκιμαντέρ, κινηματογραφική ταινία καθώς και για video art. Έχει κάνει εισηγήσεις σε διάφορα μουσικοπαιδαγωγικά σεμινάρια στην Ελλάδα ενώ ήταν επιμορφωτής στα νέα διδακτικά πακέτα μουσικής για την Α΄ και Β δημοτικού. Έχει βραβευθεί με το 1° βραβείο στο Διαγωνισμό Σύνθεσης Βόλου ενώ άρθρα του έχουν δημοσιευτεί στο επιστημονικό μουσικοπαιδαγωγικό περιοδικό «Μουσική σε πρώτη βαθμίδα» της Ένωσης Εκπαιδευτικών Μουσικής Αγωγής στην Πρωτοβάθμια Εκπαίδευση.



Perspectives of music publishing in the twenty-first century: The death of the editor?

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ABSTRACT / The article begins with an exploration of recent technological advances, such as the evolution of hardware/software, the digitization of literary material and the booming expansion of the world-wide-web, investigating their impact on the editing, publishing, teaching and performance of music. Crucial questions are addressed regarding the pros and cons of implementing such technology in music publishing, identifying the current pitfalls as well as the promising perspectives of its application. Going on, the article attempts to provide a new, working definition of the roles of those affected by such changes in the field of music publishing: from the promoters of new technology to the publishers; from the music editors to contemporary users of all levels; from amateurs and students to teachers and academics. Ultimately, suggestions on how to make the best use of available online music resources are set forth, discussing how this new technology can be a promising tool for the promotion of research, knowledge and dialogue.

Keywords: music, publishing, editing, technology, digitization, perspectives

1. INTRODUCTION

Technology in the last decade has progressed with a speed that is incomparable with any of the advances that preceded it, affecting all aspects of our lives, including our education (Adams and Hamm, 2005). Consequently, these changes could not have left the field of music publishing unaffected: the booming availability of internet access and the possibility to scan and print documents in the comfort of one's household, has in turn affected 'traditional' music publishing to a great extent. Printed volumes are now facing serious competition by digital editions available online (Ching, Pan and McNaught, 2006): the internet not only offers free out-of-copyright editions which have entered the public domain (Boyle, 2008), but also relatively more recent editions - such as the 'Neue Mozart Ausgabe'- which have also been made available online free of charge. As we shall see further on, the internet even allows and encourages users to create, modify and upload their own texts, based on primary sources which have already been made available to them online.

This newfound multitude of sources, essentially free of charge, is not without its pitfalls: more and more users, taking advantage of the availability of free sheet music, are performing from downloaded out-of-copyright – and most likely out-of-date – editions, published in the late-nineteenth and early-twentieth century: editions which not only include several misinterpretations and inaccuracies but also present rather 'romanticized' readings of earlier works, having altered or 'enriched' the text with their own incorporated performance directions which, more often than not, went unacknowledged (Barth, 1995).

In turn, this changed equilibrium gives rise to a number of important questions, as to how present-day publishers are called to handle the demands for changes in format, content and pricing: to what extent is the editing of musical texts to be transformed, employing the newfound possibilities offered by digital media? In other words, what are the future perspectives of editing and how can they possibly affect the formation of the text and of music editions in general? Will the opportunity to produce and present a multitude of simultaneous readings and interpretations through digital media render editors unnecessary as mediators between composers and performers, signifying the muchdreaded 'death of the editor'? Ultimately, how can individual music users benefit the most from these newly available options?

2. RECENT ADVANCES IN PUBLISHING AND MUSIC PUBLISHING

Approximately five years prior to the new millennium, textual theorists set off to discuss the emerging potentials of a new editorial feature, the 'Hypertext' (Tanselle, 1995 and McGann, 1995), in which 'all variants in all states can be accessed electronically to produce any desired conflation or reconstruction of texts' (Greetham, 1999: 47). The idea behind the 'Hypertext' was soon joined by the concept of 'Metadata' (Hillman and Westbrooks, 2004), granting access to all complementary, explanatory or documentary media that is attached to a digital document. These concepts, along with the explosive technological increase, particularly in the attainability and availability of affordable computing, scanning and printing equipment during the first decade of the twenty-first century, have opened up entirely innovative streams in publishing as production and dissemination.

The new technological tools were initially employed for the creation of digital libraries (Andrews and Law, 2004) and encyclopaedias, dictionaries, journals, information networks and other online projects regarding literary works or works of fine art: the 'Whitman Archive' (1995-) was a pioneer in the area of electronic scholarship, representing one of the earliest and most influential examples, establishing standards for electronic editing, site construction, and digital reproduction, and serving as the model for subsequent projects. A year later, the 'William Blake Archive' (1996-) was constructed and three years after that, the 'Rosetti Archive' (2000-2008), one of the first large-scale academic initiatives, was also launched, providing access to Rosetti's entire body of work, encoded for structured search and analysis and transacted with a substantial body of editorial commentary, notes and glosses.

Despite its initial scepticism (McGann, 2001), Academia gradually employed the benefits of this new information technology for promoting research, dialogue and the exchange of knowledge, while its 'traditional' counterparts (ie. the dissemination of information through printed matter) were either combined with complementary material and discussion forums in digital form, or ran in parallel with



digital versions (Thompson, 2005). This has since been the practice of music journals, most of which now offer online databases and digitized copies of current, recent and formerly printed articles, sometimes dating from as early as the 1800s (such as the 'Retrospective Index to Music Periodicals 1800-1950'), thus forming an immensely rich, reliable and easily accessible database of information that would otherwise require lengthy and costly research in order to be located and explored.

Naturally, these technological advances have found their way in the publishing of music: nowadays, new, improved versions of typesetting software and printing hardware ensure that the publishing process for the production of 'traditional', hard-copy editions runs more quickly, more efficiently and more economically. At the same time, music publishing in the broader sense of the word (which spreads far beyond the circulation of printed music) has also evolved dramatically quickly, mostly due to the rapid technological advances in the field of computing, which have opened up vast opportunities in the digital transmission of musical texts (Sobel and Weissman, 2008). With the use of specifically designed, specialized equipment, such as music printers, scanners, music OCR readers and other music-related hardware and software (such as evolved MIDI interfaces, score-writing and scorereading software etc.), new routes in the publication and dissemination of sheet music, such as the 'Music Encoding Initiative' (2007), have opened up: virtual sheet music on the one hand, which is essentially a scanned facsimile of the hard-copy texts (usually transmitted in PDF or image formats), and digital sheet music on the other, which, having been processed by an OCR reader, allows for music files to be manipulated and altered in ways that their virtual and hard-copy counterparts never could (Duckworth, 2005). Digital music texts can be transposed, arranged and played back with virtual instruments through a MIDI interface or reworked and printed in hard-copy for live performance with real instruments (Chapman and Chapman, 2009). Last but not least, the explosive expansion of the world-wide-web during the past decade means that free downloadable and printable music scores have become widely available online: as already mentioned, people now own the equipment necessary to access, download and print sheet music.

Amongst the first specimens of the recently evolved 'race' of music publishing is the so-called 'Computerized Mensural Music Editing': an initiative 'to offer free online access to new, high-quality early music scores produced by today's leading experts' (Utrecht University, 1991). The project, which is constantly expanding, stands as one of the most comprehensive interfaces for accessing the material available, essentially generating an entirely new form of critical music editions, in which dynamically generated, user-configured and searchable formats are infinitely produced, enhanced by the application of multimedia, hyperlink structures and semantic data mark ups, offering a wide array of information concerning alternative readings, musical sources, as well as other historical and analytical material.

Another, more recent electronic project, is the 'Programme Ricercar' (Centre d' études supérieures de la Renaissance, 2010) which presents facsimiles, transcriptions, scholarly commentaries and other tools for researching sixteen sets of books crafted by the Parisian printer Nicolas du Chemin between 1549 and 1568. The project is constantly expanding through links to databases of the sixteenth-century chanson repertory, to a digital project devoted to the reconstruction of pieces with missing vocal parts, and to another devoted to the study and editing of the literary texts themselves.



In the last few years, the average computer user is also able to scan sheet music, or even prepare personalised 'editions' through a multitude of music-notation software, such as the open-source 'Lilypond' (n.d.), and upload them on online databases, such as 'ChoralWiki' (1998-). As far as the uploading of scanned/digitized versions of printed editions is concerned, the fact that this is controlled by copyright law means that the majority of editions available online is a collection of older, out-of-copyright editions, or of editions prepared by internet users themselves (Dougan, 2006). One of the most important online music libraries to date, apart from the 'Mutopia Project' and the 'Sheet Music Archive', freely accessible for downloading as well as for uploading user-generated material, is the 'International Music Score Library Project' (Petrucci Library Project 2006), which provides free access to tens of thousands of out-of-copyright scores searchable by title, composer and nationality, time period, genre and instrument. A large number of these scores originate from the nineteenth century and especially from Breitkopf and Härtel's series of composers' complete works – and since a number of them misleadingly claim to be Urtext editions, they immediately draw the amateur performer's attention as offering an accurate, addition-free text.

3. THE COME-BACK OF THE URTEXT

As a result, issues that had already been tackled with – at least in scholarly circles – in the twentieth century have resurfaced due to this 'return' to older editions, such as discussions concerning the urtext concept, which was the centre of musicological debate since the commercialization of the term after the Second World War. Less than a decade or so after their booming appearance, scholars already attacked editions advertised as urtext. For instance, the Danish musicologist Jens Peter Larsen (1958) formulated a list of 'fundamental problems of textual criticism', some of which had already been identified by the editors of early-twentieth-century monumental editions, and which were now seen under a new light: 'Is it not a deception to use the word urtext and lead buyers to think that one exists?' asked Badura-Skoda (1965: 308). Going on, Badura-Skoda observed that even editions advertised as Urtext were often produced without any reference to primary sources, while their Forewords were entirely misleading as to the actual nature of the respective edition, thus failing to comply with modern editorial standards (1962: 130).

Still, the proclamation by the scholarly community that a definitive text was unattainable and that Urtext Editions did not and could not live up to what they purported, only succeeded in temporarily suspending their appearance: the urtext proved such a powerful marketing tool that, even those publishers who had at first eliminated the word urtext from their editions, soon re-introduced it and continued to employ it throughout the twentieth century (and into the twenty-first) with considerable success. Aided by the original support of the 'authenticity movement', Urtext Editions attained such a high status in the first couple of decades after their appearance, that they became established as the most reliable editions in the marketplace.

It therefore comes as no surprise that, during our age of commercialization, the promotion of editions as Urtext remains extremely important to their marketability, since the average consumer entrusts such editions as reproducing a text that is closest (if not identical) to the composer's intentions. This is evident in numerous product reviews available online (nowadays perhaps the most popular



means of exchanging comments and opinions on products), which bring to light the views of 'average' consumers regarding the qualities of good editions (Saraband, 2009):

You should...be asking just who wrote your favorite editions...unless of course you own Urtext Editions already (Urtext indicating that the edition in front of you is faithful to the original and any tampering made is marked as such.)

Another source describes Urtext Editions (VivaldiStudio, 2009) as providing

...a score that respects the composer's original version and is without any of the arbitrary additions from other editors.

Having realized that the commerciality of the term has been reinforced by such reviews amongst the online community, most publishers have continued to advertise the alleged qualities of Urtext Editions on their websites. For instance, the website of Editions Peters (2007) states:

Peters' Edition has developed beyond its historical and scholarly origins as a publishing venture and became a hallmark of quality in its own right, guaranteeing the user a fully authentic score. At the same time, care has been taken to ensure that, working within Urtext principles, the needs of the practical performer are properly and sympathetically addressed. The need for Urtext Editions is self-evident. At the same time, they set the standard of modern editorial practice.

Though seemingly reproducing the sort of advertisement that would be successful in the midtwentieth century, the publishing companies' promotion of the urtext appears to have back-fired in the last few years: for, ironically, due to such misleading promotion, more and more online consumers use free out-of-copyright Urtext Editions, presuming that the text, having been advertised as an urtext, is not much different than that of more recent editions. Consequently, the wide and free availability of old editions online creates a serious pitfall: for, if used uncritically by the average music user, it is highly likely - if not inevitable – that several textual 'corruptions', formed according to nineteenth- and early-twentieth-century textual and stylistic perceptions and interpretations will be passed on and increasingly reproduced in contemporary (amateur) performance.

A significant response to this problem, of crucial importance to contemporary scholarship and performance, was a project initiated by the Mozarteum Foundation in 2001, providing late-twentieth-century Mozart editions, still under copyright, entirely free of charge: the 'Digital Mozart Edition' (Mozarteum, 2001) currently grants free online access to digital facsimiles of the complete series of the 'Neue Mozart-Ausgabe' (abbr. NMA, 1951-2007) including the full critical notes. Though the NMA is far from flawless (Eisen, 1991) and in many cases has been outdated after the rediscovery of a number of lost manuscripts, its online availability nevertheless offers considerable textual advantages compared to other, much older editions and overcomes previously considerable limitations of space, volume, cost and subject matter.

Along those lines, the project collaborators are continuously expanding this collection into an interactive presentation of a variety of historical source materials, representing different stages in the genesis of a work, along with images, text files, databases of available sources and reference lists. Another, smaller-scale sample of the usefulness of such interactive initiatives has been made available through the production of an interactive CD-ROM, featuring visual and audio representation of Mozart's 'Fantasia and Sonata in C minor' K475 and 457 respectively. The digital layout of this small



scale project was enough to reveal insights of the composer's 'compositional process and the performance practice of his time, exceeding the well-known musical text by far' (Mozarteum, 2006). This example alone was one of the first to indicate the inherent possibilities in the digitization of sources and of related materials, which was soon employed by a number of subsequent digital initiatives.

4. RECENT DIGITAL INITIATIVES

The dawn of the new millennium saw the development of a number of digital and online initiatives in the fields of music and musicology. In 2003, the 'Online Chopin Variorum Edition' (Andrew Mellon Foundation) project was launched, presenting and enhancing comparative analyses of disparate types of source material, while one of its cognate projects, 'Chopin's First Editions Online' (Arts and Humanities Research Council UK), initiated in 2004, provides a virtual collection of all first impressions of first editions of Chopin's works with commentary on particularly significant textual features and employs advanced imaging techniques allied with relevant open standards for metadata and interface design.

Various similar online projects are constantly under development and expansion, not only referring to editions of music but also cross-referencing to additional source materials, biographical studies and performance-related issues: one such project is 'European Mozart Ways', a multicultural, collaborative project, essentially functioning as an online analytical archive of Mozart's journeys through Europe, with reference to biographical evidence, excerpts from the family's correspondence, and other relevant information. This project is an excellent example of how technological development has opened up the possibilities for publication, cross-disciplinary exchange and transmission of information in ways that had never before been anticipated. Another project is 'Mozart in Italy' (University of Sheffield), released in early 2011 and providing a complete, four-language, annotated, searchable edition of the family's letters. Aside from the identification of people, places and works, the project's aim is 'to include links to a source catalogue, to recordings of Mozart's works and the works of others and a complete iconographical and documentary record of his life and times'.

Additionally, the 'Bach Digital Portal' (1990-), developed by the University of Leipzig and the Packard Humanities Institute, grants free access to digital libraries, source/works catalogues and digitized scans of Bach's autographs and original parts, thus providing valuable information to both scholars and music lovers. Another initiative on Bach's music is the 'Digital Bach Project' which, under the auspices of the Oregon Bach Festival, hosts 'interactive score studies': it features performances of some of Bach's most influential works, such as the Goldberg Variations and the Mass in B minor, synchronizing the sound with automated scrolling on the score and providing complementary information on the genesis and the characteristics of the selected works.

Alongside the continuous expansion of online archives of publications and source materials, the last few years also saw the production of the first digitized out-of-copyright editions in CD- or DVD-ROM format. According to the production notes of one of the firms, the digitized editions were selected through scholarly evaluation, while the scanned pages were processed so that the printed music would appear more clearly, noting that 'while some reorganization, retitling, and touch-up of staff lines is done, we do not proofread the music or fix any of the original errors' (CD Sheet Music 2009). Digitized editions, offered in extremely low cost compared to their printed counterparts, have



been warmly received, mostly by amateur musicians and students while, according to the company, the 'New York Times' called the series 'a convenient source of music that will not clutter up the piano bench'.

The total production output, which by 2008 already numbered more than sixty extended titles, features complete editions by composer, such as the 'Digital Bach Edition': a collection of four CD-ROMs (and later of one DVD ROM) which includes the complete forty-six volumes of the nineteenth-century Bach Edition, first published between 1851-1900. Apart from the (printable) scores, the collection features searchable indexes of volumes, BWV numbers and titles in German and English, while the publishing firm has also announced its collaboration with an online audio bank, through which the digital editions' users will be able to listen to recordings of selected works, read liner notes, composer biographies and other relevant information. Additionally, the 1911 Edition of 'Grove's Dictionary of Music and Musicians' appeared in 2005 in CD- and DVD-ROM format, reviving more than 4400 pages of the now historical collection in digitally searchable format, which may be outdated as reference material but which, nevertheless, offers a fascinating and valuable record of the early-twentieth-century and its perspective of older and contemporary music.

Despite the many evident dangers of misuse of this ever-expanding web of digital tools and information, it could be said that the fruits of this new digital era are the response to a general, growing demand for affordable scores and source materials. Most importantly, the correct and fair usage of these newly available materials can be benefiting to both the scholarly and the amateur community; for, these advances present users with unlimited opportunities compared to their traditional printed counterparts, allowing for new methodological, presentational and interpretative routes which had not been possible in the past: for instance, the employment of meta-data technology not only allows for search through the archives and texts with incredible ease, but also enhances the exploration of connections and alternatives between selected textual elements and other relevant information, in forms ranging from text to score, audio, image, video or a combination of media.

5. GOING DIGITAL – PERSPECTIVES FOR THE FUTURE

Having explored the first online initiatives related to source studies and sheet music and the vast array of digital technologies already available to the public today, it is hardly a game of guesswork to predict the up and coming digital transformation of music editions in the very near future. While printed editions will continue to be available, more and more publishers will pursue the parallel digitization of editions and their commercial availability either online or in the form of digital data stored on CD, DVD, Blu-ray discs or USB sticks, or even perhaps on portable devices/applications similar to the 'Kindle' or the 'iPad'. Provided that the necessary collaborations will be established between certain institutions, commercial organizations and manufacturers, it could be possible for music editions to become available to the public in digital form, along with all critical notes, alternative textual versions, complementary performance notes, composer biographies, work context, instrument details, performance recordings and, in short, all kinds of relevant information in the form of text, audio and video, and even scans of the primary sources themselves.



Of course, one could reasonably argue that the digitization and the combination of all this material can be a considerably costly and complicated process that requires highly specialized technicians, programmers and software developers to be set in action – meaning, consequently, that the majority of music-publishing houses will most likely not be able to realize such an ambitious project by themselves. However, an ideal solution to these reasonable problems could be that the digitization of all this material (both of existing as well as of future editions) is undertaken by a central scheme: an institution or organization that will create the appropriate software platform, offering interactive access to all information. Next, this central institution can form commercial collaborations with music publishers, so that it is assigned the digitization of their material. By doing so, music publishing houses will not only ensure that their invaluable musical archives will be preserved for years to come, but also that their editions will become more widely accessible and increasingly popular, as the new multimedia interfaces are continuously reaching more and more users. As an example, the new edition of the 'Köchel Catalogue', edited by Neal Zaslaw and expected to appear in 2013, will be simultaneously released in printed form and in digital form online, with the support of the Packard Humanities Institute.

At the finish line, everybody wins: the music publishers, and along with them the record labels and multimedia production labels which may be involved in the audio/video aspects of the project, will profit from the increased sales of their existing material and also considerably reduce manufacturing costs for upcoming products; the central organization will also profit from the percentage of revenues offered in return for the digitization and sales of the material; lastly but most importantly, humanity will profit from the wide availability and the preservation of all this material in a coherent, convenient, multi-faceted, cross-referenced and cost-effective form.

6. THE DEATH OF THE EDITOR?

But what could all these advances mean to the future of music editing? Does this newly available opportunity to store and display a multitude of information leave the need for editorship out of the equation, signifying the much-dreaded 'death of the editor'? In other words, have editors become an unnecessary part of the music publication chain, now that the material on which their scholarly work has been based on is available for anyone to view and decide upon? James Stephen Murphy (2008: 280-310), referring to some of the largest online archives of literature and art, accuses digital projects of having 'killed the editor', as he observes that more emphasis has been placed on the abundance of information presented, rather than on the provision of a usable reading text:

If a user consults a site like the Rossetti Archive in the process of looking for 'The Blessed Damozel'[...] or the Whitman Archive looking for 'When lilacs last in the dooryard bloom'd'[...] he will find multiple versions of each poem and a wealth of textual and critical information, but he will find no guidance as to the version he's likely to be reading in class the next day. Neither site designates a base-text, and I am unaware of any electronic archive that presents a copy-text edited version[...] My point is not to fault the Blake Archive in particular or to condemn electronic archives in general. They are an amazing resource for literary study at all levels, providing unprecedented access and new ways of looking at historical texts[...] The problem is that, while we might be preserving texts to an unprecedented degree, if the only online options are electronic archives and transcriptions of outdated, flawed editions, we run the risk of losing something valuable as well: not just the editor, who has been turned



into an archivist, but also an understanding of texts as objects of interpretation and argument, or the products of interpretation and argument.

Surely, Murphy has raised valid questions regarding the practicality of these digital projects and their apparent uselessness as a source of a 'reading text'. He also argues that the philological importance of the 'reading text' itself, as a product of interpretation and as an ignition of further interpretative dialogue, is at loss. As an extension of this last observation, Murphy has identified what he considers as the most important fault in the making of these digital archives, which in most instances appear to have reduced the work of the editor to that of a mere collector of information, rather to that of an interpreter.

Admittedly, it does seem that the creators of these first digital projects in the fields of literature and art did not escape the pitfalls involved in the preparation of such ambitious large-scale collections – in fact, an interesting parallel can be drawn between this contemporary initiative and the first efforts of the nineteenth century towards the creation of large-scale editions: just as those large editions were more concerned with completeness rather than with the quality, the usefulness and the accuracy of the text they offered (Samuel, 2003), so do these new ambitious first attempts in creating digital archives appear to have been more concerned with collecting material; eliminating, in a sense, the editor's role and handing over the text directly to the readers. Of course, though entrusting the reader with this abundance of information is not at all negative, what Murphy rightfully asserts is that it can be intimidating to non-specialized users, and that these digital archives have so far failed to fulfil the demand of the vast majority, who still wants to view a 'read-text', a critical edition; and by doing so, Murphy continues, these archives have brought on the 'death of the editor' as an advocate of the composer's text and intention.

Yet, despite Murphy's insightful observations, the situation is not necessarily as gloomy as he perceives: for, identifying the weaknesses of these initiatives does not necessarily mean that they should be dismissed, but rather, that there is still room for improvement. Constructive criticism is in fact the most vital element in the development of the ideal digital formula which will bring about a balance between matter and presentation. Primarily, the nature of these digital archives needs to be grasped and redefined: what is the role and the need that they have been created to fulfil? Are they essentially a database of information for scholarly use, or could they in fact be more widely useful, practical and ergonomic?

Fortunately, the implementation of these new technological tools means that, instead of sacrificing the scholarly attributes for the sake of the commercial attributes, both aspects can now coexist, without eliminating each other's individual importance. In other words, these digital editions/archives can ideally offer both the 'raw data' (for scholarly use) as well as the 'critically assessed' data (for performance or less specialized use); in fact, there is no reason why any amount of raw data and metadata cannot be transformed into a comprehensive and user-friendly web of information, that informs and documents the editorial interpretation presented within the supplied critical edition(s) to date.

Thus, in essence, through the correct manipulation of the tools available to us today, the editor's role need not be reduced or eliminated at all; in fact, it is reinforced, since the digital technology allows



editorial decision (or the lack of one) without the previous limitations of space, volume or cost. In that light, the editor's task and the currently agreed editorial standards are in no way out of the equation, but rather, they have been elevated to a new, less limited sphere of existence: the editor is now supported by a team of specialists in the fields of programming and digital media, so that the desired editorial outcomes can be projected as clearly and effectively as possible. Admittedly, the demand for critically assessed 'performance' texts will always be high, and by no means could it be replaced by archival documents alone: therefore, what digital media can offer is the combination of a wealth of information that can exist both for its own sake and as complementary material to the 'read text'.

7. EPILOGUE – BENEFITING FROM ONLINE MUSIC RESOURCES

With this in mind, it is important that the users of online and digital resources are aware of both the strengths and the weaknesses of what is currently available. Though most current advances may appeal primarily to professional performers and academics, who are able to assess the information critically, particular care is required by the average user. Of primary importance, when searching for scores and editions for performance or personal study, is to always assess the material available online. Assessing the material entails much more than running a casual search in blogs for reviews by other users, since the internet, being a democratic tool, allows for everyone, be it connoisseurs or beginners, to express an opinion. Therefore, assessment of material must always be performed by consulting professional reviews that can be found in printed/online musicological journals and/or in musicological discussion forums available online.

In itself, assessing available editions benefits individuals, since they become more aware of the variety of texts in question and of the progress made in the fields of editing and research in a particular area. In some cases, if interested, an individual may even enjoy the experience of looking at the composer's autograph facsimile online, and gain valuable insight by looking at different editions, comparing them first-hand. If, due to time restrictions, assessing an edition is not an option, it is wise to seek the advice of a professional – an academic, a performer, or an experienced music teacher: after all, it is important to remember that asking questions and engaging in dialogue is undoubtedly beneficial for everyone involved. Finally, users of digital media must always be aware that, for the time being, the most recent and up-to-date printed editions may not be available online – but reviews of such editions will surely exist in digital form. Thus, an assessment is, once again, a feasible option. Undoubtedly, as digital and online resources, formats and systems will progress further, more and more options will become available to those with access to this technology and, ideally, they will further promote evolution, knowledge and unprecedented opportunities for those who make use of them critically and wisely.

Though the vast majority of current discussions regarding digital projects are largely concerned with literature rather than with music, it is nevertheless evident that the ongoing trials and errors in the process are paving the way towards the creation of large-scale digital music editions. Just as the process of producing the nineteenth century's monumental music editions was to a large extent based on the processes that had already been tried and tested in the production of monumental editions of



literature, philosophy and other disciplines, so can the production of the twenty-first century's large-scale music-related digital editions and archives be informed by the recent attempts with regards to literature- and art-related digital archives. For, the majority of problems faced during the production of the latter – such as issues of presentation, structure, organization, archiving and, of course, of editorial intervention – could and should be taken into account as directly relevant to any attempt in creating a digitally enhanced (or entirely digitally-based) edition of music. The outcome should not simply involve the preservation and the archiving of information and of the editions already available; rather, it should enhance and promote what has diachronically proven to be the most crucial element of editing and interpretation: the continuation of dialogue.

8. REFERENCES

Adams, D. and Hamm, M. (2005). *Redefining Education in the Twenty-First Century: Shaping Collaborative Learning in the Age of Information.* Springfield, Illinois: Charles Thomas.

Andrew Mellon Foundation. (2003-). *Online Chopin Variorum Edition*. Retrieved October 2, 2012, from www.ocve.org.uk.

Andrews, J. and Law, D. (2004). Digital Libraries: Policy, Planning and Practice. Aldershot: Ashgate.

Arts and Humanities Research Council. (2004-7). *Chopin's First Editions Online*. Retrieved December 21, 2009, from www.cfeo.org.uk.

Badura-Skoda, E. (1965). Textual Problems in Masterpieces of the 18th and 19th Centuries (Piero Weiss, Trans.). *The Musical Quarterly*, 51:2, 301-317.

Badura-Skoda, E. (2003). Aspects of Performance Practice. In R. L. Marshall (ed.), *Eighteenth-century keyboard music* (pp. 33-67). New York: Routledge, Taylor and Francis.

Badura-Skoda, E. and Badura-Skoda, P. (1962). *Interpreting Mozart on the Keyboard*. (Leo Black, Trans.). London: Barrie and Rockliff.

Barth, G. (1991). Mozart Performance in the 19th Century. Early Music, 19:4, 538-555.

Boyle, J. (2008). *The Public Domain: Enclosing the Commons of the Mind.* New Haven and London: Yale University Press.

CD Sheet Music Online. (2000-). Retrieved December 22, 2009, from www.cdsheetmusic.com.

Centre d' études supérieures de la Renaissance. (n.d.). *Programme Ricercar*. Retrieved November 15, 2010, from http://ricercar.cesr.univ-tours.fr/3-programmes/EMN/Duchemin/.

Centre for Digital Research in the Humanities, University of Nebraska-Lincoln. (1995-). *Walt Whitman Archive*. Retrieved November 20, 2010, from www.whitmanarchive.org.

Chapman, N. P. and Chapman, J. (2009). *Digital Multimedia*. Chichester, West Sussex and Hoboken, New Jersey: Wiley.

Ching, H. S., Pan, H. and McNaught, C. (2006). *eLearning and Digital Publishing, Vol. 10*. University of California: Springer.

Choral-wiki. (1998-). Retrieved November 10, 2010, from www.cpdl.org.

Connelly, P. (2000). What is a Good Edition?, Retrieved May 7, 2009, from www.saraband.com.au.

Copy-Us Internet Music Publishing. (n.d.). Retrieved December 21, 2009, from www.copy-us.com.

Digital Bach Edition (CD). (2005). Verona, New Jersey: CD Sheet Music.



Dougan, K. (2006). Online Sheet Music Projects and Metadata from a Public Service Perspective. Music Reference Services Quarterly, 9:1, 1-11.

Duckworth, W. (2005). Virtual Music: How the Web got wired for sound. London: Routledge.

Edition Peters. (n.d.). Retrieved May 7, 2002, from www.urtext.com.

Eisen, C. (1991). The old and new Mozart editions. Early Music, 19:4, 513-531.

European Mozart Ways Association. *European Mozart Ways*. Retrieved January 3, 2010, from www.mozartways.com.

Greetham, D. (1999). Theories of the Text. Oxford: Oxford University Press.

Hettrich, E. (Ed.). (1992). Mozart, W. A. Klaviersonaten. Munich: Henle Verlag.

Hillman, D. and Westbrooks, E. (2004). Metadata in Practice. Chicago: American Library Association.

International Mozarteum Foundation. (n.d.). Retrieved December 21, 2009, from www.dme.mozarteum.at.

International Mozarteum Foundation. (2006). *Mozart, W. A. Fantasia and Sonata in C minor K. 475 and 457: Mozart Digital – Interactive CD-ROM.* Salzburg: Stiftung Mozarteum

International Music Score Library Project. (n.d.). Retrieved December 21, 2009, from www.imslp.org.

Lampe, W. (1966). Mozart, W. A. Piano Sonatas. Munich: Henle Verlag.

Larsen, J. P. (1958). *Editionsprobleme des späten 18. Jahrhunderts*. Paper presented at the Seventh Congress of the International Musicological Society, Cologne.

Lilypond. (n.d.). Retrieved November 10, 2010, from www.lilypond.org.

McGann, J. (2001). *Radiant Textuality: Literature after the World Wide Web.* New York and London: Houndsmills/Macmillan.

McGann, J. (n.d.). *The complete writings and pictures of Dante Gabriel Rossetti – a hypermedia archive*, Retrieved January 1, 2010, from http://www.rossettiarchive.org.

McGann, J. (1995). The Rationale of Hypertext. The European English Messenger, 4:2, 34-40.

Murphy, J. S. (2008). The Death of the Editor. Essays in Criticism, 58:4, 289-310.

Music Encoding Initiative (MEI). (2007). Retrieved July 12, 2010, from http://music-encoding.org.

Mutopia project. (n.d.). Retrieved June 20, 2012, from www.mutopiaproject.org.

Oregon Bach Festival. (n.d.). *Digital Bach Project*. Retrieved June 20, 2012, from http://oregonbachfestival.com/digitalbach.

Packard Humanities Institute. (1990-). Bach Digital Portal, Retrieved June 20, 2012, from

http://www.bachdigital.de

Project Petrucci LLC. (2006). Petrucci Library Project. Retrieved December 21, 2009, from www.imslp.org.

Recordings Online. (n.d.). Retrieved December 22, 2009, from www.classical.com.

Retrospective Index to Music Periodicals 1800-1950 (RIPM). (n.d.). Retrieved January 1, 2010, from http://www.ripm.org.

Samuel. H. E. (2003). Editions, historical. In Randel, D. M (Ed.). *The Harvard Dictionary of Music*, 4th Edition. Cambridge, MA: Harvard University Press. 280-283.

Sheet Music Archive. Retrieved July 20, 2010, from www.sheetmusicarchive.net.

Sobel, R. and Weissman, D. (2008). *Music Publishing*. New York: Routledge,

Tanselle, G. (1995). Critical Editions, Hypertexts and Genetic Criticism. *The Romanic Review*, 86:3, 581-593.



Thompson, J. (2005). *Books in the Digital Age: The transformation of academic and higher Education Publishing in Britain and the United States.* Cambridge: Polity Press.

The Digital Grove Edition on CD (2005). Verona, New Jersey: CD Sheet Music.

University of North Carolina, University of Rochester, and the Scholarly Editions and Translations Division of the National Endowment for the Humanities. (1996). *William Blake Archive*. Retrieved November 20, 2010, from http://www.blakearchive.org.

University of Sheffield, Humanities Research Institute. (2008). *HRI Online Publications*. Retrieved October 2, 2012, from http://www.hrionline.ac.uk.

Utrecht University. (1991). *Computerized Mensural Music Editing*. Retrieved January 1, 2010, from http://www.cmme.org.

Vivaldi Studio. (2000). Digital Music Scores. Retrieved May 7, 2009, from www.vivaldistudio.com.

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Callas: the conflict about Epidaurus

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ABSTRACT / The objective of this article is to explore situations that are intimately related to Callas' concerts in Epidaurus. Callas, who had left Greece in 1945 to go to the United States, and hadn't been back since, returned to Athens in 1957 to inaugurate the Festival with two performances at the Herodium in 1957. However, an unpleasant atmosphere had been created against her, because she demanded an enormous amount for the standards of that period! After her appearance at the Athens Festival, Callas, as excepted, did not want to give another concert in Greece. But, in 1959 K. Bastias took charge of the administration of the Greek National Opera and proposed Callas to present an opera in the Ancient Theatre of Epidaurus. It is worth noting that since its opening in 1954, the Epidaurus Festival only included ancient Greek drama performances given by the National Theatre of Greece. Performances from other troupes were not allowed. Finally, Callas accepted to present Norma by Bellini and decided to grant her remuneration in order to create a scholarship foundation. After Callas' success in the role of Norma, she returned to Epidaurus a year later to present Medea by Cherubini. At the main time a situation of tension was to begin; Emilios Chourmouzios, the director of the National Theatre, reacted to the performance of Medea, a fact that evokes many questions. Therefore, his reaction is not justified. In fact, he realized that via Callas' performances in the Epidaurus theatre melodrama tended to be established. He saw losing the National Theatre's monopoly in Epidaurus and undoubtedly, the presence of the Diva in Epidaurus was the first step to abolish the monocracy of the Greece National Theater.

Keywords: Callas, Festival, Epidaurus, Opera, Norma, Medea, Minotis, Bastias, Greek National Opera, Chourmouzios, Greek National Theater

1. ATHENS FESTIVAL IN 1957

There are numerous foreign and Greek studies that analyze Maria Callas' life and work. However, the objective of this article is not to replicate information on her international career or personal life but to explore all the events that are intimately related to her concerts in Epidaurus, in the role of Norma (1960) and Medea (1961) bringing the latter into focus.

In February 1957, Achilleas Mamakis, director of the newly established Athens Festival, met Callas in Milan, and proposed her to open the Festival in the summer of that year. Callas, having a busy program during the summer, asked on purpose an excessive remuneration believing that the Festival could not afford it. Nevertheless, Mamakis agreed. So, Callas, who had left Greece in 1945 to pursue a carrer in the United States, and hadn't been back since, returned to Athens in 1957 to inaugurate the Festival with two performances at the Herodium on 01 and 05 August 1957 (Petridis, 1957, August 06, p.2).

However, the first performance was canceled just an hour before. Rumors started spreading around (Εματαιώθη η έναρξις του Φεστιβάλ, 1957, August 02, and Η αναβολή ενάρξεως του Φεστιβάλ Αθηνών, 1957, August 03, p.2). According to the media this cancellation was either due to Callas' illness (Η αναβολή ενάρξεως του Φεστιβάλ Αθηνών, 1957, August 03, p.2)1 or because of the police authorities having cancelled the concert in order to prevent public disorder (Θεατρικά νέα, 1957, August 02, p.2 and Εματαιώθη η έναρξις του Φεστιβάλ, 1957, August 02,) since there have been rumours for disapproval on behalf of the public.

It seems that before her arrival an unpleasant atmosphere had been created against her, because the artist refused to sing under the direction of a Greek conductor and had asked to have her collaborator, A. Votto, fly from Italy (Θ εατρικά Νέα, 1957, August 01, p.2). But above all, she demanded a 9,000 dollar fee for her two performances at the Festival - an enormous amount for the standards of that period! The press put the blame on the high-ranking government minister, Constantinos Tsatsos (1899-1987) who had accepted this proposal.

So Callas' payment issue lit a fire in the Greek political stage and that was the reason why the leaders of the other political parties, namely G. Papandreou (1888-1968), S. Venizelos (1894-1964), leaders of the Liberal Party, and S. Papapolitis (1911-1973), leader of the political party "National Political Union Centre" (EΠΕΚ) refused to attend the opening of the festival, expressing their discontent (Θεατρικά Νέα, 1957, August 01, p.2). After this tension, Callas' pretended illness escalated the already explosive ambience.

Tsatsos, in order to appease the spirits, stated2 that Callas' remuneration was unusual for the Greek standards but usual for international theatres. He cited as examples: her appearance in Chicago, where for one and only appearance Callas received 10.000\$ and in Texas, where for a single appearance she received 11.000\$. To support his position he pointed out that the festival ticket worth of 420 drachma (Επισήμως ανακοινούται ότι η κ. Κάλλας θα εμφανισθή τη Δευτέρα, 1957, August 03) was actually less than the ticket cost in festivals abroad. He added that the gains from Callas' two performances covered her remuneration as well as all her related expenses. Moreover, he mentioned that for the upgrading of the festival every possible sacrifice should be made. For this reason personalities of international reputation should be invited, whose resounding presence in Athens could "monopolize the entire world press", something that did happened in Callas' case. Lastly, he turned against his political opponents for using the Festival and Callas' issue for gaining political benefits.

² To perceive the amount, it is worth mentioning that in 1957 a newspaper cost 1.50 Drs.



 $^{^{1}}$ According to the doctor, Callas suffered from a slight inflammation of the trachea. But the newspaper Ta Nea (Θεατρικά Νέα, 1957, August 02, p.2) claims that the doctor said that she could sing.

In an ambience full of doubts about Callas' second performance the official opening of the Festival took place on 2 August at the National Theatre with the play Iphigenia in Aulis with Anna Synodinou and Thanos Kotsopoulos in the leading roles (Η αναβολή ενάρξεως του Φεστιβάλ Αθηνών, 1957, August 03, p.2). The day after Callas' unique performance, during a press conference at the hotel "Grande Bretagne", she refused to answer to questions about her remuneration saying that "it is her own affair" and adding that "of course she is getting paid well enough, nevertheless, the theatres have always the last word" (Θεατρικά Νέα, 1957, August 07, p.2). The situation was triggered after some articles in the press claiming that Tsatsos' statements were misleading, because he knew that Callas had never achieved to be paid more than \$2.500 per performance (Θεατρικά Νέα, 1957, August 08, p.2). Finally, the committee of the festival announced that Callas received the sum of 135.000 drch - half the amount of that expected, for a single performance. However, there is no official reference or source to provide specific information about the actual amount.

Indeed, the invitation of a great personality like Callas in the Athens Festival, not only was consistent with the artistic goal of the Festival, which was to bring together the best Greek artists who excelled in Greece or abroad (Kaggelari, 2003, June 29, p.24), but would also highlight the institution worldwide. Thus, Callas' appearance also served the second goal of the festival which was the development of tourism (Kaggelari, 2003, June 29, p.24). However, it should be noted that her appearance was intended to introduce the newly formed institution, primarily to the Greek public and to foreign tourists who were visiting Greece and secondly, the enhancement of tourism since a foreigner who was able to enjoy the artist in a operatic scene in his country would not travel to Greece just for an operatic concert by Callas3.

However, the fact that the appearance of Callas became a political scandal which has been reinforced by the press of that period it seems a natural consequence as the 1950's was a difficult decade for the Greeks: Greece was trying to recover after a troubled past decade during which the country had suffered due to the Italian and German occupation and by the civil war. Under the "Marshall" project, tourism was seen as a powerful tool that could reinforce reconstruction (Kaggelari, 2003, June 29, p.24). Reasonably, the question arises: where such sacrifices worthy at the time?

³ For the first concert on 1 August the following program had been selected: three airs from the Verdi operas *La Forza del destino* and *Il Trovatore*, Overture from the opera *La Vestale* by Spontini, one air from Wagner's *Tristan und Isolde*, one air from *Lucia di Lammermoor* by Donizetti, one air from *Hamlet* by Thomas and an intermezzo from *Amico Frits* an opera by Mascagni. The Festival Orchestra would end the program with an overture from *La forza del destino* as well as an intermezzo and a dance from the lyrical drama *La Vida breve* by Manuel de Falla. The second concert on 5 August would include: an overture from the opera *Les vêpres siciliennes*, aria from *La vestale*, an air from Meyerbeer's *Dinorah*, Prelude and the Death of Isolde from *Tristan und Isolde*, *Polovtsian Dances* by Borodin, one air from *Ballo in maschera*, intermezzo and dance from *La vida breve* by Manuel de Falla, one air from *Lucia di Lammermoor* (Το πρόγραμμα των δύο συναυλιών της Κάλλας, 1957, July 10, p.5. However, due to the cancellation of the first performance it seems that on 5 August the program of the first concert was given (Lalaouni, 1957, August 07).



2. NORMA IN 1960

After her appearance at the Athens Festival and because of the hostile atmosphere, Callas, as excepted, did not want to give another concert in Greece. Nevertheless, in 1959 K. Bastias4 took charge of the administration of the Greek National Opera (Εθνική Λυρική Σκηνή). It was the same person who, back in 1940, saw into young Maria Calogeropoulou a great talent, supporting her financially, recruiting her as a chorister and then as a main actress in the newly established National Opera. Bastias proposed Callas to present an opera in the Ancient Theatre of Epidaurus, directed by Alexis Minotis (Bastias, 2005, p. 462). Callas had already worked with him in 1958 and in 1959. We may presume that Minotis was hired by Bastias in order to change Callas' mind; this is probably the reason why she finally agreed to appear again in Greece after the previous scandal. The chosen Opera was Norma by Bellini5. And as far this performance was concerned, Callas asked to bring over the conductor Tullio Serafin with whom she had also collaborated in the past6.

The first performance of Norma, which sold 12.000 tickets7, was cancelled because of a sudden downpour (Θεατρικά Νέα, 1960, August 22, p.2 and Kampanis, 1960, August 23, p.2). The inhabitants of the region claimed that it was "the wrath of Gods that postponed the performance of Norma" (Η ζωή της πόλεως, 1960, August 23, p.2). In fact, in the area there was an old superstition and according to it, the ancient Greek gods accepted drama -and not opera- to be performed in the ancient theatre.

Finally, the first performance was on 24 August and the second on 26 August. Nevertheless, during the second, Callas was ill with fever, as Bastias informed the audience before the beginning of the performance (Θ E α T ρ IK α , 1960, August 27, p.2). The third scheduled appearance of Callas, which was to replace the first performance that was cancelled because of rain, was also cancelled, because of "Callas' rapid deterioration of influenza"8. Due to her bad health condition, Callas left Greece in Onassis' yacht, in order to be hospitalized abroad. For both performances the artist received the amount of \$10.000, a sum which she donated to "Maria Callas scholarships Foundation"9.

The selection of Norma came as a surprise. Callas in 1958 and 1959 collaborated with Minotis and Tsarouchis in order to present Medea by Cherubini abroad. Bastias' son claims that it was Callas who suggested Norma (Bastias, 2005, p.462). This statement is also confirmed by a press conference she gave after her arrival in Greece in 1960: "I did not choose Medea but Norma because it is more of

⁹ There was an official announcement that Callas would perform *Norma* in Olympia Theatre in February 1961 and that the box office receipts would be donated to her newly-founded «Maria Callas Scholarships» (Θεατρικά Νέα, 1960, August 30, p2). However, this did not happen.



⁴ Kostis Bastias (1901-1972) novelist, journalist, publisher, editor and columnist for major Athenian newspapers, general manager of the Royal (National) Theater (1937-1941), the National Opera (1940-1941 and 1959-1964) and the National Radio Foundation (1961-1963).

⁵ On August 21, 24 and 28, 1960. Yannis Tsarouchis-scenery, Antonis Fokas -costumes, Michael Vourtsis- Chorus Conductor, Tatiana Varouti-choreography.

⁶ Until his arrival in Athens, rehearsals were taken over by Totis Karalivanos.

⁷ The performance was attended by the Deputy Prime Minister Costas Karamanlis, the Public Speaker Mr. Rodopoulos and the leader of the Liberals Party Mr. Venizelos (Θεατρικά Νέα, 1960, August 22, p.2).

⁸ The doctor, Mr. Papathanassopoulos, found inflammation in the upper respiratory system which was turned to laryngitis because of the hot and dry climate of Greece. He recommended her to abstain for a week from her duties (Καταρροϊκήν λαρυγγίτιδα υπέστη η Μ. Κάλλας, 1960, August 28,).

a bel canto» 10 (Callas 1960, August 09). This opera was one of Callas' favorites, a demanding role that the artist knew well, but also a play to which Callas gave prominence with her interpretation and vocal talent. Additionally, it was an opera that had never been performed in Greece (Giatras, 1960, August 19, p.3).

Callas' decision to grant her remuneration in order to create a scholarship foundation in her name for people who wanted to pursue vocal studies but they did not have the financial means was a pleasant surprise, so press and public reconsidered their opinion about her (Pilichos, 1960, August 10, p.2 11 and Psyrrakis, 1960, August 11, p.3). In the press conference she explained that she took that decision, as an action of gratitude towards Bastias, who had helped her in the past (Callas 1960, August 09 and Bastias 1997, pp. 472-473). Nevertheless, this statement is not confirmed, because the sources are few and unreliable. Indeed, "Maria Callas' scholarships Foundation" is an institution that is still active, helping many young artists.

On another account of the issue, and according to Bastias' son, it was actually Kostis Bastias who persuaded Callas to provide her remuneration towards the creation of the scholarships foundation. This fact is not confirmed by another source. But if this is true, it raises the following question: Why did Bastias propose it to her? Was it a strategy to appease the tension created in 1957? Or did Bastias, by this means, wanted the money to return to the institution?

3. MEDEA IN 1961¹²

After Callas' great success in the role of Norma, she returned to Epidaurus a year later to present Medea by Cherubini, a production already presented abroad.

Minotis recounts (Minotis, 1995 February 12, p. 22 and Minotis, 1981, p. 115-116) that in the summer of 1958, Callas called him asking to assume the direction of Medea in order to present it in The Dallas Opera in Texas13. Initially, he refused, expressing his disagreement about this type of opera. However, according to him, Ms K. Paxinou14, his wife, who was present during this phone call, persuaded him to accept.

In the autumn of 1958, Callas interpreted Medea by Cherubini at the Dallas Opera, directed by Minotis15. The same production was transferred to Covent Garden, in 1959. In November 1959, the performance was repeated in Dallas and in December 1961 as well as in May-June 1962, it was staged

¹⁵ Scenery and costumes by Y. Tsarouchis. According to Minotis (1981, p. 115) Tsarouchis was informed by the newspapers for the Minotis- Callas collaboration and asked him to work with them.



 $^{^{10}}$ Original text: «ήθελα τη Μήδεια αλλά προτίμησα τη Νόρμα διότι είναι πιο bel canto».

¹¹: "the taming of the tiger....She will donate \$ 15,000 dollars at the Greek National Opera".

¹² According to Dounias (1961, August 09) the French version was presented but N. Dontas (2003, July 13, p. 30) suggests that it was presented in its Italian version.

¹³ The possibility that Callas had met Minotis for the first time in 1957 when she came to sing at the Festival of Athens is not accurate, because according to Minotis he had not yet met her at the time (Minotis, 1981, p 115).

¹⁴ Katina Konstantopoulou-Paxinou (1900-1973) was a famous Greek actress also known in the U.S.A. during the 1940-1950 decade. She has interpreted many roles in American films. In 1944 she won the Oscar for the support role of Pilar in *For whom the bell tolls*. Although she was regarded as one of the major Greek actresses, she had also excellent musical education and began her career in Greece in 1920 as a lyric singer.

at "La Scala" 16. Callas chose the same opera in order to present it in the theatre of Epidaurus in 1961, directed by Minotis and conducted by Nichola Rescigno 17.

Callas arrived in Greece in Onassis' yacht in order to start rehearsing18. Her remuneration reached the amount of 5.000 dollars per performance, a sum of money that she decided once again to provide to the "Maria Callas' Scholarship Foundation" (Καθημερινή ζωή, 1961, August 06, p.2, Θεατρικά Νέα, 1961, August 07, p.2 and Η Κάλλας αποθεώθη ως «Μήδεια», August 08, 1961, p.3). The premiere of the opera, which was almost postponed because of the last minute bad weather, took place in 6 August, and according to the Hellenic Tourism Organisation data was attended by 17.000 spectators, among them many Greek politicians and artists (Θεατρικά Νέα, 1961, August 07, p.2 and Καθημερινή ζωή, 1961, August 08, p.2)19. A week later, on 13 August was the second concert and the audience reached 17.500 spectators. It is worth noting that 2.000 people were left without a ticket!

At the meantime another situation of tension was to begin. It is worth noting that since its opening in 1954, the Epidaurus Festival only included ancient Greek drama performances given by the National Theatre of Greece, hence, performances from other operatic groups were not allowed20. Therefore, in 1954 there were only representations of Ancient Greek Tragedy given at the theater of Epidaurus (Gini, 2003, July 13, p. 7) and since 1957 performances of Ancient comedy have been established (Mountraki, 2003, July 13, pp. 8-9 and Prousali, 2001, March 18, p. 17). Due to a limited number of seats, performances of ancient drama were also given in other ancient theaters, like the restored ancient theater of Delphi and the Herodium (Chlepa, 2003, June 29, pp. 28-29). Callas' two performances, in 1960 and in 1961 were just an exception. Nevertheless, the director of the National Theatre, Emilios Chourmouzios (1904 - 1973), reacted to the performance of Medea ($K\alpha\theta\eta\mu\epsilon\rho\nu\eta'$ $\zeta\omega\eta'$, 1961, August 01, p.2), a fact that evokes many questions as such: Why did Chourmouzios not react a year later to the representation of Norma?

Looking back at the Kathimerini newspaper, where Chourmouzios used to be a columnist, we find one article that was published several days after the performance of Norma (Chourmouzios, 1960, August 31). In this article Chourmouzios argues against opera representations in Epidaurus, something that cancels a tradition of many centuries that connects this venue to ancient drama21. Moreover, he

²¹ As for the Director of the National Theatre, it is necessary to display some aspects of the ancient drama and opera in order to give a global perspective. His works are indicative: Chourmouzios, on one hand, devalues the role of music in ancient drama, and, on the other hand, disagrees with the comments about the exaggerated role of music (Chourmouzios, 1952 January, p.110). He concludes that music "distorts" drama and it converts it into melodrama, which, according to him, is "fake",



 $^{^{16}}$ Minotis directed the same play starring Magda Olivero in 1967 in Dallas and in 1968 in Kansas.

¹⁷ Y. Tsarouchis: scenery/costumes, M. Vourtsis: Chorus Conductor, Maria Chors: Choreography. With Modest and Vikers in the leading roles. The opera has been discussed for many extras that were on the scene of which 100 people were soldiers who served their military service in the nearby town of Nafplion.

¹⁸ The musicians were against the filming of the rehearsals by the French television shift, because their legal rights were not paid. Nevertheless, it had received Callas' authorization as well as the authorization of the Greek National Opera for using the rehearsals in a television program on Callas (Θεατρικά Νέα, 1960, August 02, p.2).

¹⁹ Reported 15,000 spectators (Η Κάλλας αποθεώθη ως «Μήδεια», August 08, 1961, p.3, see also Bastias, 2005, p. 477).

²⁰ In September 1935, twenty-one years before the establishment of the institution of the Epidaurus Festival, Dimitri Mitropoulos, pianist, composer and conductor, appeared in the theater of Epidaurus with some members of the symphony orchestra of the Conservatory of Athens. Similar concerts were given by Mitropoulos and the ancient theaters of Delphi, Corinth and Sikyon.

put the blame on the Archaeological Council that, for the sake of tourism, accepted the performance in Epidaurus and added that Norma could have been played in the Herodium, or in the Panathenian Stadium "if Callas wanted to satisfy her artistic ambition".

Chourmouzios' point of view is shared with Mr Papathanassopoulos, professor of acoustics at the National Polythechnic University, who, in a letter to *Kathimerini* (Papathanassopoulos, 1960, September 02), supported the opinion that Epidaurus is not suitable for staging musical performances, not only because of the sanctity of the place but also because of the acoustics, that is not helpful at all for music. The theatre, he claimed, was only suitable for poetry events with theatrical performances being part of this tradition.

Neverhteless, in 1960 Chourmouzios had not reacted to the representation of Norma but a year later, his point of view triggered a great debate between the National Theatre of Greece and the Greek National Opera with the performance of Medea ending up in a personal debate between Chourmouzios and Minotis. Namely, Chourmouzios although he knew about the collaboration between the Opera House and Minotis, wrote a letter to the Director of the Opera House, Mr. Bastias, informing him that he had not given permission to Minotis to work with the Opera House for the production of Medea (Θεατρικά Νέα, 1961, May 16, Λόγοι και Αντίλογοι, 1961, May 18 and Πνευματική και Καλλιτεχνική κίνηση, 1961, May 16). Moreover, he threatened that, if the National Opera dared to use Minotis to the detriment of the National Theatre, in that case the National Theatre would not participate in the Athens Festival. Minotis at the same period was directing at the National Theatre the ancient tragedy, The *Phoenissae*. Chourmouzios, perhaps deliberately, scheduled the performances at the same time with the rehearsals in Epidaurus, to cause difficulties and exacerbate the situation.

After Chourmouzios' letter to Bastias, Minotis wrote to the Director of the National Theatre and asked for permission to work with the National Opera (Minotis, 1961, May 18). Chourmouzios also responded (Chourmouzios, 1961, May 19) giving permission and at the same time calling him to continue fulfilling his obligations towards the National Theatre. As a result, Minotis had to supervise the rehearsals of Medea in Epidaurus and at the same days interpret a role and direct The *Phoenissae*. Thus, Minotis was divided between Athens and Epidaurus to rehearse for Medea and, at the same time, participate in The *Phoenissae* (Bastias, 2005, p. 476).

Maybe it was because of Chourmouzios' reactions, that Minotis provoked rumors about him resigning, along with Paxinou, from the National Theatre (Εθνική Λυρική Σκηνή, 1961, July 30, p.2, Θεατρικά Νέα, 1961, July 29, p.2 and Η ελληνική θεατρική σκηνή, 1961, August 20, p.8). The press wrote a lot about this rumor but Chourmouzios claimed that he had not been informed (Θεατρικά Νέα, 1961, July 30, p.2). Also, he added that the National Theatre had no intention to stop its collaboration with Minotis and Paxinou (Θεατρικά Νέα, 1961, July 30, p.2). The couple, however, did

foreign, and outlandish and cannot be adopted by the Greek mentality. He somehow supported the superiority of ancient drama over melodrama and, of course, he maintained that each of these two genres has its own specific space of projection and display (Chourmouzios, 1978, p.200).



not leave after the representation of The *Phoenissae* but only when they were persecuted by the dictatorship in 1967.

What did cause Chourmouzios' behavior? At this point it is necessary to mention one other event which has no direct relation to that performance but it is important to note, as it outlines some aspects of Minotis' character: in the autumn of 1960 Minotis was directing the Merchant of Venice and at the same time performing the role of Shylock. Before the opening night, the National Theatre had placed, as usual, at the main entrance of the building an advertising banner providing information about the play. Minotis' name appeared on the second line, before the name of the main actress Vasso Manolidou, who was playing the role of Portia. Minotis demanded his name to go fist, but Chourmouzios explained that according to the tradition of the National Theatre the name of a female protagonist goes first, unless the main role belongs to a man. Chourmouzios also underlined that this parameter in that case was not applicable. Minotis was annoyed and stopped rehearsing, presenting an objection to the Licensing Committee for Actors ($E\pi\iota\tau$ po π) Aδείας Ασκήσεως $E\pi\alpha\gamma$ γέλματος Ηθοποιού). However, the final decision was against him (Kanakis, 1999 pp. 314-316 and Kritas, 1998, p. 130). Nonetheless, the director of the National Theatre had a peculiar character (Prousali, 2001, March 18, p.15)22.

Shortly after the end of Medea's performances B. Papathanassopoulos prepared a second letter (Papathanassopoulos, 1961, August 17,) in order to highlight the inadequacy of Epidaurus to accommodate musical events. It is not known today whether the professor knew Chourmouzios personally or whether he just seized the opportunity for personal benefit. However, some arguments-about the acoustic and the sanctity of the place- were used by both men to persuade the public about the inappropriateness of Epidaurus, proposing the Herodium as the ideal place for musical performances. This fact created suspicion about a connection between them. As far as the question about the acoustics of the theatre of Epidaurus is concerned –of course it is not to be analyzed in this study- modern studies testify the suitability of that theatre (Tzekakis, 1999, July 25, pp.11-12 and Bosnakis, 1999, July 25, p. 18)23. Consequently, the argument about the acoustics of the ancient theatre of Epidaurus is incorrect.

Furthermore, the argument about the acoustics and the sanctity of the theater are being refuted by other elements: Studying the ancient Greek texts we realize that poetry in ancient Greece was inseparable from the music and that is why the term "μουσική [music]" meant the combination of speech and melody. Music and poetry were always together. As a result, the ancient drama, tragedy and comedy, were always accompanied by music, composed by the poet himself, not only for the

²³Επίδαυρος το Αντηχείο-το Θαύμα, 2007, March 31 and Vasilantonopoulos, S. Zakynthinos, T. Chatjiantoniou, P. Tatlas, N.A. Skarlatos, D. Mourzopoulos, Y, 2004.



²² It is worth noting that at the same time with the performances of *Medea*, another conflict between Chourmouzios, Nana Mouskouri and Manos Hadjidakis was created. In fact, Manos Hadjidakis for reasons of art solidarity and comradeship withdrew his music from *Erofili*, so in the end it was performed without music. Actually, the manager of the National Theatre deliberately avoided giving to the press Mouskouri's name, as a result, her name was missing from the advertising articles in the press as well as from the program of the National Theatre. However, the conflict between Mouskouri and the National Theatre was initiated a year before when the administration of the National Theatre rejected Mouskouri's appearance in *Lysistrata* (Καθημερινή ζωή 1961, August 24, p.2, Θεατρικά Νέα, 1961, August 24, p.2 and Θεατρική Σελίδα, 1961, August 26,p.2)

chorus but also for the speaking part of the drama. We might be talking about a type of musical recitation. In other words, a genre –recitation- was born. In fact, from various ancient sources we learn that among the instruments used for the background music of the ancient drama were: lyre [λύρα], cithara [κιθάρα] (a kind of lyre which differed as regards the speaker, the size and the sound), flute [αυλός], trumpets [σάλπιγγες], cymbals [κύμβαλα], shells [όστρακα], rattles [κρόταλα], drums [τύμπανα] and tambourines [ντέφια]. Besides, as it is known today, the birth of the opera by a group of intellectual people, followers of Plato, in Florence, came as an attempt to revive the ancient Greek tragedy. Likewise, the argument for the sanctity of the site of Epidaurus is also incorrect. So, how can the sanctity of the place be affected if the theater had been created for performances there were dominated by music and how could such a place, lack proper acoustics?

And what about Bastias' and Minotis' arguments on the question of the place's sanctity (Bastias&Minotis, 1961, August 01, p.5 and Θεατρικά Νέα, 1961, August 01, p.2)? Bastias respects these objections; however, he argues that there is no sanctity in the place but gravity. It is quite normal for any ancient theatre to accommodate modern performances as well as any theatrical modernity, for example modern revival of ancient drama, including opera. So that the effort of the Opera House not only does it reduce the importance of the ancient theatre of Epidaurus, but it elevates it, too. Minotis claimed that if any artistic or tourist interest designated the place only for representations of ancient drama, any other type of events could not be justified in any way. Additionally, comic performances 24 were nonetheless accepted in the Epidaurus theatre, so an opera performance by Callas not only does it reduce the theatre's status but it also restores its seriousness.

As for Chourmouzios' and Papathanassopoulos' point of view, either they ignored the role of music in the ancient Greek drama, or they overlooked it for some reason. However, for brevity's sake, we just have to relate Chourmouzios' beliefs and reactions which do not seem justified for another reason: Chourmouzios with A. Terzakis, novelist (1907-1979) and I. M. Panagiotopoulos, author and educator (1901 – 1982), were the three-member artistic committee of the Athens Festival. During their term, except for the performances of ancient drama, performances of classical music, opera and other sorts of entertainment were excluded (Vavlidas, 2003, June 29, p. 14). In fact, Chourmouzios realized that via Callas' performances in Epidaurus theatre, melodrama tended to be established. Chourmouzios, as a matter of fact, was against the establishment of melodramatic performances not only because he saw that he was losing the National Theatre's monopoly in Epidaurus but also that Minotis was becoming an established opera director with the National Greek Opera. Aptly the author of the column "Eleftherostomies" in the newspaper Eleftheria (August 05, 1961, p.2) parodied the situation by making a wry comment:

"It is possible that next year Chourmouzios will perform in Epidaurus himselfAs far as Callas, Minotis and Paxinou are concerned, they are going to disappear. But I'm afraid that the spectators will disappear, too!"25

²⁵ Original text: «τον επόμενο χρόνο φαίνεται ότι θα παίξει μόνο στην Επίδαυρο ο Χουρμούζιος και θα εξαφανιστούν πραγματικώς και Κάλλας και Παξινού και Μινωτής. Αλλά φοβούμαι και οι θεατές».



²⁴ He makes use of the Greek term «τερπνά». Probably he means the comedies of Aristophanes, which were performed in Epidaurus. It is worth noting that Minotis was a supporter of the tragedy.

However, while Bastias announced that Callas would perform also in 1962 in Epidaurus (Θριαμβευτική υπήρξε εις το θέατρον της Επιδαύρου η δευτέρα παράστασις της Μήδειας με την Κάλλας, 1961, August 15, p.7, Θεατρικά Νέα, 1961, August 15, p.2 and Καθημερινή Ζωή, 1961, August 15, p.2) that did not happen. Apparently he tried to use his acquaintance with the great soprano to reinforce the presence of National Opera in Epidaurus. However, this wish did not come true because Medea was the last official appearance of the artist in Greece. There are a lot of speculations explaining that. One of them is the soprano's voice problem. Another speculation is her poor health, a cause that forced her to cancel her appearances (Bastias, 2005, p. 480). Secondly, considering that the two of the three appearances she made from 1957 to 1961, were accompanied by conflicts that perhaps reminded her the past, i.e. the period after the Italian and German occupation in Greece before she left to go abroad in 1945. Maybe this is the reason why Callas did not want to continue her appearances in Greece.

The Greek audience could enjoy the greatest Greek soprano, when she had reached the pinnacle of her career. Maybe, if these conflicts about Epidaurus-that also involved her directly or indirectly-had not existed an important institution could be established in Greece with Callas' presence. However, Callas' two performances in Epidaurus opened the way for other type of performances to be staged in the ancient theatre, apart from ancient Greek drama.

Undoubtedly, the presence of the Diva in Epidaurus was a great event and the first step to abolish the monocracy of the Greece National Theater in Epidaurus. Even though the Diva's presence in Epidaurus meant that the National Theatre's monopoly was over, it took 13 years until, in 1974, another theatre company performed on the orchestra of this monumental theatre: it was the legendary Theatro Technis by Karolos Koun, that became a counterbalance of the somehow academic stagings of the National Theatre.

4. AKNOWLEDGMENTS

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5. REFERENCES

- Bastias, K.,& Minotis, A. (1961, August 01). Η παράστασις της Μήδειας αποκαθιστά την σοβαρότητα του θεάτρου της Επιδαύρου [Medea elevates the importance of the ancient theatre of Epidaurus]. *Το Βήμα* [*Το Vima*], p. 5.
- Bastias, Y. K (1997). *Ο Κωστής Μπαστιάς στα χρόνια του Μεσοπολέμου* [Kostis Bastias during the interwar years] II.. Athens: Ed. Ekdotiki Athenon.
- Bastias, Y. K. (2005). Κωστής Μπαστιάς: Δημοσιογραφία-Θέατρο-Λογοτεχνία [Kostis Bastias: Journalism, Theatre, Literature]. Athens: Kastaniotis.
- Bosnakis, D. (1999, July 25). Θέατρα μνήμης άξια...[Theatres that are worth remembering...]. *Καθημερινή* [*Kathimerini*] : *Επτά ημέρες* [*Epta imeres*], pp. 18-21.
- Callas, M. Interview. (1960, August 09). Retrieved July 14, 2012, from http://www.youtube.com/watch?v=HV7MnFe7mAk.



Chlepa, E.-A. (2003; June 29). Ωδείο Ηρώδου Αττικού [Herod Atticus Odeon]. *Καθημερινή* [*Kathimerini*]: *Επτά* ημέρες [*Epta imeres*], pp.28-29.

Chourmouzios, E. (1952 January). Μερικά προβλήματα ερμηνείας του αρχαίου δράματος [Some problems in interpreting the ancient drama]. *Νέα Εστία* [*Nea Estia*], 51(589), pp.106-111.

Chourmouzios, E. (1960, August 31). Μια άλλη φωνή [Another opinion]. Καθημερινή [Kathimerini].

Chourmouzios, E. (1961, May 19). Letter (Chourmouzios's letter to Minotis). Epidaurus (file 3 subfolder 3). "Paxinou-Minotis" Archive, E.A.I.A. [The Hellenic Literary and Historical Archive].

Chourmouzios, E. (1978). Το αρχαίο δράμα [The ancient drama]. Athens: Ekdosis ton filon.

Dontas, N. (2003, July 13). Καταξίωση μουσικών αστέρων [Recognition of musical stars]. *Καθημερινή* [*Kathimerini*] : *Επτά ημέρες* [*Epta imeres*], pp. 30-31.

Dounias, M. (1961, August 09). Cherubini: Medea. Καθημερινή [Kathimerini].

Εθνική Λυρική Σκηνή [Greek National Opera]. (1961, July 30). Ελευθερία [Eleftheria], p. 2.

Ελευθεροστομίες [Outspoken]. (1961, August 05). Ελευθερία [Eleftheria], p. 2.

Εματαιώθη η έναρξις του Φεστιβάλ [The open night of the festival was canceled]. (1957, August 02). *Το Βημα* [*Το Vima*].

Επίδαυρος το Αντηχείο-το Θαύμα [Epidaurus, the Resonator-the Miracle] (2007, March 31). Τα Νέα [Ta Nea], Retrieved January 12, 2012, from http://www.alexander-edu.org/scientificgreek/pdf/keimena78.pdf

Επισήμως ανακοινούται ότι η κ. Κάλλας θα εμφανισθή τη Δευτέρα [Officially announced that Callas' concert will take place on Monday]. (1957, August, 03). Το Βήμα [Το Vima].

Giatras, D. (1960, August 19). Η Νόρμα του Μπελλίνι [Norma by Bellini]. Το Βήμα [Το Vima], p.3.

Gini, L. (July 13, 2003). Το αρχαίο δράμα και πάλι στο κοίλον [The ancient drama once again in the auditorium]. Καθημερινή [Kathimerini]: Επτά ημέρες [Epta imeres], pp.6-7.

Η αναβολή ενάρξεως του Φεστιβάλ Αθηνών [The cancellation of the open night of the Athens Festival]. (1957, August 03). Εμπρός [Empros], p.2.

Η ελληνική θεατρική σκηνή [The Hellenic theatrical stage]. (1961, August 20). Ταχυδρόμος [Tachidromos], p.8.

Η ζωή της πόλεως [The life in the city]. (1960, August 23). Ελευθερία [Eleftheria], p.2.

Η Κάλλας αποθεώθη ως «Μήδεια» [Callas in Medea] (1961, August 08). Μακεδονία [Makedonia], p.3

Θεατρική Σελίδα [Theatrical Page]. (1961, August 26). Εμπρός [Empros], p. 2.

Θριαμβευτική υπήρξε εις το θέατρον της Επιδαύρου η δευτέρα παράστασις της Μήδειας με την Κάλλας [Callas' second performance in Medea was success]. (1961, August 15). Μακεδονία [Makedonia], p.7

Kaggelari, D. (2003, June 29), Θέατρο κάτω από την ακρόπολη [Theater under the Acropolis]. *Καθημερινή* [*Kathimerini*]: Επτά ημέρες [*Epta imeres*], pp. 24-27.

Καθημερινή Ζωή [Every day life]. (1961, August 01). Το Βήμα [Το Vima], p. 2.

Καθημερινή Ζωή [Every day life]. (1961, August 06). Το Βήμα [Το Vima], p. 2.

Καθημερινή Ζωή [Every day life]. (1961, August 08). Το Βήμα [Το Vima], p. 2.

Καθημερινή Ζωή [Every day life]. (1961, August 15). Το Βήμα [Το Vima], p. 2.

Καθημερινή Ζωή [Every day life]. (1961, August 24). *Το Βήμα* [*Το Vima*], p. 2.

Kampanis, N. (1960, August 23). Εματαιώθη η προχτεσινή εμφάνισις της Κάλλας εις το Θέατρον της Επιδαύρου [Callas' performance in the theater of Epidaurus was canceled]. *Το Βήμα* [*Το Vima*], p.2.



- Kanakis, V. (1999). Εθνικό θέατρο: Εξήντα χρόνια σκηνή και παρασκήνιο [National Greek Theater: Sixty years of stage and backstage]. Athens: Kaktos.
- Καταρροϊκήν λαρυγγίτιδα υπέστη η Μ. Κάλλας [Maria Callas suffers from laryngitis].(1960, August 28). *Το Βήμα* [*Το Vima*].
- Kritas, Th. (1998). Όπως τους γνώρισα [As I met them]. Athens: Kastaniotis.
- Lalaouni, A. (1957, August 07). Μαρία Μενεγκίνι Κάλλας [Maria Meneghini Callas]. Βραδυνή [Vradyni]
- Λόγοι και Αντίλογοι [Contradictions]. (1961, May 18). *Eleftheria* , [Newspaper]. Epidaurus (file 3, subfolder 3). "Paxinou-Minotis" Archive, Ε.Λ.Ι.Α. [The Hellenic Literary and Historical Archive]
- Minotis, A. (1961, May 18). Letter (Minotis' letter to Chourmouzios). Epidaurus (file 3 subfolder 3). "Paxinou-Minotis" Archive, E.A.I.A. [The Hellenic Literary and Historical Archive]
- Minotis, A. (1981). Μακρινές Φιλίες [Long Friendships]. Athens: Kaktos.
- Minotis, A. (1995, February 12). Ακέραιη και μοναδική [Intact and unique]. *Καθημερινή* [*Kathimerini*]: *Επτά ημέρες* [*Epta imeres*], pp. 22-24.
- Mountraki, Ir. (2003, July 13). The revival of Attic comedy [Η αναβίωση της Αττικής κωμωδίας]. *Καθημερινή* [*Kathimerini*]: *Επτά ημέρες* [*Epta imeres*], pp.8-9.
- Papathanasopoulos, V. (1960, September 02). Το θεατρον της Επιδαύρου και οι παραστάσεις της Νόρμα [Epidaurus and the representations of Norma]. *Καθημερινή* [*Kathimerin*].
- Papathanasopoulos, V. (1961, August 17). Η Επίδαυρος και τα μελοδράματα [Epidaurus and the opera], Καθημερινή [Kathimerini].
- Petridis, P. (1957, August 06). Μαρία Μενεγκίνι Κάλλας [Maria Meneghini Callas]. *Το Βήμα* [*To Vima*], p.2.
- Pilichos, G. K. (1960, August 10). Η τίγρις που έγινε αρνάκι [The taming of the tiger]. Τα Νέα [Ta Nea], p. 2.
- Πνευματική και Καλλιτεχνική κίνηση [Intellectual and Artistic movement]. (1961, May 16). *Avgi*, [Newspaper]. Epidaurus (file 3, subfolder 3). "Paxinou-Minotis" Archive, Ε.Λ.Ι.Α. [The Hellenic Literary and Historical Archive]
- Prousali, E. (2001, March 18). The golden age of Emilios Chourmouzios [Η χρυσή εποχή του Αιμίλιου Χουρμούζιου]. *Kathimerini* [*Καθημερινή*] : *Epta imeres* [*Επτά ημέρες*], pp. 14-17.
- Psyrrakis, R. Για την τέχνη της, όχι για την ζωή της εμίλησε εχτές η Μαρία Κάλλας [Marias Callas spoke for her art, not for her life] (1960, August 11). Το Βήμα [Το Vima], p.3.
- Rezan, (1961, August 05). Η προετοιμασία της μεγάλης πρεμιέρας [The preparation of the great premiere]. Ελευθερία [Eleftheria], p. 2
- Τα Θεατρικά Νέα [Theatrical News]. (1961, May 16). *Ta Nea* [Newspaper]. Epidaurus (file 3, subfolder 3). "Paxinou-Minotis" Archive, E.Λ.Ι.Α. [The Hellenic Literary and Historical Archive]
- Τα Θεατρικά νέα [Theatrical News]. (1957, August 01). Τα Νέα [Ta Nea], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1957, August 02). Τα Νέα [Ta Nea], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1957, August 07). Τα Νέα [Ta Nea], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1957, August 08). Τα Νέα [Ta Nea], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1960, August 22). Τα Νέα [Ta Nea], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1960, August 23). Ελευθερία [Eleftheria], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1960, August 27). Τα Νέα [Ta Nea], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1960, August 30). Τα Νέα [Ta Nea], p.2.
- Τα Θεατρικά νέα [Theatrical News]. (1961, July 29). Τα Νέα [Ta Nea], p.2.



Τα Θεατρικά νέα [Theatrical News]. (1961, July 30). Τα Νέα [Τα Nea], p.2.

Τα Θεατρικά νέα [Theatrical News]. (1961, August 01). Τα Νέα [Ta Nea], p.2.

Τα Θεατρικά νέα [Theatrical News]. (1961, August 07). Τα Νέα [Ta Nea], p.2.

Τα Θεατρικά νέα [Theatrical News]. (1961, August 15). Τα Νέα [Ta Nea], p.2.

Τα Θεατρικά νέα [Theatrical News]. (1961, August 24). Τα Νέα [Ta Nea], p.2.

Τα Θεατρικά νέα [Theatrical News]. (1960, August 30). Τα Νέα [Ta Nea], p.2.

Το πρόγραμμα των δύο συναυλιών της Κάλλας [The program of Callas' two concerts]. (1957, July 10). Ελευθερία [Eleftheria], p.5.

Tzekakis, E. (1999, July 25). Η ακουστική του αρχαίου θεάτρου [The acoustics of the ancient theater]. Καθημερινή [Kathimerini: Επτά ημέρες [Epta imeres], pp.11-12.

Vasilantonopoulos, S. Zakynthinos, T. Chatjiantoniou, P. Tatlas, N.A. Skarlatos, D. Mourzopoulos, Y.(2004). Μετρήσεις και Ανάλυση της Ακουστικής του Θεάτρου της Επιδαύρου [Measurements and Analysis of the Acoustics of the Ancient Theater of Epidaurus]. Retrieved March 31, 2007, from http://www.wcl.ece.upatras.gr/audiogroup/publications/pdfs/epidauros.pdf

Vavlidas, P., A. (June 29, 2003). Musical openings and new spaces [Μουσικά ανοίγματα και νέοι χώροι]. Καθημερινή [Kathimerini : Επτά ημέρες [Epta imeres], pp.14-18.

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Article

Applying the Theory of Linguistic Relativity to Music: An Initial Exploration

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ABSTRACT | Language and music are essential facets of the human experience and, as such, are unique in being ubiquitous throughout cultures. This paper is a new attempt to apply the theory of linguistic relativity, which holds that language and culture are mutually reflective and generative, to the relationship between music and culture. Since both language and music are communicative devices and often affect one another, this paper compares and contrasts these two cultural products as well as suggests implications for further exploration of the interface of these two universal social constructs and the human cultures which produced them. The discussion entertained and the conclusions drawn in this paper may be of particular interest and value to a spectrum of scholars and practitioners ranging from linguists and musicologists to language and music educators.

Keywords: Sapir-Whorf Hypothesis, Cultural Theory, Musical Relativity, Folk Music, Communication

1. LANGUAGE, MUSIC, AND CULTURE: A UNIQUE RELATIONSHIP

All known human cultures exhibit two common practices: language and music (Williamson, 2009). This is significant – many concepts which may be taken for granted in one culture are entirely absent in another. For example, among the Piraha tribe in the Brazilian Amazon, there are no creation myths, no fixed terms for colours, nor are there linguistic mechanisms for counting.

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Nevertheless, the Piraha have language, and an abundance of music in the form of songs (Patel, 2010). The universality of these two cultural phenomena has led to centuries of speculation as to the interrelationship between language and music. The tradition of interpreting music in rhetorical terms flourished during the Renaissance, when the renewed interest in the art of rhetoric led to the publication of an estimated 2,000 books on the subject between 1400 and 1700 – many of these were published in editions which numbered 250 to 1,000 copies (McCreless, 2007). In the 18th century, instrumental works were not exclusively interpreted as auditory pleasantries – they were wordless orations which consisted of carefully ordered sequences of thoughts (Bonds, 1991). Parallel studies of music and linguistics have led many academics to wonder as to the true nature of the relationship between the two. In order to best understand this connection, we must first understand the individual communicative nature to both language and music.

When the human species evolved into being, we were equipped with several adaptations which distinguish us from other primates and animals: bipedalism; the long, opposable thumb; and a vocal tract, unique to us, which enables us to speak and sing (Hodges, 1996). Language is much easier than music to define and identify – as the principal form of human communication (Patel, 2010), it is regarded as the most important human "invention," although it was never actively invented (Deutscher, 2005). As the human species differentiated itself from our primate cousins, language developed with us. One of the great evolutionary mysteries is the source, origin, and purpose of language. What we do know is this: without language, no aspect of human society would exist. Furthermore, it appears that language is something which is specific to the human genome.¹

Is there a deeper, communicative purpose to music? This is a question which remains unresolved, and is the subject of considerable debate. Steven Pinker claims that music is merely "auditory cheesecake," without any adaptive function in human evolution. He argues that it emerged by taking advantage of the systems used to create language, without serving any inherent communicative need itself (Pinker, 1997). Charles Darwin, however, suggested that musical behaviours may have developed in humans and other animals as part of the complex pressures of sexual selection, and that music served as a sort of protolanguage (Darwin, 2009). Many contemporaries of Pinker responded to his controversial dismissal of music, rising to its defence. Ian Cross, Elizabeth Tolbert, Nicholas Bannan, and Robin Dunbar are only a few of the academics who support the belief that music played an integral role in the development of human culture, and go so far as to suggest that the relationship between music and language is more intimate than may have been previously believed (Mithen, 2006).

Surely, any communicative role that music might play in human socialization and interaction is much more abstract than the spoken word – if indeed it is a language, then it is an inchoate one, appealing to our pathos, first and foremost. Music is understood through the senses, not through

¹ See also: Cavalli-Sforza (1997), Fisher (2005), Takahashi et al. (2009).



logic. Indeed, the human brain does not interpret music as simple auditory phenomena, as it might process random noise and aimless sound; rather, it is understood on an emotional level (Weinberger, 1998), indicating that music *means something* to the human brain.

Is this emotional response based on some common human value system, or is our understanding of music – and music's effect on us – the result of generations of cultural conditioning? If the latter is the case, what values and cultural elements are preserved and transmitted through the medium of music? Perhaps there is already a precedent to answer these and other such questions – the hypothesis of linguistic relativity. In the course of the following paper, we will explore the application of this theory to musical communication in the hopes of beginning to answer these questions. We will begin by comparing and contrasting the cultural phenomena of language and music, both on historical and biological levels, followed by an exploration into the theory of linguistic relativity. Our paper will conclude with the application of this hypothesis to musicology, drawing evidence from various musical practices in traditional cultures. By tracing the organic development of folk music and culture, we will explore the relationship between music and language, and the potential for an entirely new way of approaching musical communication.

2. LANGUAGE AND MUSIC: WHAT IT MEANS TO BE HUMAN

Before any attempt can be made at comparing language and music, we must first understand these two characteristically human constructs. What is language? What is music? Neither question produces simple answers. The definitions of language and music are diverse, ranging from the very specific to the abstract. Both are highly complex sequences of discrete structures which unfold over time, which are then interpreted by the brain as a communicative whole (Williamson, 2009). Aniruddh Patel points out that both language and music consist of similar elements: rhythm, which he classifies as patterns of timing, accents, and grouping; melody; and syntax, or the principles which guide the construction of comprehensible sequences out of discrete elements. Furthermore, as Patel informs us, both have an affective goal (Patel, 2010).

In spite of these similarities, language and music are very different both in their presentation, as well as in their neurological pathways. Most significantly, language is a referential form of communication while music is largely a-referential, characterized by a "floating intentionality" (Cross, 2001) that engages individual responses and interpretations which vary from listener to listener.

On a neurological level, it has been found that the two hemispheres of the brain both process sound, but each selects a different variety of sound combinations. The right half of the brain, directed and largely responsible for our emotions, interprets the world in terms of spatial relationships and non-verbal communication. Here, concordant sounds are processed. The left half of the brain, however, which processes input sequentially and is associated with the development of language, processes primarily discordant sounds (Robertson, 2004). Although each governs very different components of interpretation and cognition, it is evident that we require both halves of our brain to



communicate most effectively. Without the emotional, musical right brain, a speaker cannot understand nuances which underlie vocabulary. Paul Robertson provides an example of such a case. A patient, who had had a large portion of his right hemisphere removed, was asked the question, "How do you feel?" The patient's response, literal in meaning and unmusical in tone, was: "With my hands." Alternatively, Robertson discusses an individual who, following a massive stroke which damaged his left hemisphere, found himself without the ability to speak, read, or write. In spite of the loss of his verbal self, this man was still able to communicate through music, composing and improvising at the piano (Robertson, 2004). Clearly, in spite of several differences in formation and function, language and music are connected and interrelated within the human communication system. While the loss of one faculty does not necessarily affect the other, effective self-expression often requires both.

Jean-Jacques Rousseau claimed that language was the first social institution,² without which none of the later developments of human society could ever have occurred. Without language, there would be no creation myths, no trade, no stories, no empires, no revolutions, no teaching or learning, no questions or answers. Whether spoken or signed, language is the primary mode of communication and interaction between individuals and societies. It is dynamic and reflexive, in a constant state of evolution, so long as a language has native speakers (Bonvillain, 2003). There are differing opinions on what a true definition of language is, but it is generally agreed upon that language must have meaning; productivity,³ or the ability to remix and reassemble a finite number of discrete words to form endless new communication; and displacement, which is the ability to discuss things or abstract ideas that are not present (Grandin, 2005).

The origin of language is still being discovered, and remains the source of considerable consternation and debate in scholarly circles. Linguistics as a science blossomed in the 19th century, although the origin of languages was a taboo subject. The Linguistic Society of Paris, founded in 1866, forbade any discussion of the *origin* of language, a prohibition which continued for nearly a century (Mithen, 2006). Today, theories abound among linguists and anthropologists as to the origin and purposes of language. One postulation asserts that the use of tools triggered brain development in humans, which led to the necessary acquisition of language (Mithen, 2006).

Hauser, Chomsky, and Fitch discuss the evolution of language at some length, and they point out three primary issues which plague this debate: first, the "shared versus unique" distinction in the presence of communicative systems in non-human animals; second, whether language evolution was gradual or saltational; and, third, whether language evolved out of extant animal communication systems, or if aspects of language were exapted from a previous adaptive purpose, a perspective

³ Hauser et al refers to this component as *recursivity*. Marc D. Hauser, Noam Chomsky, and W. Tecumseh Fitch, The Faculty of Language: What Is It, Who Has it, and How Did It Evolve? *Science*, *298*, 5593 (22 November 2002): 1569.



² Jean-Jacques Rousseau, *Essay on the Origin of Languages which treats of Melody and Musical Imitation*;: 5.

which the authors call the "continuity versus exaptation" issue (Hauser, Chomsky, & Fitch, 2002). Hauser et al. divide the concept of language into two categories: FLB (the faculty of language in its broadest sense), which includes a sensory-motor system and a conceptual-intentional system, as well as the mechanisms necessary to combine a finite set of linguistic components into an infinite number of utterances; and FLN, which includes only this final quality of recursivity, and is identified as a uniquely human component of language.⁴

Noam Chomsky, a leader in the field of linguistics, is a champion of the innatist perspective for first-language acquisition and the theory of the Universal Grammar. Children, he argues, do not simply learn a language by repeating linguistic elements to which they are exposed, since adult language is rife with false starts, incomplete sentences, grammatical flaws and errors. Chomsky suggests that all humans are born with an innate predilection for language acquisition, which manifested itself as a template which contains all the principles universal to human languages. This biological construct is called the Universal Grammar, and is directly coded into the human genetic sequence (Lightbown & Spada, 2006). The ease and natural tendency for human children to acquire language, especially when compared to non-human primates and other animals, suggests that language is a mechanism which evolved after humans diverged from a common ancestor some 6 million years ago (Hauser, Chomsky, & Fitch, 2002). Some scientists perceive language as the byproduct of distinct, hybrid regions of the brain evolving, such as Broca's area; others feel that language is a more complex, but nevertheless analogous to the communication systems of other primates, whose brains include homologous regions to Broca's and Wernicke's areas (Geary, 2005).

These two regions, Broca's and Wernicke's areas, are both found on the left hemisphere of the brain. Broca's area was discovered in 1861 by Pierre Paul Broca during an autopsy of a patient named Monsieur Leborgne, nicknamed "Tan" after the only syllable with which he could respond to a question. Tan had lived without the ability to speak for 21 years. During the autopsy, Broca found that a neurosyphilitic lesion had destroyed a part of Tan's brain, now named after Broca himself. It is this region of the brain that is associated with speech (Karpf, 2006), and, along with its right homologue, is specialised to quickly and automatically parse syntax (Maess, Koelsch, Gunter, & Friederici, 2001). In 1873 Carl Wernicke, a German neuro-psychiatrist, made an analogous discovery with the brain of a man whose faculties for speech and hearing were unaffected by a stroke, but who was nearly incapable of *processing* and *understanding* anything said to him. Wernicke found a lesion on the

⁴ This is a topic which is still hotly debated. Much research has been done in the communication systems of non-human animals, including a very interesting study analyzing the distress calls of Gunnison's prairie dogs conducted by Con Slobodchikoff. The result of this study what that prairie dog colonies have communication systems which consist of discrete elements including nouns, verbs, and adjectives. Temple Grandin discusses his research in her book *Animals in Translation*, for further reading into this study, see C. N. Slobodchikoff, "Cognition and Communication in Prairie Dogs," *The Cognitive Animal: Empirical and Theoretical Perspectives on Animal Cognition*, Marc Bekoff, Colin Allen, and Gordon M. Burghardt, Eds. (Cambridge, MA: MIT Press, 2002): 257-264.



brain near to the auditory centre of the brain, thus, leading him to conclude that this region of the brain was responsible for processing speech comprehension (Karpf, 2006).

Here, in the brain, the most concrete connections between language and music are present. Although the two are evidently not completely linked (as exhibited by the presence of musicality in an aphasic individual, or of language in a person with amusia), these two processes certainly share many neurological substrates and pathways. For instance, Maess et al. established that Broca's area processes musical syntax in addition to linguistic syntax, implying that the brain understands music as a relative of language (Maess, Koelsch, Gunter, & Friederici, 2001). The importance of this discovery is strengthened by the fact that the subjects studied were all "non-musicians," which is suggestive of an implicit musicality in human cognition (Jenstschke, Koelsch, Sallat, & Friederici, 2008). Additionally, children who struggle with linguistic syntax face similar challenges with understanding musical syntax.

What is music? This is a question which has proved over and over again to be incredibly difficult to satisfactorily answer. The discovery of traditional music, as well as exploratory approaches to art music throughout human culture have produced a wide variety of opinions as to what is, and what is not, music. An oft-cited example of this difficulty is 4'33" (1952) by John Cage – can this piece, a study in ambient sound and musical reticence, be considered music? Often music is broken down into its requisite components. Hroar Klempe cites four necessary characteristics of music: sensuality, distinct pitches combined with rhythmic structures, the subversion of clear meaning, and harmony (Klempe, (2009). Aniruddh Patel points out the presence of rhythm, melody, syntax, and affect as key elements of music, which are notable for having parallels in linguistic expression (Patel, 2010). Victoria Williamson describes music at its most fundamental level as a collection of sounds produced by the human voice or an instrument (Williamson, 2009). Bruno Nettl, one of the foremost figures in ethnomusicology, defines music as "human sound communication outside the scope of language" (Mithen, 2006). Finally, McDermott and Hauser identify music on three levels: as structured sounds produced by humans either directly or through instrumental proxy, the sounds produced are often made to convey emotions and enjoyment, and often (but not always) consist of a complex structure (McDermott & Hauser, 2005).

As evidenced by the above attempts to define and explain music, this is a challenging concept to pin down. For the purposes of this exploration, we will propose our own definition of music. First, it is a structured entity balancing some proportion of intentional sound and intentional silence.⁵ The resulting sound is the product of a finite number of discrete elements that can be combined into a potentially infinite number of permutations, of which the composer uses a select number to satisfy the aesthetic goals of a piece. Furthermore, the produced sound uses both elements of rhythm, melody,

⁵ The inclusion of intentional silence is of particular importance, as composed art music as well as folk music often depends largely on the balancing powers of negative space provided by rests or silence. In the case of John Cage's 4'33", the "composition" is entirely of negative space, and the projections of self which the audience then produces.



and harmony in proportions which vary from culture to culture⁶. The purpose of music is to communicate some concept or ideal for which spoken language is inadequate, even if this may be reduced to simply providing pleasure.

There are other questions to consider: at what point or points in human history did music begin to emerge; where does it come from, from an evolutionary standpoint; and what purpose does it serve? These questions have been receiving an increasing amount of attention over the past several years, and the proposed theories and hypotheses have been met with an unsurprising amount of debate. On one end of the continuum, Steven Pinker dismisses music as "auditory cheesecake," claiming that it arose by taking advantage of structural processes used in language production, but serving no other evolutionary purpose (Pinker, 1997). Such an opinion is supported by the observation that unlike other human functions and activities such as eating, sleeping, talking, and sex, music production yields no obvious benefits (McDermott & Hauser, 2005).

There is evidence both for and against Pinker's "music as cheesecake" theory. In many respects, music appears maladaptive to early *Homo sapiens*. Musical practice requires a large amount of energy, and would potentially attract predators or enemies while simply providing entertainment Fitch, 2006) – a generally useless development for a species which was still eking out an existence against all the odds in a harsh environment, battling starvation, the elements, and predators. While the shared mechanisms of musical ability and language support Pinker, there is evidence provided by current research that music does not rely exclusively on structures dedicated to language. These separate structures have been demonstrated by aphasic patients who have musical skills left intact, or conversely, in individuals with amusia who are able to communicate through spoken language, proving that language and music are at least partially independent (Fedorenko, Patel, Casasanto, Winawer, & Gibson, 2009).

Music has been suggested to be a biological adaptation which functions in a variety of arenas. It may be associated with courtship and sexual selection (McDermott & Hauser, 2005), or with social cohesion (Hodges, 1996) within cooperative groups such as religious networks, prehistoric tribes, or warriors. Lullabies, which are extremely common (McDermott & Hauser, 2005), aid considerably in the mother-infant bond, and would play a large role in language acquisition for babies. Children attain linguistic faculties by interacting with this communicative system – however, not all cultures use the "motherese" speak so common in North American homes. Among the Kaluli and Inuit peoples, for example, adults do not converse with young children (Lightbown, & Spada, 2006). As a result, children would first be exposed to their mother tongue through lullabies, which would train the infant ear to

⁷ See also: Cross (2001), Huron (2001), Merker (2001).



⁶ Although melody and harmonic elements are most important in the Western music as a whole, McDermott and Hauser point out that these elements are of much less significance in other world musics. In their place, rhythm is the primary method of musical expression. (McDermott and Hauser, "The Origins of Music: Innateness, Uniqueness, and Evolution,": 32.)

the prosody of their language. As children in such cultures begin to babble and talk, they would begin to interact with other siblings and peers, only entering the social and linguistic realm of adults as they reached maturity.

A number of theories and hypotheses have been put forward regarding musical development in the human species, particularly with regard to its relationship to language. Charles Darwin postulated that, before the onset of either music or language in their modern incarnations, humans communicated via a system which exhibited characteristics of both. From this primitive system, he suggested, music and language emerged as separate entities.⁸

Steven Brown, a musicologist, made a similar proposal in 2000, naming this protolanguage "musilanguage" (Brown, 2001). According to Brown, musilanguage exhibited the shared features of language and music, including phrase units and formations, as well as functional purposes on both a phonological level and a meaningful one. Musilanguage, Brown suggests, evolved out of the vocalizations of primates which he names "referential emotive vocalization," or REV; these vocalizations were calls, not songs, which communicated emotive responses to environmental stimuli, and are exemplified by the alarm call system of the African vervet monkey (Brown, 2001).

Steven Mithen proposed another model for the development of language and music, which he called "Hmmmmm" communication, an acronym for a communication system that was: "Holistic, manipulative, multi-modal, musical, and mimetic in character" (Mithen, 2006). Again, this model proposes a sort of musical protolanguage from which capacities for both language and music evolved.⁹

Instrumental music, as an element of human culture, is estimated to be at least 36,000 years old, due to the discovery of ancient bone flutes; however, it is likely that instrumental music is much older than this – possibly 4,000 years older. The existence of contemporary instruments, primarily percussion instruments, which are made out of perishable materials, suggests that their primitive ancestors were similarly susceptive to the environment, easily destroyed by the elements or unable to withstand the ensuing millennia (Fitch, 2006). There is tantalizing speculation that music – instrumental music – is even older than this: an artifact supposed to be a Neanderthal flute which was radiocarbon dated to 43,100 ±700 years old was discovered in Slovenia in 1997. The presence of two clearly preserved holes led its discoverers to conclude that the artifact, made out of a bear's bone, was a flute. The instrument was damaged by a carnivore's chewing at some point, however, which may have been the cause of three other holes on the object; this damage has resulted in considerable scepticism on the function of the object. In the case that this item was used for musical purposes, however, it would suggest that music was utilized even before humans or Neanderthals had fully developed spoken language (Fitch, 2006), as well as evolutionary divergence between these two

⁹ See also: Livingstone (1973), Marler (2000), Merker (2001), Merker (2002), Richman (1993).



⁸ Charles Darwin, *The descent of man and selection in relation to sex.* (London, UK: John Murray). Cited in W. Tecumseh Fitch, "The biology and evolution of music: A comparative perspective," 198

hominid species, supporting the notion that music and language evolved out of a protocommunicative system that was founded upon the homologous elements which form the backbone of these two unique modes of expression.

Peter Fletcher sums up the relationship between these two essentially human characteristics by stating: "Language is seen as a cognitive mode, its capacity deep in the mind, while music is not essentially cognitive, and extends beyond mind, beyond the body" (Fletcher, 2001). Although the origins of language and music remain largely theoretical at this juncture, it is clear that there is a connection between the two. The likelihood that both of these faculties are functionally related, and may have developed out of a common ancestor is strongly supported both by characteristics of the two systems and shared pathways in the brain. A number of studies suggest that, although language and music are produced independently of one another, the syntactic structures of both are processed together (Fedorenko, et al., 2009). The correlation between the two opens the possibility that language and music may be of similar value in understanding the worldview and experience of a culture.

3. LINGUISTIC RELATIVITY: LANGUAGE AND CULTURE AFFECT ONE ANOTHER

In the middle of the 20th century, a number of linguists observed a unique relationship between language and culture. Linguistic anthropology in American scholarship was part of a "four fields" approach, where anthropology as a whole was approached holistically – as a discipline, it incorporated a study of the physical (or biological), linguistic (or philological), cultural, and archaeological records. The study of language itself was championed by Franz Boas (1858-1942), who is largely credited with founding the American field of anthropology (Duranti, 1997). Boas was among the first to recognise the unique role language played in indigenous cultures. As an educator, he trained his students to develop grammars and dictionaries of traditional languages based on culturally significant texts (Mithun, 2004).

Having studied the Eskimos and Kwakiutl Indians, two Native American tribes located on the Northwest Coast, Boas came to conclude that it was not only of theoretical interest, but practical and necessary to study a culture's language. Without an understanding of the linguistic expression of a people, one would have an incomplete knowledge of the culture in which the language was spoken (Duranti, 1997). Different languages, he found, would classify and explain the world and human experience in culturally unique ways, a discovery that has been used to bolster the argument for cultural relativism, which states that cultures ought to be understood on its own terms, as opposed to being related to foreign cultures (Duranti, 1997). These contributions would be perpetuated by one of Boas's students, Edward Sapir (1884-1939), whose further research would have profound ramifications upon the field of linguistic anthropology.



Sapir and his student, Benjamin Lee Whorf (1897-1941), were largely responsible for the early development of linguistic anthropology in the early 20th century, focusing much of their study on the languages and cultures of Native American tribes (Bonvillain, 2003). Their research led to the formation of what is known today as the linguistic relativity principle. Sapir claimed that human experience was mediated through both language and culture: only items, events, and forces of cultural significance would be labelled. Comparatively, once labelled, the identified element would become culturally significant (Bonvillain, 2003). As such, language and culture were mutually reflective and mutually generative, existing in a perpetual state of give-and-take between the two, each mediated by the force of the other.

Language's cultural specificity is illustrated by Thomas Widlok, who pointed out the erroneous approach to the languages of hunter-gatherer tribes in the African bush. The languages of the various "Bushmen" were reduced into one lexicon, an act which Widlok claims "implicitly collapsed the landscape and its people" (Widlok, 2008). George Orwell also noted the incredible power words have over the thoughts of the speaker: in *Nineteen Eighty-Four*, Newspeak not only took away the linguistic tools to dissent, but also the cognitive seeds of individuality.

Language and culture are in a constant state of ebb-and-flow. Culture, both the human manifestation, as well as the natural environment in which a language is spoken, affects language. Language use, in turn, clues in the human mind to important elements, influencing culture, and so on. It is well-known that the human brain develops a sort of filter on stimuli – we can "tune out" sounds, smells, or visuals which appear to be unimportant, freeing up our consciousness to focus on relevant stimuli. Similarly, the linguistic component to our interaction with the world around us is selective for elements of importance. The increased importance of various facets of a culture may be expressed in a variety of ways, often with the most important factor being described with a greater variety of nuanced terms.

What happens when music replaces language in this model? How do cultural norms and values gravitate toward musical expression, and how is music moulded and modelled after the aesthetics and beliefs of a people? Do scales and cadences vary from one culture to the next, in accordance to inherent values? How do the interactions between musician and instrument, the relationship between music-makers, or restrictions on who may or may not participate in musical expression reflect a society? The relationship between music and psyche of the people who produce it would most likely be clearest in traditional culture, and less so in the art music of society. This includes the art music of the Western Classical tradition, as well as the art music of what are commonly referred to as "folk" cultures. Art music, music which is produced for aesthetic pleasure and entertainment, is present in a variety of cultures across the globe. As a genre, it has a tendency to be much more self-aware and

¹⁰ Also referred to as the Sapir-Whorf hypothesis, although the accuracy of this term has been contested.



refined than music intended for communication. For this reason, we will focus our discussion in this paper away from art music.

4. SINGING OUR WAY TO BECOMING HUMAN: HOW MUSIC AND CULTURE EXPRESS ONE ANOTHER

Musical practice, especially in traditional cultures, has the power to encapsulate the values, beliefs, and social structures which characterise a people. Music gives definition to the boundaries of thought and values to the culture which has produced it. These cultures might be national or ethnic, at other times based on the shared experience of gender, work, or any other common identity shared by people. The Hungarian composer and scholar Béla Bartók (1881-1945) firmly believed that musical expression was related to the location in which it was produced (Ramnarine, 2003). Even the most cursory of glimpses into musical traditions from around the world reveals that the performance and function of music in everyday life is rich with meaning, both implicit and explicit.

Often, music mimics the patterns and rhythms of the local language. In his lecture "The Music of Language and the Language of Music," Aniruddh Patel spoke of the relative lengths of vowels in spoken French and English, and their parallels in French and English music. English language and music was characterized by greater contrast in adjacent vowels or note values, while French was much more evenly spaced out.11 The implications between music and language – and linguistic relativity – reach far beyond this.

Obviously, one of the most immediately observable links in the relationship between the Sapir-Whorf hypothesis and musical relativity would be in the analysis of song texts, as the topical material of songs is often indicative of the value of various themes in a culture's life. While some concepts are more universal than others, as with love songs or laments, others are more culture-specific. Musical relativity, however, extends far beyond song. Musical textures and preferred tonalities, for example, are unique to various cultures and regions. The pentatonic scale and three-part polyphonic singing are ancient musical approaches, and are widely used in the folk music of southern Albanians, Epirote Greeks, and western Macedonians, among others (Rice, 2000).

Performance practice also indicates cultural values and experiences. Alan Lomax hypothesized that specific song structures were indicative of social functions within a society. According to him, solo song was expected to be found in centralized societies, and cultures with a simpler political structure would have an abundance of leaderless performances; and cohesive societies would have unified choirs, while the music in cultures which emphasized the individual would have diffuse choirs (Lomax, 1968). This particular perspective has been criticized for being overly simplistic, reducing the complex

¹¹ These findings were later replicated with a much larger sampling of French and English music in 2003 by David Huron and Joy Ollen.



nature of a society to a minimal rubric. Nevertheless, Lomax's suggestions are indicative of the potential relationship between ensemble structures and various social norms.

Although this field is yet young, there are already tantalizing glimmers of research which indicates that music is culturally relative – that the ways in which a people choose to or are able to express themselves through song, dance, and instrumental music are reflective of the environment in which they were created. Similarly, the notion that musical expression can in turn affect its creators has begun to receive more attention. Issues of gender roles, age, social structure and stratification, geography, lifestyles and professions, and natural resources are all expressed through the medium of music.

5. AN ENCROACHING SILENCE: CONCLUSIONS AND IMPLICATIONS FOR FURTHER RESEARCH

The purpose of our paper has been to lay the foundations for further research into the unique relationship between music and culture. Through the course of this paper, we have endeavoured to illustrate not only the connection between music and language, but the joint connection of these two universal social constructs and the human cultures which produced them. We have seen how music, like language, has the ability to reflect cultural norms and values, which brings one to the inevitable question: so what?

What does this all mean? Is Steven Pinker right – is music just "auditory cheesecake" without which the human species would be virtually unchanged? As is often the case, the answer is both yes and no. Yes, music is a construct which is not essential to the survival of the human species – we would be able to gather and hunt for food, find shelter, and procreate without it, much like other species inhabiting out planet. However, these functions would likely be able to be carried out without the benefit of language, and it is likely that the earliest ancestors of humans did exactly that. As human *beings*, though, we would be radically different without music.

Language and music are essentially human, and research is beginning to suggest that one, if not both, of these functions has a biological precedent. The two, however, manifest themselves in culturally distinct ways, with prosodies and lexicons, grammars and syntaxes, which vary from one group of people to the next.

We take pride in our ability to know things – we are, after all, *Homo sapiens*, the "knowing man". An understanding of musicality, while essential to many of the nuances to spoken language which make human cultures possible, allows us to reach into a deeper, more emotional realm of ourselves. Musical expression is beyond the explicit descriptions of self, and is grounded in a subconscious understanding. Music, much like language, is one of those essential components of our humanity.



There is a need to understand who we are as individuals, as members of a culture, and as members of this diverse and complex species. And yet, tragically, the rich and multifarious tradition of music which permeates human cultures throughout the world is gravely endangered. With the loss of indigenous languages and traditional musical styles, the cultures associated with them are dying out as well, choked out of existence by an encroaching push for homogeneity.

For social, political, religious, or economic reasons, popular and commercial music is supplanting the songs which have accompanied people of the world since time immemorial. Children are learning languages of trade and mainstream society, vestiges of the havoc wreaked by European colonial powers in previous centuries. As a result, children are not only unable to communicate with older generations of their family, they are unable to understand the unique mindset associated with traditional languages. Ancient knowledge and wisdom are ceasing to be passed along, elegant song traditions and musical lore are fading away, and all that once was is being slowly forgotten.

Roughly every two weeks, one lonely light of consciousness, the last speaker of an indigenous language, is extinguished. With that voice, an entire way of life vanishes. Over the course of just a few decades, the number of languages spoken in our world has dropped precipitously – according to some figures, from 6,000 to less than 3,000 (Davis, 2003). Once a language is no longer spoken by native speakers it dies, and with it an entire culture, worldview, and way of life silently passes out of existence. If the implied connections between language and music are considered, then it is safe to conclude that the same fate threatens endangered music. The truth of disappearing music cannot be denied, whether it is part of a larger ethnic culture, or part of a smaller subculture, such as those associated with occupations.

Ted Gioia writes of the Gan people in Burkina Faso – in 1996, a sole surviving member of these people was found to perform upon the shepherd's side-blown bamboo flute. This performance was among the last of its kind, and was luckily recorded – when he died the next year, this tradition died with him, for neither the instrument nor the lifestyle it accompanied were passed on to later generations (Gioia, 2006). This is increasingly the case – only the older generations know their traditional songs, dances, instruments, and stories. The loss of these marks the loss of a way of life and a perspective with which to comprehend, interact with, and contribute to the world.

Understanding the relationship between music and culture is more crucial now than ever before – researchers can come to understand where a people had been, where they are now, and what the future may hold for them. Not only does this provide insight into an individual culture, this knowledge provides clues as to our own humanity, as we are all connected through evolution to a time when early man was scraping out a meagre existence in a world which only remotely resembles that in which we live today, before we had spread out of Africa to become the dominant animal on our tiny planet.



It is a matter of course that civilizations and cultures rise and fall, and that a culture which does not adapt to the influence of the changing world will very likely perish. It is unreasonable to expect that all human cultures remain and do not change through time. In an age where we are seeking out our identity, however, it is useful to understand the social and cultural foundations for the worldview of our global neighbours. Furthermore, in an attempt to better comprehend the values, perspectives, and origins of our own cultures, it is worthwhile to know our own histories. The influence of various cultures on present-day societies is present throughout the globe.

We must strive to understand the many manifestations of human culture and, perhaps more importantly, take steps to preserve them for future generations to experience. Certainly, to forget these songs and traditions is to lose a considerable amount of our humanness. When we begin to explore what it truly means to be a human being, in a world where intelligence can be created artificially and where craft is increasingly mechanized, it is all the more imperative that we hold on to a knowledge of where we once were. It is possible that what distinguishes us from other living things is not necessarily encoded within our DNA, and it is not what we have accomplished to date, but rather how we reached this point and where we intend to go. Studying the linguistic and musical traditions of contemporaneous and historical cultures sheds light upon the former part of this question; what we do with this knowledge determines the latter.

6. REFERENCES

- Bonds, M. E. (1991). Wordless rhetoric: Musical form and the metaphor of the oration. Cambridge, MA: Harvard University Press.
- Bonvillain, N. (2003). Language, culture, and communication: The meaning of messages, 4th ed. Upper Saddle River, NJ: Prentice Hall.
- Botha, R. (2009). On musilanguage/"Hmmmm" as an evolutionary precursor to language. Language & Communication, 29, 61-76.
- Brown, S. (2001). The "musilanguage" model of music evolution. In N. L. Wallin, B. Merker, & S. Brown (Eds.), The origins of music (pp. 271-300). Cambridge, MA: MIT Press.
- Cavalli-Sforza, L. L. (1997). Genes, peoples, and languages. Proceedings of the National Academy of Science, 94, 7719-7724.
- Cross, I. (1999). Is music the most important thing we ever did? In S. W. Yi (Ed.), Music, mind, and science (pp. 10-39). Seoul, South Korea: Seoul National University Press.
- Cross, I. (2001). Music, cognition, culture, and evolution. Annals of the New York Academy of Science, 930, 28-42.
- Davis, W. (2003). Wade Davis on endangered cultures. TED: Ideas Worth Spreading. Retrieved February 8, 2010, from http://www.ted.com/talks/lang/eng/wade_davis_on_endangered_cultures.html
- Deutscher, G. (2005). The unfolding of language: An evolutionary tour of mankind's greatest invention. New York, NY: Henry Holt and Company.
- Duranti, A. (1997). Linguistic anthropology. Cambridge, UK: Cambridge University Press.



- Duranti, A. (Ed.) (2004). A Companion to linguistic anthropology. Malden, MA: Blackwell Publishing.
- Fedorenko, E., Patel, A., Casasanto, D., Winawer, J., & Gibson, E. (2009). Structural integration in language and music: Evidence for a shared system. Memory & Cognition, 37(1), 1-9.
- Fisher, S. E. (2005). On genes, speech, and language. New England Journal of Medicine, 353(16), 1655-1657.
- Fitch, W. T. (2006). The biology and evolution of music: A comparative perspective. Cognition, 100, 173-215.
- Fletcher, P. (2001). World musics in context: A comprehensive survey of the world's major musical cultures. Oxford, UK: Oxford University Press.
- Geary, D. C. (2005). The origin of the mind: Evolution of brain, cognition, and general intelligence. Washington, D.C.: American Psychological Association.
- Gioia, T. (2006). Work songs. Durham, NC: Duke University Press.
- Grandin, T. (2005). Animals in translation. New York, NY: Scribner.
- Haas, M. R. (1969). The prehistory of languages. The Hague, the Netherlands: Mouton.
- Hauser, M. D., Chomsky, N., & Fitch, W. T. (2002). The Faculty of language: What is it, who has it, and how did it evolve? Science, 298, 1569-1579.
- Hodges, D. A. (1996). Human musicality. In D. A. Hodges, (Ed.), Handbook of music psychology (pp. 29-68). San Antonio, TX: Institute for Music Research Press.
- Huron, D. (2001). Is music an evolutionary adaptation? Annals of the New York Academy of Science, 930, 43-61.
- Huron, D., & Ollen, J. (2003). Agogic contrast in French and English themes: Further support for Patel and Daniele. Music Perception: An Interdisciplinary Journal, 21(2), 267-271.
- Jenstschke, S., Koelsch, S., Sallat, S., & Friederici, A. D. (2008). Children with specific language impairment also show impairment of music-syntactic processing. Journal of Cognitive Neuroscience, 20(11), 1940-1951.
- Karpf, A. (2006). The human voice: How this extraordinary instrument reveals essential clues about who we are. New York, NY: Bloomsbury.
- Klempe, H. (2009). How to understand communicative musicality? Integrative Psychological & Behavioral Science, 43(3), 260-266.
- Lightbown, P. M., & Spada, N. (2006). How languages are learned. Oxford, UK: Oxford University Press.
- Livingstone, F. B. (1973). Did the Australopithecines sing? Current Anthropology, 14(1-2), 25-29.
- Lomax, A. (1968). Folk song style and culture. London, UK: Transaction Publishers.
- Maess B., Koelsch S., Gunter, T.C., & Friederici, A.D. (2001). Musical syntax is processed in Broca's area: An MEG study. Nature Neuroscience, 4, 540-545.
- Marler, P. (2001). Origins of music and speech: Insights from animals. In N. L. Wallin, B. Merker, & S. Brown (Eds.), The origins of music (pp. 31-48). Cambridge, MA: MIT Press.
- McCreless, P. (2007). Music and rhetoric. In T. Christensen (Ed.), The Cambridge history of western music theory (pp. 847-879). Cambridge, UK: Cambridge University Press.
- McDermott, J., & Hauser, M. (2005). The Origins of music: Innateness, uniqueness, and evolution. Music Perception: An Interdisciplinary Journal, 23(1), 29-59.
- Merker, B. (2001). Synchronous chorusing and human origins. In N. L. Wallin, B. Merker, & S. Brown (Eds.), The origins of music (pp. 315-327). Cambridge, MA: MIT Press.



- Merker, B. (2002). Music: The missing Humboldt system. Musicae Scientiae, 6(1), 3-21.
- Mithen, S. J. (2006). The singing Neanderthals: The origins of music, language, mind, and body. Cambridge, MA: Harvard University Press.
- Mithun, M. (2004). The value of linguistic diversity: Viewing other worlds through North American Indian languages. In A. Duranti (Ed.), A companion to linguistic anthropology (pp. 121-140). Malden, MA: Blackwell Publishing.
- Patel, A. D. (2010). The music of language and the language of music. Music in the brain lecture series. Retrieved May 2, 2010, from http://www.loc.gov/today/cyberlc/feature_wdesc.php?rec=4498
- Patel, A. D., & Daniele, J. R. (2003). An empirical comparison of rhythm in language and music. Cognition, 87(1), B35-B45.
- Patel, A. D., & Daniele, J. R. (2003). Stress-timed vs. syllable-timed music? A comment on Huron and Ollen. Music Perception: An Interdisciplinary Journal, 21(2), 273-276.
- Pinker, S. (1997). How the mind works. New York, NY: Norton.
- Ramnarine, T. K. (2003). *Ilmatar's Inspirations: Nationalism, Globalization, and the Changing Soundscapes of Finnish Folk Music.* Chicago, IL: University of Chicago Press.
- Rice, T. (2000). The music of Europe: Unity and diversity. In T. Rice, J. Porter, & C. Goertzen (Eds.), The Garland encyclopedia of world music (pp. 2-15). New York, NY: Garland Publishing.
- Richman, B. (1993). On the evolution of speech: Singing as the middle term. Current Anthropology, 34(4), 721-722.
- Robertson, P. (2004). Music and the brain: A musicologist's viewpoint. In F. C. Rose (Ed.), Neurology of the arts (pp. 307-316). London, UK: Imperial College Press.
- Slobodchikoff, C. (2002). Cognition and communication in prairie dogs. In M. Bekoff, C. Allen, & G. M. Burghardt (Eds.), The cognitive animal: Empirical and theoretical perspectives on animal cognition (pp. 257-264). Cambridge, MA: MIT Press.
- Takahashi, H., Takahashi, K., & Liu, F. C. (2009). FOXP genes, neural development, speech and language disorders. Advances in experimental medicine and biology, 665, 117-129.
- Tolbert, E. (1990). Magico-religious power and gender in the Karelian lament. In M. Herndon & S. Ziegler (Eds.), Music, gender, and culture (pp. 41-56). Wilhelmshaven: Florian Noetzel Verlag.
- Weinberger, N. M. (1998). Brain, behavior, biology, and music: Some research findings and their implications for educational policy. Arts Education Policy Review, 99(3), 28-36.
- Widlok, T. (2008). Landscape unbounded: Space, place, and orientation in 5Akhoe Hai//om and beyond. Language Sciences, 30, 362-380.
- Williamson, V. (2009). In search of the language of music. Psychologist, 22(12), 1022-1023.
- Ziegler, S. (1990). Gender-specific traditional wedding music in Southwestern Turkey. In M. Herndon & S. Ziegler (Eds.), Music, gender, and culture (pp. 85-100). Wilhelmshaven: Florian Noetzel Verlag.



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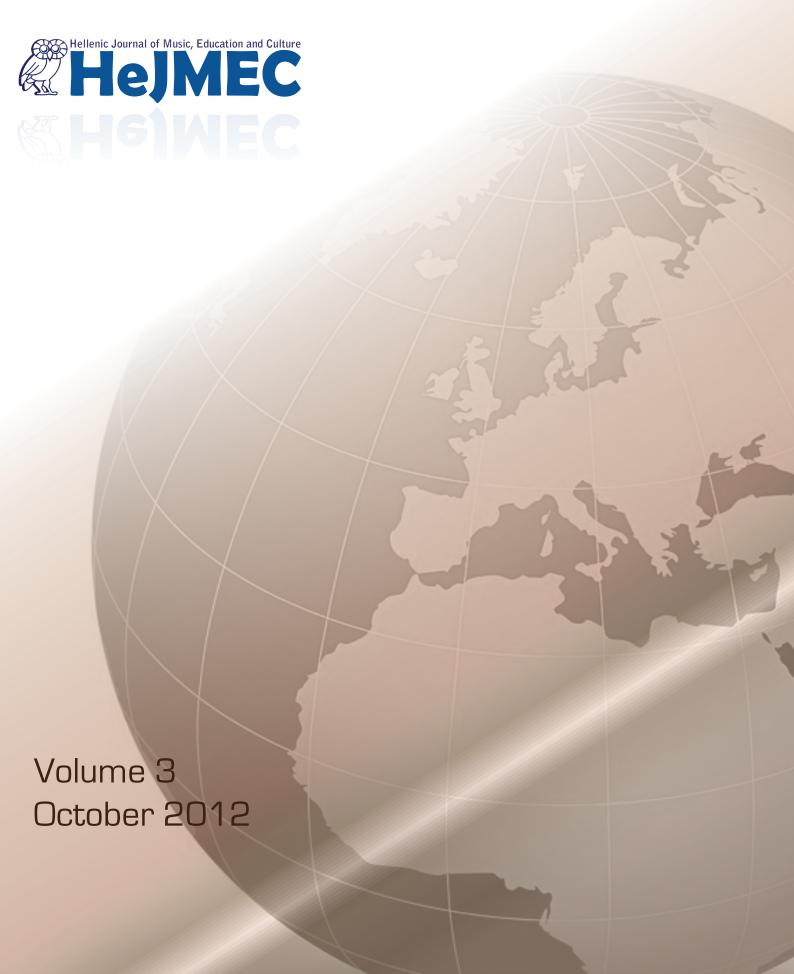
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