Re: Expert Testimony on (i) Community Establishment; (ii) Nexus; and (iii) Support for DotMusic's Community-Based Application[1] for .MUSIC (Application ID 1-1115-14110)

Dear ICANN and Economist Intelligence Unit ("EIU"):

Please accept this letter that indicates that there is substantive and compelling evidence that the DotMusic application convincingly meets the full criteria under Community Priority Evaluation on the following points: (i) the Music Community's *Establishment* as defined by DotMusic; (ii) the matching *Nexus* between the "music" Community and the "music" string (or top-level domain); and (iii) that DotMusic possesses documented *Support* from organizations representing a majority of the global Music Community addressed and defined.

Please see my credentials attached hereto that identify my level of expertise and specialized knowledge with respect to the music community's organization and delineation.

SUMMARY

DotMusic has established the following:

> 1) Its Community definition recognizes the cohesive, symbiotic and overlapping nature of the global Music Community. The definition includes those associated with commercial and non-commercial creation, performance, marketing and distribution of music;
>
> 2) "Music Community" members have the requisite awareness and recognition of the interdependency, overlapping and cohesive nature of each "organized community of similar nature that relates to music." These organized and aligned communities are closely united and make "music" as we know it today. It is this self-awareness and interdependence that gives the "Music Community" its strength. With exponential growth of the Internet, mobile and the Domain Name System (DNS), the "Music Community's" use and reliance on the Internet to create, market and disseminate music-related content, products, services and activities will continue to grow;
>
> 3) The "Music Community" functions in a regulated sector with global copyright protections – it is clear that the "community," as defined, implies "more of cohesion than a mere commonality of interest" with an "awareness and recognition of a community among its members." Several international treaties mandate a globally-recognized set of standards for

[1] https://gtldresult.icann.org/application-result/applicationstatus/applicationdetails/1392

the protection of the "Music Community" member rights with relation to their copyrighted music works around the world;

4) The "Music" Community -- as defined by DotMusic -- has at least one entity *mainly* dedicated to the community supporting DotMusic's application. Such documented *Support* includes several "international federation of national communities of a similar nature," music coalitions and others that are strongly associated with "music," which represent a majority of the Community with considerable millions of members worldwide.[2]

5) The *Nexus* of the "music" Community matches the "music" applied-for string because it represents the entire global Music Community – a community that pre-existed 2007 with a size in the considerable millions of constituents. The "Music Community" definition -- which incorporates the strict fundamental attributes of a closely united Community definition that is "organized" and "delineated" -- ensures that all of its constituent members have a requisite awareness of the community as defined, including both commercial and non-commercial stakeholders, to register a .MUSIC domain without any conflicts of interests, over-reaching or discrimination.

6) DotMusic has received support from the largest coalition of Music Community member organizations ever assembled to support a cause. Such unparalleled global Music Community support represents an overwhelming majority of the global Music Community as defined. Cumulatively, DotMusic possesses documented support[3] from institutions/organizations representing a majority of the Community as defined and recognized in the DotMusic application.

There is substantive evidence that DotMusic fulfills the *Nexus*, *Community Establishment* and *Support* criteria for the "Music" string. The inclusion and representation of every music constituent type is paramount to the articulated purpose of the string. DotMusic and its application's global Music Community supporters substantiate that every type of music constituent contributes to the function and operation of the music sector within a regulated framework. The symbiotic nature of the Community as defined and structured means that "Music" would not function as it does today without the participation of all music constituent types that interconnect to match the "music" string with the "music" Community definition.

[2] http://music.us/supporters
[3] http://music.us/supporters

ASSESMENT OF COMMUNITY DEFINITION, ESTABLISHMENT AND NEXUS

A) Music Community Definition, Establishment & Community Endorsement[4]

DotMusic's definition of the "Music Community" as a "strictly delineated and organized community of individuals, organizations and business, a logical alliance of communities of similar nature that relate to music" (See Application Answer to Question 20a) is factually accurate and representative of the "Music Community." Community characteristics include:

i) An Organized, Cohesive, Interdependent Logically-Allied Community:

The "Music Community" definition covers the regulated, interdependent and cohesive nature of the music sector that exists today. "Music Community" members have the requisite awareness and recognition of the interdependent, overlapping and cohesive nature of each "organized community of similar nature that relates to music" that comprises the "Music Community." Without such cohesiveness and interdependency, the defined "Music" Community matching the applied-for string ("Music") would not be able to function in its regulated sector. "Music" is a regulated sector comprised of a logical alliance of interdependent communities relating to music with organized practices and institutions that enable and regulate the production, distribution and consumption of music that was publicly recognized by both ICANN and the Government Advisory Committee[5]

As a result, the Music Community as defined is "closely united" (As per the definition of "cohesion" according to Merriam-Webster dictionary[6]) or "united or form a whole" (As per the definition of the word "cohesion" according to Oxford Dictionaries[7]).

DotMusic's application follows unified principles that the entire Community subscribes to, such as: creating a trusted identifier and safe haven for music consumption, protecting musicians' rights and intellectual property, fighting copyright infringement/piracy, supporting fair compensation and music education, and following a multi-stakeholder approach of representation of all types of global music constituents without discrimination (See Application Answers to 18).

The "Music Community" as defined (a "strictly delineated and organized community of individuals, organizations and business, a logical alliance of communities of similar nature that relate to music") establishes that:

(1) There is an awareness and recognition among its members;

---

[4] See http://music.us/establishment
[5] https://www.icann.org/en/system/files/bm/briefing-materials-2-05feb14-en.pdf, Pg.3
[6] http://www.merriam-webster.com/dictionary/cohesion
[7] http://www.oxforddictionaries.com/us/definition/american_english/cohesion

(2) The organized and delineated logical alliance of communities exists; and

(3) The Community is "closely united" and "interdependent" (i.e. Each "organized community of similar nature that relates to music" which is part of the "logical alliance of communities that relate to music" is not mutually exclusive).

In short, the applied-for string ("Music") matches the name of the "Music" Community as defined by DotMusic's application. DotMusic's "Music Community" definition accurately represents the common definition of the "Music Community," which is confirmed by Wikipedia.

According to Wikipedia:[8]

> *Music community is defined as a logical alliance of interdependent communities that are related to music, which include commercial participants…and non-commercial participants…and consists of an "ensemble of practices and institutions that make possible and regulate the production, distribution and consumption of music"…UNESCO identifies the music community as a "community of identity" implying common identifiable characteristics and cohesive attributes such as sharing a music culture, norms and subscribing to common ideals related to music…The music community is not defined as much by demographic indicators such as race, gender, and income level, as it is by common values, cohesive norms and interconnected structures to build a community identity. It refers to music-related individuals and organisations in a shared environment with shared understandings and practices, modes of production and distribution. The shared organisation of collective musical activities, identity and community value is created as result of infrastructure and a shared set of common values…Many studies outline the historical, cultural, and spatial significance of the music community, including how its identity is formed through musical practices. The music community shares a cohesive and interconnected structure of artistic expression, with diverse subcultures and socio-economic interactions…subscribing to common ideals. Under such structured context music consumption becomes possible regardless whether the transaction is commercial and non-commercial.*[9]

[8] Wikipedia is ranked 6th among the ten most popular websites (Alexa, Retrieved March 23, 2015 from http://www.alexa.com/siteinfo/wikipedia.org) and constitutes the Internet's largest, most frequently updated and popular general reference work (See OECD, OECD Internet Economy Outlook 2012, OECD Publishing, http://www.oecd-ilibrary.org/science-and-technology/oecd-internet-economy-outlook-2012_9789264086463-en, Pg.172) that compares favorably to the accuracy of other encyclopedias (such as the Britannica) according to a 2012 study conducted in partnership with Oxford University (See http://blog.wikimedia.org/2012/08/02/seven-years-after-nature-pilot-study-compares-wikipedia-favorably-to-other-encyclopedias-in-three-languages).

[9] Music Community. In *Wikipedia*. Retrieved July 6, 2015, from https://en.wikipedia.org/wiki/Music_community

ii) An Aware, Pre-Existing and Recognized Community of Considerable Millions Worldwide:

DotMusic's definition of the Community covers all Community members associated with the string, each with a requisite awareness of the Community that can be validated through their natural association with a particular music-related community that they clearly identify with. According to DotMusic, all Music Community members must identify their music-related community in order to demonstrate their requisite awareness of the defined Community as part of the .MUSIC registration and validation process.

According to DotMusic, the Music Community's geographic breadth is inclusive of all recognized territories covering regions associated with ISO-3166 codes and 193 United Nations countries with a Community of considerable size with millions of constituents (Application Answer to Question 20a).

According to DotMusic, "registrants will be verified using Community-organized, unified "criteria taken from holistic perspective with due regard of Community particularities" that "invoke a formal membership (Application Answer to Question 20a)." The defined Community represents all music-related entities with a clear and straightforward membership with the Community involved in the legal production, performance, promotion, and distribution of music worldwide. According to DotMusic, the Music Community members must have an active, non-tangential relationship with the applied-for string "music" and also have the requisite awareness of the music-related community that they are a part of by specifically identifying it as part of the registration and validation process (i.e. upon successful registration and validation, each community member will be given a unique community identification number that will automatically associate them with their identified community and the "music" string).

DotMusic's Community definition matches the applied-for string because it allows both commercial and non-commercial stakeholders to register a .MUSIC domain without any conflicts of interests, over-reaching or discrimination/exclusion. Given the regulated sector of the community, it is clear that the "Music Community" as defined implies "more of cohesion than a mere commonality of interest" with an "awareness and recognition of a community among its members." Several international treaties mandate cohesive and globally-recognized set of standards for the protection of the music community members' rights with relation to their copyrighted music works around the world.[10]

The Berne Convention for the Protection of Literary and Artistic Works[11] provides that each of the 168 contracting parties[12] (representing an overwhelming majority of the world's population) provides automatic protection for music works first published in other countries of the Berne union and for unpublished music works whose authors are citizens of or resident in such other

[10] http://www.rightsdirect.com/content/rd/en/toolbar/copyright_education/International_Copyright_Basics.html
[11] http://www.wipo.int/treaties/en/text.jsp?file_id=283698
[12] http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=15

countries.[13] This means that if a Music Community member's copyright rights are violated in any other signatory country's jurisdiction, then the music community member will have the music copyright rights given by that country. Music Community members are clearly aware of the collective Community's rights, which could not be made possible without these cohesive and globally-recognized set of standards. If such standards were not coherent or enforced then music would not be able to exist in its current form and the industry component of the Music Community sector would not exist. As such, the Community's *Establishment* and definition is "cohesive" and hence cannot be construed since the Community is a logical alliance of music communities that establish a clearly delineated and organized Community structure that is "closely united" and functions as a "whole"

Further evidence to substantiate the cohesive, symbiotic and overlapping nature of the Community, includes other globally-recognized standards and classification systems, which identify who the individual songwriters, publishers and rights holders are and which songs they are associated with so that Community members are appropriately compensated, regardless of whether the constituent is a commercial, non-commercial or amateur entity. The "music" string is commonly used in classification systems such as ISMN,[14] ISRC,[15] ISWC,[16] ISNI.[17] (Application Answer to Question 20a). For example, if a music entity would like to distribute their music, either commercially or for free, then an ISRC can be assigned to globally identify any specific music work. An ISRC, which facilitates efficient music discovery and community member payment, is constructed from 12 characters representing country, registrant, year of registration and designation (i.e. the serial number assigned by the registrant). With respect to domains, an equivalent system that relates to identifying a specific domain's registrant and other relevant information pertaining to the domain is WHOIS. Domain registrants are required by ICANN "to provide accurate WHOIS contact data" or else their domain "registration may be suspended or even cancelled".[18]

---

[13] http://www.britannica.com/EBchecked/topic/62482/Berne-Convention

[14] The International Standard Music Number (ISMN) is a unique number for the identification of all notated music publications from all over the world. The ISMN is an ISO certified global standard number (ISO 10957:2009). See http://www.ismn-international.org/whatis.html and http://www.iso.org/iso/home/store/catalogue_ics/catalogue_detail_ics.htm?csnumber=43173

[15] The ISRC (International Standard Recording Code) is the international identification system for sound recordings and music video recordings. The ISRC is an ISO certified global standard number (ISO 3901:2001) and is managed by the IFPI. See http://isrc.ifpi.org, https://www.usisrc.org/about/index.html and http://www.iso.org/iso/catalogue_detail?csnumber=23401

[16] The ISWC (International Standard Musical Work Code) is a unique, permanent and internationally recognized reference number for the identification of musical works. The ISWC has been approved by ISO (International Organization for Standardisation) as a global standard (ISO 15707:2001) and is managed by CISAC. See http://www.iswc.org/en/faq.html and http://www.iso.org/iso/catalogue_detail?csnumber=28780

[17] The International Standard Name Identifier (ISNI) is the ISO certified global standard number (ISO 27729) for identifying the millions of contributors to creative works and those active in their distribution. ISNI holds public records of over 8 million identities and 490,000 organizations. See http://www.isni.org/ and http://www.iso.org/iso/catalogue_detail?csnumber=44292

[18] https://whois.icann.org/en/about-whois and https://www.icann.org/resources/pages/faqs-f0-2012-02-25-en

Without such Music Community "cohesion" and standardized systems functioning in its regulated sector, the Music Community would not be able to create, market and distribute their music. By the same token, fans would not be able to identify the music they are listening to with a specific music artist, regardless of whether the listening activity or behavior is commercial or non-commercial in nature. The socio-economic structure that characterizes "music" as commonly-known today would be non-existent without these organized and delineated elements that commonly define the Community.

iii) International Federations and Organizations mainly Dedicated to the Community:

According to ICANN's Applicant Guidebook ("AGB")[19]: *"With respect to "Delineation" and "Extension," it should be noted that a community can consist of…a logical alliance of communities (for example, an international federation of national communities of a similar nature… viable as such, provided the requisite awareness and recognition of the community is at hand among the members."* (AGB, 4-12). The community as defined in the DotMusic application has at least one entity *mainly*[20] dedicated to the community which has supported DotMusic, which include several "international federation of national communities of a similar nature" relating to music, music coalitions and other relevant and non-negligible music organizations.

One of these entities include the only international federation of national communities relating to government culture agencies and arts councils, which has an integral association with music globally: the International Federation of Arts Councils and Culture Agencies (IFACCA).

IFACCA is the only international federation that represents government culture agencies and arts councils globally. These national communities are governmental institutions that play a pivotal

[19] https://newgtlds.icann.org/en/applicants/agb/guidebook-full-11jan12-en.pdf

[20] Per the Oxford and Merriam Webster dictionaries, the word "mainly" is defined as "*more than anything else*" (See http://www.oxforddictionaries.com/definition/english/mainly and http://www.merriam-webster.com/dictionary/mainly respectively). According to DotMusic, the string .MUSIC relates to the Community "by representing all constituents involved in music creation, production and distribution" (Application Answer to Question 20d). Supporting organizations related to that string that are "mainly" dedicated to the Community and its activities, include the International Federation of Arts Councils and Culture Agencies (IFACCA) representing government culture ministries and arts councils, the International Federation of Musicians (FIM) representing musicians globally, the International Federation of Phonographic Industry (IFPI) representing the recording industry worldwide, the International Confederation of Music Publishers (ICPM) representing the voice of global music publishing, the International Association of Music Information Centres (IAMIC, the American Association of Independent Music (A2IM), whose associate members represent a majority of music consumed, the Independent Music Worldwide Independent Network (WIN) representing independent music worldwide, the International Society for Music Education (ISME) the premiere international organization representing music education, and many others (See support at http://music.us/supporters and https://gtldresult.icann.org/application-result/applicationstatus/applicationdetails:downloadattachment/142588?t:ac=1392).

role with respect to music.[21] IFACCA's members cover the majority of music entities globally, regardless of whether they are commercial, non-commercial or amateurs. Government ministry of culture and council agencies related to music cover a majority of the overall community with respect to headcount and geographic reach. The "Size" covered reaches over a hundred million music entities i.e. "considerable size with millions of constituents" per Application Answer to Question 20a.

The string "music" falls under the jurisdiction of each country's Ministry of Culture governmental agency or arts/music council (emphasis added). The degree of power and influence of government ministry of culture and council agencies with respect to music surpasses any organization type since these agencies (i) provide the majority of funding for music-related activities; (ii) regulate copyright law; and (iii) encompass all the music entities that fall under their country, regardless whether these entities are commercial, non-commercial or amateurs. IFACCA is globally recognized by its strategic partners, such as UNESCO, a United Nations agency representing 195 member states and the European Commission.[22] The UNESCO strategic partnership[23] is relevant, especially since UNESCO founded the International Music Council (the "IMC") in 1949, which represents over 200 million music constituents from over 150 countries and over 1000 organizations globally.[24]

Government activities in the clearly delineated and organized "Music Community" include setting statutory royalty rates. For example, in the United States, mechanical royalties are based on a "statutory rate" set by the U.S. Congress. This rate is increased to follow changes in the economy, usually based on the Consumer Price Index. Currently, the mechanical statutory rate is $0.091 for songs five minutes or less in length or $.0175 per minute for songs that are over five minutes long.[25]

Ministries of culture and arts councils (that comprise IFACCA's membership) support musicians, musical performances, independent music artists, non-commercial musical expression and education in their respective countries. The 165 ministries of culture, arts councils and affiliates that comprise IFACCA's membership support the "performing arts" and music specifically. Without the financial and logistical support of arts councils and the ministries of culture, the music community would be adversely affected, and in some countries, may not exist in any appreciable manner. For example, the Ministry of Culture 2011 budget for the small country state of Cyprus for culture funding was €34,876,522 with critical support of music activities.[26] Other small government Ministries of Culture, such as Albania,[27] or government

[21] http://www.ifacca.org/membership/current_members/
[22] http://www.ifacca.org/strategic_partners/
[23] http://www.ifacca.org/strategic_partners/
[24] http://www.imc-cim.org/about-imc-separator/who-we-are.html
[25] U.S Copyright Office, http://www.copyright.gov/carp/m200a.html
[26] 2011 Annual Report for Cyprus Ministry of Culture, Section 1.2 "Music" (http://www.moec.gov.cy/en/annual_reports/annual_report_2011_en.pdf). Activities include Music Performances in Cyprus (1.2.1) and Abroad (1.2.2), Subsidization of Paphos Aphrodite Festival (1.2.3), Music Publications (1.2.4), Subsidization and Purchases of Digital Records (1.2.5), Promotion for Cypriot musical creativity abroad (1.2.6),

Ministries of Culture and Arts Councils from countries with larger populations, such as India,[28] all provide critical support and substantial advocacy for music. Other examples include government institutions collaborating and advocating music through their funded country-based pavilion initiatives at Midem, the world's largest music conference.[29]

Government ministries and arts councils provide critical support for the Music Community, including commercial music organizations By way of example, government ministries' and arts councils' substantial connection to and support of "music" is noted in the reports of funding and support for music. Some examples to showcase the degree of power of the IFACCA's membership towards the string and global and national music are music investment and music funding (Annual reports by governments and councils):

- New Zealand Ministry of Culture has funded significant music projects. Some include the REAL New Zealand Music Tour ($415,000), the New Zealand String Quartet ($150,000) and New Zealand Music Commission: ($1,378,000).[30]
- The Australian Government/Council For The Arts invested $51.2 million for the nation's orchestras; $21.6 million for opera; $10.8 million for other music artists and organizations; $13.1 million for multi-platform artists and organizations; and $4 million in miscellaneous funding, including sector building and audience development initiatives and programs.[31]
- Canada Council for the Arts is Canada's national, arts funding agency investing $28 million in its Canada Council Musical Instrument Bank (Page 16) and $28,156,000 in Music Arts Programs (Page 66).[32] The Government of Canada also renewed its annual investment of $27.6 million over five years in the Canada Music Fund.[33]
- The United Kingdom Department for Culture and Education (DfE) will fund music education at significant levels: £77 million, £65 million and £60 million will be available in the three years from April 2012.[34]

Cyprus Symphony Orchestra Foundation (1.2.7), Music Information Centre (1.2.8), Developing Music Education (1.2.9), Organising of the 1st Musicological Symposium (1.2.10) and Musical Festivities for the European Volunteerism Year (1.2.11)

[27] http://www.culturalpolicies.net/down/albania_012011.pdf

[28] 2010-11 Annual Report from India Ministry of Culture, http://www.indiaculture.nic.in/hindi/pdf/Culture-AnRe-2010-2011(Eng).pdf

[29] http://my.midem.com/en/contact-us/pavilion-representatives/

[30] 2011 Annual Report from New Zealand Ministry of Culture: http://www.mch.govt.nz/files/Annual%20report%202011%202012%20pdf%20version%20(D-0448383).PDF

[31] 2011 Annual Report for the Australia Council for the Arts, http://www.australiacouncil.gov.au/__data/assets/pdf_file/0016/142351/Australia-Council-Annual-Report-201112.pdf, Page 28

[32] 2011 Annual Report for Canada Council for the Arts, http://www.canadacouncil.ca/NR/rdonlyres/6F7549BB-F4E5-4B8B-95F4-1FF9FAFB9186/0/CanadaCouncilAnnualReport2012_COMPLETE.pdf

[33] http://www.pch.gc.ca/eng/1294862453819/1294862453821

[34] Department for Culture, The Importance of Music, A National Plan for Music Education, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/180973/DFE-00086-2011.pdf, Page 4, 2011

- The United States National Endowment of the Arts has awarded more than $4 billion to support the arts since its inception[35] and has a strong focus on music as outlined in its Strategic Plan[36] with Congress requested to provide $154,465,000 for fiscal year 2014.[37]
- The National Arts Council of South Africa invested 2,536,131 ZAR in Music and 9,995,000 ZAR in Orchestras and has focused strongly on the "Strengthening of live indigenous music and advocating the revival of the live music circuit in South Africa"[38]
- The Singapore Arts Council will fund $10.2 million in the arts under its 2013 Grants Framework, including the Ding Yi Music Company and Siong Leng Musical Association.[39]
- In 2011, the support for artistic activities by the Arts Council of Finland was €32.4 million of which €4,921,850 was awarded to music.[40]

Each of IFACCA's members has a clear association with, and mandate to support the music arts in their countries. In most countries, their ministry of culture/arts council is the largest funder and marketing supporter of the music arts.

The IFPI is another entity *mainly* dedicated to the Community. The IFPI is the only organization that represents the interests of the recording industry worldwide. It is the "voice of the recording industry worldwide"[41] whose members[42] – major and independent companies -- represent a majority of all commercial music consumed globally. For example, the RIAA, an IFPI national group member,[43] represents "approximately 85% of all legitimate recorded music produced and sold in the United States,"[44] the world's largest music market with 30% global market share.[45] Formed in 1933, the IFPI's mission was to "represent the interests of the recording industry worldwide in all fora."

---

[35] 2011 Annual report for the National Endowment of the Arts, http://www.nea.gov/about/11Annual/2011-NEA-Annual-Report.pdf, Page 2
[36] NEA Strategic Plan 2012-2016, www.arts.gov/about/Budget/NEAStrategicPlan2012-2016.pdf
[37] http://www.ifacca.org/national_agency_news/2013/04/10/us-president-requests-154465000-neh-2014/
[38] 2010-2011 Annual Report for the National Arts Council South Africa, National Arts Council South Africa, http://www.nac.org.za/media/publications/AR%2010-11%20NAC.PDF/download, Page 11. Also Mmino, the South African – Norwegian Education Music Programme, solely funds music projects funding a total of 294 projects. Thirteen projects were allocated funding for a total of R1,680,600 of which R1,381,000 went towards music educational and R299,600 to exchange projects (Page 10)
[39] Singapore Arts Council, http://www.nac.gov.sg/media-centre/news-releases/news-detail?id=c2db15e2-c319-40ec-939c-d58735d0a91c
[40] http://www.taiteenkeskustoimikunta.fi/documents/10162/31704/TY+tilastotiedote+1+12+.pdf, Page 1 and Page 23
[41] http://www.ifpi.org/about.php
[42] http://www.ifpi.org/our-members.php
[43] http://www.ifpi.org/national-groups.php
[44] http://www.riaa.com/faq.php
[45] http://www.statista.com/topics/1639/music/

Another clear example of an "entity *mainly* dedicated to the community" with members that cover hundreds of millions of music constituents with formal boundaries is A2IM, the American Association of Independent Music. A2IM has two types of members: U.S independent Label members and Associate members. A2IM membership for Labels and Associates is invoked formally through an application and if accepted would require annual membership dues.[46]

The reach of A2IM Associate[47] membership covers hundreds of millions of entities (i.e. the reach of A2IM's total membership "geographic breadth is inclusive of all recognized territories covering regions associated with ISO-3166 codes and 193 United Nations countries with a Community of considerable size with millions of constituents – See Application Answer to Question 20a).

Organized and strictly delineated communities related to music that are A2IM members include:

- **Apple iTunes**[48] – iTunes accounts for 63% of global digital music market[49] - a majority – with a registered community of 800 million registered members[50] available in 119 countries who abide to strict terms of service and boundaries[51] and have downloaded over 25 billion songs[52] from iTunes' catalog of over 43 million songs[53] covering a global music community, regardless of genre or whether the community entities are amateur, professional, commercial or non-commercial. To add music to iTunes, all music artists must have a formal membership with iTunes via an Apple ID registration, which includes a current credit card on file.[54]
- **Pandora**[55] – Pandora is the world's largest streaming music radio with a community of over 250 million registered members.[56]
- **Spotify**[57] – Spotify is the world's largest music streaming community with over 50 million active registered members in 58 countries and over 30 million songs. The music community uploads 20,000 songs every day.[58]
- **Vevo**[59] – Vevo is the world's leading all-premium music video community and platform with over 8 billion monthly views globally.[60]

---

[46] http://a2im.org/about-joining/
[47] http://a2im.org/groups/tag/associate+members/
[48] http://a2im.org/groups/itunes
[49] http://appleinsider.com/articles/13/04/16/apples-itunes-rules-digital-music-market-with-63-share
[50] http://www.npr.org/blogs/therecord/2015/01/06/375173595/with-downloads-in-decline-can-itunes-adapt
[51] http://www.apple.com/legal/internet-services/itunes/ww/index.html
[52] http://www.apple.com/pr/library/2013/02/06iTunes-Store-Sets-New-Record-with-25-Billion-Songs-Sold.html
[53] https://www.apple.com/itunes/features/
[54] https://www.apple.com/itunes/working-itunes/sell-content/music-faq.html
[55] http://a2im.org/groups/pandora
[56] http://www.cnet.com/news/like-a-rolling-milestone-pandora-hits-250m-registered-users/ and http://phx.corporate-ir.net/External.File?item=UGFyZW50SUQ9MTkxNTM1fENoaWxkSUQ9LTF8VHlwZT0z&t=1, Pg.9
[57] http://a2im.org/groups/spotify
[58] https://press.spotify.com/us/information/
[59] http://a2im.org/groups/vevo/

- **Youtube**[61] – Youtube is the world's largest music video streaming community with millions of music creators -- amateur, professional, commercial or non-commercial -- and over 1 billion registered members covering all regions globally. 6 billion hours of video is watched every month on Youtube,[62] of which 38.4% is music-related.[63]
- **Reverbnation**[64] – Reverbnation[65] is one of the world's largest music community and a leading music distributor with over 3.87 million musicians, venues labels and industry professionals covering every country globally. The Reverbnation community grows by over 50,000 artists, bands, labels and industry professionals monthly.
- **BMG**[66] – BMG is focused on the management of music publishing and recording rights. BMG has an international presence and represents over 2.5 million music rights globally.[67]

A2IM also includes members that are associated with global government agencies which exclusively represent substantial music economies and music members, such as France (BureauExport[68]), China (China Audio Video Association[69]) and Germany (Initiative Musik).[70] A2IM also has Affiliate[71] associations within the global music community. These include Affiliates such as MusicFirst,[72] the Copyright Alliance,[73] the Worldwide Independent Network (WIN)[74] and Merlin.[75]

A2IM also represents a recognized Music Coalition representing the interests of the Global Independent Music Community.[76] The A2IM Coalition includes Merlin, a global rights agency for the independent label sector, representing over 20,000 labels from 39 countries, Worldwide Independent Network (representing label creators in over 20 countries), Association of Independent Music (representing largest and most respected labels in the world), and IMPALA (Independent Music Companies Association on behalf of over 4,000 independent music companies and national associations across Europe, representing 99% of music actors in Europe which are micro, small and medium sized enterprises.

---

[60] http://www.vevo.com/c/EN/US/about
[61] http://a2im.org/groups/youtube/
[62] https://www.youtube.com/yt/press/statistics.html
[63] http://www.researchandmarkets.com/reports/2092499/internet_video_2011_2014_view_share_site_and
[64] http://a2im.org/groups/reverb-nation/
[65] http://www.reverbnation.com/about
[66] http://a2im.org/groups/bmg-rights/
[67] http://www.bmg.com/category/about-us/history/
[68] http://a2im.org/groups/french-music-export-office
[69] http://a2im.org/groups/china-audio-video-association-cava
[70] http://a2im.org/groups/initiative-musik-gmbh
[71] http://a2im.org/groups/tag/associate+members/
[72] http://musicfirstcoalition.org/coalition, The musicFIRST Coalition, with founding members A2IM, RIAA, and Recording Academy represents musicians, artists, managers, music businesses, and performance right advocates.
[73] http://www.copyrightalliance.org/members
[74] http://www.winformusic.org
[75] http://www.merlinnetwork.org
[76] https://www.icann.org/en/system/files/correspondence/bengloff-to-chehade-et-al-20aug14-en.pdf and https://www.icann.org/en/system/files/correspondence/bengloff-to-crocker-et-al-07mar15-en.pdf

Cumulatively, A2IM's Label and Associate Membership, A2IM's Affiliates and the A2IM's Global Independent Music Community Coalition, covers a majority of the global music community. Its cumulative membership is in the hundreds of millions of entities with formal boundaries belonging to strictly organized and delineated communities related to music as per the Community Definition and Size (See Application answer to Question 20a).

Another global Music Community Coalition led by the RIAA "on behalf of over 15 national and international trade associations" also expressed its support for .MUSIC to be under a "community" application model, including encouraging statements in support of DotMusic's policies that stated that the coalition "was encouraged to see" that DotMusic "included several measures to deter and address copyright infringement within that TLD." The "coalition members represent the people that write, sing, record, manufacture, distribute and/or license over 80% of the world's music" [77] – a majority of global music.[78]

Another letter[79] sent to ICANN (on April 14th, 2015) by Danielle Aguirre from the NMPA and on behalf of a music publisher and songwriter community coalition representing a majority of the global music publishing community, also expressed "support [for] the .MUSIC community applications because respecting and protecting music rights serves the global music community and the public interest."

The International Music Products Association, NAMM, is another globally-recognized and relevant group of non-negligible size that has supported DotMusic. [80] NAMM, formed in 1901, is *mainly* dedicated to the global music community by representing the international music products industry and community, with globally-recognized members and exhibitors that include Yamaha, Roland, Sennheiser, Sony, Fender, Harman, Kawai, Shure, Steinway, Audio-Technica, AKAI, Gibson, Peavey, Korg, AKG, Selmer, JBL, Alesis, Ibanex, AVID, Casio, DW, Sabian, Pearl, Zildjian, Martin, Ludwig, Marshall and others.[81] [82] Every amateur and professional musician worldwide uses music products manufactured and distributed by NAMM's members. Without these musical instruments and products, music as we know it today would not be created or produced. NAMM and its trade shows power the $17 billion global music products industry serving as a hub for the global music community wanting to seek out the newest innovations in musical products, recording technology, sound and lighting. NAMM's mission is "to strengthen

[77] https://www.icann.org/en/system/files/correspondence/riaa-to-icann-05mar15-en.pdf, Pg.1
[78] https://www.icann.org/en/system/files/correspondence/riaa-to-icann-05mar15-en.pdf, Pg.3, Appendix A
[79] https://www.icann.org/en/system/files/correspondence/aguirre-to-icann-board-eiu-14apr15-en.pdf
[80] http://music.us/letters/NAMM_International_Music_Products_Association.pdf
[81] https://www.namm.org/files/showdir/ExhibitorList_WN15.xls
[82] http://www.musictrades.com/global.html

the music products industry and promote the pleasures and benefits of making music."[83] NAMM also hosts the NAMM Show, the world's largest event for the music products industry.

Collectively, the DotMusic application received support from the largest coalition of music community member organizations ever assembled to support a cause representing over 95% of music consumed globally.[84] Such unparalleled global Music Community support represents an overwhelming majority of the global Music Community as defined. Cumulatively, DotMusic possesses documented support[85] from institutions/organizations representing a majority of the Community addressed. Music -- as commonly-known by the general public and experienced today -- would not be possible without these supporting, non-negligible and relevant organizations that have endorsed DotMusic.

In conclusion, there is substantive and compelling evidence that DotMusic entirely fulfills the criteria for *Community Establishment* and Community *Endorsement* from the majority of the global Music Community as defined.

B) Nexus[86]

According to the Applicant Guidebook ("AGB"), to receive the maximum score for Nexus, the applied-for string -- "music" -- must match the name of the community or be a well-known short-form or abbreviation of the community name.

The *Nexus* of the "Music Community" entirely matches the applied-for "music" string because it represents the entire global Music Community as commonly-known and perceived by the general public. This definition allows for all constituents with a requisite awareness of the Community defined to register a .MUSIC domain without any conflicts of interests, over-reaching or discrimination. The definition of the Community requires that members have an active, non-tangential relationship with the applied-for string and the requisite awareness of the music community they identify with as part of the registration process. It is clear that the general public will directly associate and equate the string with the Community as defined by DotMusic. There is no possibility of overreaching beyond the definition or allowing unrelated non-music entities to be included as part of the Community. Community members may register a .MUSIC by either:

---

[83] https://www.namm.org/about
[84] See http://music.us/supporters, https://gtldresult.icann.org/application-result/applicationstatus/applicationdetails:downloadattachment/142588?t:ac=1392, Bloomberg BNA at http://music.us/RIAA_Backs_DotMusic.pdf Pg.1, and http://diffuser.fm/will-dot-music-domains-make-the-internet-better/
[85] http://music.us/supporters
[86] See http://music.us/nexus

1) Identifying that they belong to a Music Community Member Organization ("MCMO"); or

2) Identifying the community they belong to, which is consistent with the definition of the Community: "the strictly delineated and organized logical alliance of communities of similar nature related to music."

All Community members are aware of and recognize their inclusion in the defined Community by identifying which clearly defined community they belong to and have an active participation in. The *nexus* of the applied-for string ensures inclusion of the entire global community that the string represents while excluding unrelated-entities not associated with the string. This way there is a clear match and alignment between the "music" sting and the Community defined.

While the exact size of the global Music Community as defined is unknown (there is no empirical evidence providing an exact, finite number because amateur entities are also included in the Community's definition), it is in the considerable millions as explicitly stated in the DotMusic Application. DotMusic's definition of the Community and mutually-inclusive Registration Policies ensure that eligible members are only music-related and associated with the string. This is because the string identifies all constituents involved in music. Music-only participation optimizes the relevancy of .MUSIC domains to the string and entirely matches the *nexus* between the string and Community defined. According to DotMusic, the Community *definition, eligibility* criteria and *content and use* requirements ensure that peripheral industries and entities not related to music are excluded so that the string and the defined Community matches and aligns in a consistent manner consistent with DotMusic's community-based purpose i.e. only entities with music-related activities are able to register .MUSIC domains.

Membership aligns with the *nexus* of the Community and the string, which is explicitly relevant to music. The string as defined in the application demonstrates uniqueness because it has no other significant meaning beyond identifying the community described in the application. According to DotMusic's application, any tangential or implicit association with the *nexus* of the Community and the string is not regarded as a delineated membership since it would be considered unclear, dispersed or unbound. Such unclear, dispersed or unbound tangential relationships with the defined "music" Community and applied-for "music" string would not constitute a qualifying Community membership and would be ineligible for registration. Every type of music constituent critically contributes to the function and operation of the music sector within a regulated framework[87] given the symbiotic overlapping nature of the Community as defined and structured. Music would not function as it does today without the participation of all music constituent types which cumulatively match the string with the Community definition.

[87] ICANN has disclosed that the string .MUSIC is a sensitive string operating in a regulated sector. ICANN also accepted Government Advisory Committee (GAC) advice for safeguards to protect the Music Community and the public interest (See https://icann.org/en/system/files/correspondence/crocker-to-dryden-3-29oct13-en.pdf Pg.7)

In conclusion, there is substantive and compelling evidence that DotMusic entirely fulfills the criteria for *Nexus*.

Respectfully Submitted,

Signature:  argiro.vatakis@gmail.com, Aug 3 '15 ip: 62.1.34.220

Name: Argiro Vatakis

Title: Dr.

Organization: Cognitive Systems Research Institute

ARGIRO VATAKIS
http://www.argirovatakis.com
argiro.vatakis@gmail.com

Education:

University of Oxford, Lincoln College, UK, 2004-2007
Doctor of Philosophy (D. Phil.) in Experimental Psychology
Thesis title: *Assessing the factors modulating synchrony perception for complex audiovisual stimuli*.

California State University Long Beach, USA, 2002-03
1st year completed, Masters (M.A.) Degree in Research Psychology
Honors in *Perception (PSY631)* and *Learning (PSY632)*

California State University Long Beach, USA, 1995-2000
Bachelors (B.A.) in Psychology

Awards & Prizes:

- Institute for Advanced Study Fellowship, Theme "Time", Durham University, UK, 2012-2013
- Post-doctoral scholarship, "Maria P. Laimou" Foundation, Greece, 2009-10
- Graduate Senior Scholarship, Lincoln College, University of Oxford, 2007
- Brain Travel Grant, Brain, 2007
- Graduate Research Fund Award, Lincoln College, University of Oxford, 2007
- Onassis Foundation Science Lecture Series (*'Brain plasticity: From molecules to behavior'*) Award, 2006
- Graduate Symposium Award, International Multisensory Research Forum (IMRF), 2006
- Neuroscience Training (NEUROTRAIN) in Europe Grant, European Commission, Research Directorate General, Marie Curie Conferences & Training Courses, Contract No. MSCF-CT-2005-029703, 2006
- Graduate Senior Scholarship, Lincoln College, University of Oxford, 2006
- European Commission Improving Human Potential Programme Fellowship, NeuralComp, 2006
- Graduate Research Fund Award, Lincoln College, University of Oxford, 2006
- Newton Abraham Studentship, Medical Sciences, University of Oxford, 2005-07
- William R. Miller Postgraduate Award, St. Edmund Hall College, University of Oxford, 2005-06
- St. Hugh's Graduate Award, St. Hugh's College, University of Oxford, 2005-07
- Grindley Grant, British Experimental Psychology Society, 2005
- Travel Award, St. Edmund Hall College, University of Oxford, 2005
- Brockhues Graduate Award, University of Oxford, 2004
- Sally Casanova California State University Pre-Doctoral Scholar Award, 2003-04
- Student Academic Travel Award, CSU Long Beach, 2003

- Psychology Department Travel Award, CSU Long Beach, 2003
- Dean's List, CSU Long Beach, 1998-99
- Student Access to Science Summer Scholarship, CSU Long Beach, 1996
- High School Honors, 4th Gymnasium of Chios, 1989-1991

Research/Work Experience:

Timing & Time Perception: Reviews, Brill Publishing House & University of Groningen, NL, 2014-2017
Position: Editor-in-Chief
Editor of this new and unique journal that aims to bring together all reviews on timing and time perception from different disciplines and perspectives.

Timing & Time Perception, Brill Publishing House, NL, 2013-2017
Position: Editor-in-Chief
Proposer and Editor of this new and unique journal that aims to bring together all research on timing and time perception from different disciplines and perspectives.

University of Athens, Department of Philosophy and History of Science, Greece, 2012-2015
Funded by: Cognitive Mechanisms in the Perception, Representation, and Organization of Knowledge (COGMEK), THALIS National Research Funding
PIs: Dr. Konstantinos Moutousis & Prof. Stella Vosniadou
Position: Researcher
As a researcher in COGMEK under the Group: *Spatial and Temporal Perception: General characteristics and the role of higher-level cognitive processes*, I will investigate whether or not learning and priming modulates synchrony perception and how this modulation can enhance or inhibit the peak and decline of the time-course of time perception through development. I will also co-supervise two doctoral students.

Cognitive Systems Research Institute (CSRI), Athens, Greece, 2011-present
Funded by: Time In MEntaL activitY: theoretical, behavioral, bioimaging and clinical perspectives (TIMELY), ISCH Action TD0904, 2010-2013. COST-ESF Networking grant (http://www.timely-cost.eu) & POETICON ++, FP7-ICT-Cognitive Systems, Interaction, Robotics
Director: Katerina Pastra, Ph.D.
Position: Coordinator/Researcher
TIMELY is a networking project between scientists working on time and time perception for the exchange of expertise and establishment of new collaborations. TIMELY seeks to explore fundamental questions on TP by bringing together, for the first time, senior and junior scientists from different disciplines and perspectives. Specifically, TIMELY will focus on four main themes:

- *Conceptual analysis and measurement of time*
- *Exploring Cognitive, Linguistic, and Developmental factors associated with TP variability*
- *Extending time research to ecologically-valid stimuli*

- *Uncovering the neural correlates of TP*

POETICON++ will be a continuation of the work done in POETICON on for discovering the "languages" of sensorimotor representations and the correspondences with natural language.

Institute for Language and Speech Processing (ILSP), Research Centers "Athena", Athens, Greece, 2008-2011
Funded by: POETICON, European Commission 7th Framework Programme, Cognitive Systems and Robotics, STREP Project ICT-215843.
Department Head: S. Piperidis
Position: Post-doctoral Researcher
The POETICON project follows an empirical approach for discovering the "languages" of sensorimotor representations and the correspondences with natural language. Guided by cognitive experiments, it employs cutting-edge equipment and established cognitive protocols for collecting face and body movement measurements, visual object information and associated linguistic descriptions from interacting human subjects, with the objective to create an extensible computational resource which associates symbolic representations with corresponding sensorimotor representations.

Hellenic Institute of Transport (HIT), Center for Research and Technology Hellas (CERTH), Athens, Greece, 2007-08
Funded by: Center for Research and Technology Hellas (CERTH)
Department Head: Aggelos Bekiaris, Ph.D.
Position: Post-doctoral Researcher
Focusing on the study of the relationship of the driver with the vehicle and methods to increase safety while driving. Tasks included working with a driving simulator or real driving experiments. Involved in the European Union funded programs of:

- HUMABIO (Human monitoring and authentication using biodynamic indicators and behavioural analysis)
- ACTIBIO (Unobtrusive authentication using activity related and soft biometrics)
- TRAIN ALL (Integrated system for driver training and assessment using interactive education tools and new training curricula for all modes of road transport)
- DRUID (Driving under the influence of drugs, alcohol and medicines)
- SENSATION (Advanced sensor development for attention, stress, vigilance and sleep/wakefulness monitoring),
- ASK IT (Ambient intelligence system of agents for knowledge based and integrated services for mobility impaired users)
- IN SAFETY (Infrastructure and safety).

Crossmodal Research Laboratory, Department of Experimental Psychology, University of Oxford, UK, 2004-07
Funded by: Newton Abraham Studentship, Medical Sciences.
Lab Supervisor: Prof. Charles Spence, Ph.D.
Position: Doctoral Student

Focusing on the study of audiovisual temporal perception for complex stimuli using psychophysical and neuroimaging techniques.

Department of Neurology II and Center for Advanced Imaging Medicine, University of Magdeburg, Germany, 2006
Funded by: Visiting Scientist DFG Grant
Lab Supervisor: Toemme Noesselt, Ph.D.
Position: Visiting Scientist
Focusing on the study of auditory, visual, and tactile synchrony perception using psychophysical and fMRI techniques.

Max Planck Research Institute for Biological Cybernetics, Dr. Logothetis Department, Germany, 2004-05
Funded by: Max Planck Society
Lab Supervisor: Zoe Kourtzi, Ph.D.
Position: Research Scientist
Focusing on the study of visual perception using Glass Patterns using fMRI and psychophysical methods.

Behavioral Neuroscience Laboratory, Department of Psychology, CSU Long Beach, USA, 2003-04
Lab Supervisor: Diane W. Lee, Ph.D.
Position: Research Assistant
Focusing on understanding the processes underlying learning and memory formation, investigating the role of hippocampus in learning, and injury-induced hippocampal neurogenesis.

Boeing Corporation, Phantom Works, Long Beach, USA, 2003-04
Funded by: Boeing Corporation
Lab Supervisor: Jack Dwyer, Ph.D.
Position: Research Assistant
Focusing on the development of effective radar systems that function based on the principles of the mechanisms governing the human eye.

Psychoacoustics Laboratory, Dep. of Psychology, CSU Long Beach, USA, 2002-05
Lab Supervisor: Thomas Z. Strybel, Ph.D.
Position: Research Assistant
Investigation of unimodal and crossmodal (auditory and visual) perception of apparent motion.

Event Organization/Co-organization:

Conferences:

- International Conference on Timing and Time Perception, March 31st–April 3rd, 2014, Corfu, Greece (http://www.finalconference.timely-cost.eu/).

- *4th Annual Conference of the Hellenic Cognitive Science Society*, June 6-8th, 2013, Athens, Greece (http://cogsci13.helleniccognitivesciencesociety.gr/).

Workshops:

- Workshop on *Temporal Prediction*, October 18th, 2013, Granada, Spain.
- Workshop on *Development of Timing and Time Perception: A lifespan perspective*, October 16-17th, 2013, Granada, Spain.
- Workshop on the *Applying the senses in the classroom*, November 20th, 2011, Athens, Greece.
- International Workshop on the *Multidisciplinary Aspects of Time and Time Perception*, October 7th-8th, 2010, Athens, Greece (http://timely-cost.eu/1st-international-workshop-multidisciplinary-aspects-time-perception).
- ECOLIFE Festival, Agora, OAKA Olympic Sports Complex, Athens, Greece, June 2006. *The Unique Fair on Environmental Friendly Products & Services,* 3-day "Food for thought" Multisensory sensory experience exhibition. *Funded by*: British Council in Greece

Satellite Meetings:

- Satellite Meeting on the *Neurobiology of Time: From Normality to Dysfunction*, September 9th, 2011, Seville, Spain (http://www.ebbs-seville2011.com/ index.php/scientific-programme/satellite).

Symposiums:

- *Time to act: New perspectives on embodiment and timing* at the International Conference on Timing and Time Perception, March 31st–April 3rd, 2014, Corfu, Greece.
- 1-Day Symposium at the 4th Hellenic Cognitive Science Society Annual Conference on *Timing in Clinical Populations*, June 7th, 2013, Athens, Greece.
- 1-Day Symposium at the 13th Hellenic Conference of Psychological Research on *Timing in perception: Visual instability-temporal distortion [*Ο χρόνος στην αντίληψη: Οπτική αστάθεια - χρονική διαστρέβλωση], May 15-19th, 2013, Alexandroupoli, Greece.
- 2-Day International Symposium on *Temporal Processing Within and Across Senses*, October 4th-5th, 2012, Tuebingen, Germany.
- 3-Day International Symposium on the *Time and the Conscious Brain*, October 31st- November 2nd, 2011, HWK, Delmenhorst, Germany.
- EuroCogSci2011 Symposium on the *Current advances on Time perception: Psychophysical, Neuronal, and Applied Perspectives*, May 21st-24th, 2011, Sofia, Bulgaria.
- Symposium at the International Neuropsychological Society (INS) meeting *Time and Cognition: From behavioral studies to brain imaging*, June 30-July 3, Krakow, Poland.

Training Schools:

- 5-Day Training School on the *Imaging Time*, February 23-27th, 2013, Magdeburg, Germany.
- 5-Day Training School on the *Temporal Timing and Time Perception: Procedures, Measures, & Applications,* February 4-8, 2013, Corfu, Greece.

- 3-Day Training School on *Dynamical systems for psychological timing and timing in speech processing*, May 2nd-4th, 2012, Vietri sul Mare, Italy.
- 5-Day Training School on the *Temporal processing in clinical populations*, March 26th-30th, 2012, Thessaloniki, Greece.
- 5-Day Training School on the *Psychophysical, Computational and Neuroscience Models of Time Perception*, April 4th-8th, 2011, Groningen, Netherlands (http://timely-cost.eu/training-school-2).

Chairing:

- Oral Session: Children's Learning & Perception in the *13th International-2nd World Conference of the Association of Psychology and Psychiatry for Adults and Children (APPAC)*, "Psychology, Neuropsychiatry & Social Work in Modern Times", May 20-23, 2008, Athens, Greece.
- Experimental Psychology Session in the *3rd Annual D. Phil. Students Meeting*, 22 June 2007, University of Oxford, Medical Sciences Division.

Teaching Experience:

Lecturer:

- *Research Methods in Experimental Psychology,* Department of Philosophy and History of Science, University of Athens, Greece, 2014-15
- *Multisensory Perception and Attention,* Department of Philosophy and History of Science, University of Athens, Greece, 2009-13
- *Cognitive Psychology*, Department of Philosophy and History of Science, University of Athens, Greece, 2011-14
- *Introduction to Cognitive Psychology II*, Department of Psychology, Panteio University, Athens, Greece, 2009-10
- *Current Topics in Cognitive Psychology*, Department of Psychology, Panteio University, Athens, Greece, 2009-10
- *Introduction to Cognitive Psychology I*, Department of Psychology, Panteio University, Athens, Greece, 2008-10

Graduate Assistant, PSYCH 110, *Introduction to Behavioral Statistics*, Department of Psychology, CSU Long Beach, USA, 2002-04

Tutor (Math & Psychology), Professional Tutors of America, Brea, USA, 2002-03

Laboratory Instructor, PSYCH 310, *Intermediate Statistics*, Department of Psychology, CSU Long Beach, USA, Summer Session 2002

Student Supervision:

Master thesis supervision:

- Georgia Anna Chandridi, Thesis Title: *Memory mixing in audiovisual duration judgments*, Dept. of Philosophy & History of Science, University of Athens, Current.
- Venetia Bakirtzi, Thesis Title: *Audiovisual Temporal Integration in Autism*, Dept. of Philosophy & History of Science, University of Athens, Current.

- Stella Angelaki, Thesis Title: T*he Unity Effect: Top-down or Bottom-up processes?* Dept. of Philosophy & History of Science, University of Athens, Current.
- Efthimis Tsilionis, Thesis Title: *Imaging the Unity Effect*, Dept. of Philosophy & History of Science, University of Athens, Current.
- Mary Kostaki, Thesis Title: *Continuity and Synchrony: The common link*, Dept. of Philosophy & History of Science, University of Athens, Current.
- Elpida Manoudi, Thesis Title: *Timing in Cinematography*, Dept. of Philosophy & History of Science, University of Athens, Current.
- Alexandros Rouchitsas, Thesis Title: *Explicit and Implicit Temporal Learning*, Dept. of Philosophy & History of Science, University of Athens, Current.
- Markos Sellis, Thesis Title: *Multisensory Integration: Inverse Effectiveness or Stochastic Resonance?*, Dept. of Philosophy & History of Science, University of Athens, 2015.
- Petros Papavasiliou, Thesis Title: *Emotional Responses to Musical Intervals with Specific Acoustical Properties and the Effect of the Induced Emotions in Duration Perception*, Dept. of Philosophy & History of Science, University of Athens, 2015.
- Helena Sgouramani (co-supervision with Marc Leman & Leon van Noorden), Thesis Title: *In Search of Lost Time: Does Dance Experience Enhance Time Perception?* Dept. of Philosophy & History of Science, University of Athens, 2013.
- Miketa Arvanity (co-supervision with Noam Savig), Thesis Title: *Is 'A' always red? Multisensory integration in synesthetes and non-synesthetes,* Dept. of Philosophy & History of Science, University of Athens, 2013.
- Argiro Vagia, Thesis Title: *Language and Timing: How temporal and non temporal concepts can affect duration perception,* Dept. of Philosophy & History of Science, University of Athens, 2013.
- Dionisis Koymoytsos (co-supervision with Charles Spence), Thesis Title: *Unity assumption for non-speech stimuli,* Dept. of Philosophy & History of Science, University of Athens, 2012.
- Nancy Verriopoulou (co-supervision with Simon Grondin), Thesis Title: *Using video games and brain training software to modulate human time perception,* Dept. of Philosophy & History of Science, University of Athens, 2011.
- Vassiliki Sofra (co-supervision with Stella Vosniadou), Thesis Title: *Creativity and student performance,* Dept. of Philosophy & History of Science, University of Athens, 2010.
- Daphne Roumani (co-supervision with Konstantinos Moutousis), Thesis Title: *Binocular Rivarly,* Dept. of Philosophy & History of Science, University of Athens, 2009.
- Fotis Fotiadis (co-supervision with Thanasis Protopapas), Thesis Title: *The effect of cue naming in probabilistic category learning,* Dept. of Philosophy & History of Science, University of Athens, 2009.
- Eliza Argyriou (co-supervision with Nikolaos Smyrnis), Thesis Title: *Aspects of auditory-motor synchronization with isochronous rhythmic patterns,* Dept. of Philosophy & History of Science, University of Athens, 2009.

- Dimitris Rogaris (co-supervision with Georgios Gyftodimos), Thesis Title: *Perception of simple and complex musical pieces,* Dept. of Philosophy & History of Science, University of Athens, 2009.

Bachelor's thesis supervision:

- Eleni Psarrou, Thesis Title: *Intentional binding of naturalistic stimuli*, Dept. of Psychology, Panteion University, Athens, 2014.
- Konstantina Margiotoudi, Thesis Title: *Timing and Gestures,* Dept. of Psychology, Panteion University, Athens, 2013.

Publications

Journal:

Vatakis, A., Van Rijn, H., & Meck, W. (Start year: 2013). Timing & Time Perception. Brill: Leiden, The Netherlands.

Meck, W., Van Rijn, H., & Vatakis, A. (Start year: 2014). Timing & Time Perception: Reviews. University of Groningen and Brill, Leiden, The Netherlands.

Journal Special Issues:

Vatakis, A., & Ulrich, R. (2014). Temporal Processing Within and Across Senses – Part 2. *Acta Psychologica*, **149**, 129-178.

Vatakis, A., & Ulrich, R. (2014). Temporal Processing Within and Across Senses – Part 1. *Acta Psychologica,* **147**, 1-152.

Books/Edited Books/Proceedings:

Vatakis, A., Balci, F., Correa, A., & Di Luca, M. (in preparation). Timing and time perception: Procedures, measures, and applications. Brill: Leiden, The Netherlands.

Vatakis, A., & Allman, M. (2015). Time Distortions in Mind: Temporal processing in clinical populations. Brill: Leiden, The Netherlands.

Vatakis, A. (2014). International Conference on Timing and Time Perception, 31 March-3 April 2014, Corfu, Greece. *Procedia - Social and Behavioral Sciences, Proceedings Volume 126, 1-280*.

Vatakis, A., Esposito, A., Giagkou, M., Cummins, F., & Papadelis, G. (2011). *Multidisciplinary Aspects of Time and Time Perception*. Springer LNCS/LNAI Proceedings Volume.

Book Chapters:

Vatakis, A., & Bakou, A. E. (2015). Distorted multisensory experiences of order and simultaneity. In A. Vatakis & M. Allman (Eds.), *Time Distortions in Mind: Temporal processing in clinical populations*. Brill: Leiden, The Netherlands.

Vatakis, A. (2014). TIMELY: A network on timing and time perception. In B. Lewandowska-Tomaszczyk & K. Kosecki (Eds.), *Time and Temporality in Language and Human Experience*. Series: Lodz Studies in Language - Volume 32. Peter Lang Publishing Group.

Vatakis, A., & Papadelis, G. (2014). The research on audiovisual perception of temporal order and the processing of musical temporal patterns: Associations, pitfalls, and future directions. In D. Lloyd & V. Arstila (Eds.), *Subjective Time*. MIT Press.

Vatakis, A. (2013). Cross-modality in speech processing: Synchrony perception and the unity effect. In J. Simner & E. Hubbard (Eds.), *The Oxford Handbook of Synaesthesia*. Oxford University Press.

Vatakis, A. (2013). The role of stimulus properties and cognitive processes in the quality of the multisensory perception of synchrony. In L. Albertazzi (Ed.), *The Wiley-Blackwell Handbook of Experimental Phenomenology. Subtitle: Visual Perception of Shape, Space and Appearance.* Wiley-Blackwell.

Vatakis, A., & Papadelis, G. (2011). A Timely Endeavor: Theoretical, Behavioral, Bioimaging, and Clinical Perspectives on Time Perception. In A. Esposito, A. M. Esposito, R. Martone, V. C. Muller, and G. Scarpetta (Eds.), *Toward Autonomous, Adaptive, and Context-Aware Multimodal Interfaces: Theoretical and Practical Issues*, Springer-Verlag: Berlin Heidelberg.

Vatakis, A., & Spence, C. (2010). Audiovisual temporal integration for complex speech, object-action, animal call, and musical stimuli. In M. J. Naumer & J. Kaiser (Eds.), *Multisensory Object Perception in the Primate Brain*. Springer-Verlag: Berlin Heidelberg.

Translated Books:

Ward, J. (2010). The Frog Who Croaked Blue (A. Vatakis & S. Samartzi, Trans.). Athens, Greece: Pedio. (Original work published 2008).

Herrmann, D. J., Yoder, C. Y., Gruneberg, M., & Payne, D. G. (2010). Applied Cognitive Psychology: A textbook (S. Samartzi & A. Vatakis, Trans.). Athens, Greece: Pedio. (Original work published 2006).

Paper (Peer-Reviewed) Publications:

Vatakis, A., & Pastra, K. (submitted). The PLT Corpus: A multimodal database of spontaneous speech and movement production on object affordances. *Science Data*.

Vatakis, A., Pastra, K., & Dimitrakis, P. (submitted). Co-speech Exploratory Acts: The interaction of language and active touch in object knowledge acquisition. *Cognition.*

Indraccolo, A., Spence, C., Vatakis, A., & Harrar, V. (2015). Combined effects of motor response, sensory modality, and stimulus intensity on temporal reproduction. *Experimental Brain Research*

Meck, W., Vatakis, A., & van Rijn, H. (2014). Timing & Time Perception Reviews: Opening the door to theoretical discussions of consciousness, decision-making, multisensory processing, time cells and memory mapping … to name but a few issues of relevance to temporal cognition. *Time & Time Perception Reviews*, **1**, 1-4.

Vatakis, A. (2014). TIME(ly) is up! Conclusions and New Outlooks on Timing and Time Perception. *Procedia - Social and Behavioral Sciences*, **126**, 1-2.

Vatakis, A., & Ulrich, R. (2014). Temporal Processing Within and Across Senses. *Acta Psychologica*, **147**, 1.

Sgouramani, E., & Vatakis, A. (2014). "Flash" Dance: How speed modulates perceived duration in dancers and non-dancers. *Acta Psychologica*, **147**, 17-24.

Meck, W. H., Vatakis, A., & van Rijn, H. (2013). Timing & time perception enters a new dimension. *Timing & Time Perception*, **1**, 1-2.

Karambetsos, C., Kouskoukis, C., Giannakopoulos, G., Agapidaki, E., Mihas, C., Katsarou, A., Miridakis, C., Vatakis, A., & Kolaitis, G. (2013). A comparison of

mental health problems among children with alopecia areata or atopic dermatitis and their parents. *British Journal of Medicine and Medical Research*, **3(1)**, 162-172.

Vatakis, A., Maragos, P., Rodomagoulakis, I., & Spence, C. (2012). Assessing the effect of physical differences in the articulation of consonants and vowels on audiovisual temporal perception. *Frontiers of Integrative Neuroscience*, **6 (71)**, 1-18.

Esposito, A., Esposito, M., Giagkou, M., Vatakis, A., & Vinciarelli, A. (2012). On the perception of visual durational speech features: A comparison between native and non-native speakers. *CogInfoCom 2012, 3rd IEEE International Conference on Cognitive Inforcommunications*, Kosice, Slovakia.

Vatakis, A., & Spence, C. (2011). Enhanced audiovisual temporal sensitivity when viewing videos that appropriately depict the effect of gravity on object movement. In A.Vatakis, A. Esposito, M. Giagkou, F. Cummins, and G. Papadelis (eds.) *Multidisciplinary Aspects of Time and Time Perception*. Springer LNCS/LNAI Proceedings Volume.

Verriopoulou, D., & Vatakis, A. (2011). Using video games and brain training software to modulate human time perception. *5th European Conference on Games Based Learning*, Athens, Greece.

Wallraven, C., Schultze, M., Mohler, B., Vatakis, A., & Pastra, K. (2011). The POETICON enacted scenario corpus: A tool for human and computational experiments on action understanding. *9th IEEE Conference on Automatic Face and Gesture Recognition*, art. no. 5771446, pp. 484-491, Santa Barbara, USA.

Pastra, K., Wallraven, C., Schultze, M., Vatakis, A., & Kaulard, K. (2010). The POETICON corpus: Capturing language use and sensorimotor experience in everyday interaction. *Language Resources and Evaluation (LREC) 2010*, Malta.

Wallraven, C., Schultze, M., Mohler, B., Volkova, E., Alexandrova, I., Vatakis, A., & Pastra, K. (2010). Understanding objects and actions - A VR experiment. *Language and Speech*, 1-2.

Vatakis, A., Ghazanfar, A. A., & Spence, C. (2008). Facilitation of multisensory integration by the "unity effect" reveals that speech is special. *Journal of Vision*, **8**(9):14, 1-11.

Vatakis, A., Portouli, V., & Bekiaris, E. (2008). Investigating the effects of continuous positive airway pressure (CPAP) treatment on driving and attentional performance of patients with sleep impairments. *Proceedings of the 5th International Workshop on Wearable, Micro and Nano Technologies for the Personalised Health, pHealth 2008*.

Vatakis, A., & Spence, C. (2008). Investigating the effects of inversion on configural processing using an audiovisual temporal order judgment task. *Perception*, **37**, 143-160.

Vatakis, A., Navarra, J., Soto-Faraco, S., & Spence, C. (2008). Audiovisual temporal adaptation of speech: Temporal order versus simultaneity judgments. *Experimental Brain Research*, **185**, 521-529.

Vatakis, A., & Spence, C. (2008). Evaluating the influence of the 'unity assumption' on the temporal perception of realistic audiovisual stimuli. *Acta Psychologica*, **127**, 12-23.

Vatakis, A., & Spence, C. (2007). How 'special' is the human face? Evidence from an audiovisual temporal order judgment task. *Neuroreport*, **18**, 1807-1811.

Vatakis, A., & Spence, C. (2007). Crossmodal binding: Evaluating the 'unity assumption' using complex audiovisual stimuli. *Proceedings of the 19th International Congress on Acoustics (ICA)*.

Vatakis, A., & Spence, C. (2007). Crossmodal binding: Evaluating the 'unity assumption' using audiovisual speech stimuli. *Perception & Psychophysics*, **69**, 744-756.

Vatakis, A., Navarra, J., Soto-Faraco, S., & Spence, C. (2007). Temporal recalibration during asynchronous audiovisual speech perception. *Experimental Brain Research*, **181**, 173-181.

Vatakis, A., Bayliss, L., Zampini, M., & Spence, C. (2007). The influence of synchronous audiovisual distractors on audiovisual temporal order judgments. *Perception & Psychophysics*, **69**, 298-309.

Vatakis, A., & Spence, C. (2007). Investigating the factors that influence the temporal perception of complex audiovisual events. *Proceedings of the European Cognitive Science 2007 (EuroCogSci07)*, 389-394.

Vatakis, A., & Spence, C. (2006). Temporal order judgments for audiovisual targets embedded in unimodal and bimodal distractor streams. *Neuroscience Letters*, **408**, 5-9.

Vatakis, A., & Spence, C. (2006). Audiovisual synchrony perception for music, speech, and object actions. *Brain Research*, **1111**, 134-142.

Vatakis, A., & Spence, C. (2006). Evaluating the influence of frame rate on the temporal aspects of audiovisual speech perception. *Neuroscience Letters*, **405**, 132-136.

Vatakis, A., & Spence, C. (2006). Audiovisual synchrony perception for speech and music using a temporal order judgment task. *Neuroscience Letters*, **393**, 40-44.

Lyons, G., Sanabria, D., Vatakis, A., & Spence, C. (2006). The modulation of crossmodal integration by unimodal perceptual grouping: A visuo-tactile apparent motion study. *Experimental Brain Research*, **174**, 510-516.

Krekelberg, B., Vatakis, A., & Kourtzi, Z. (2005). Implied motion from form in the human visual cortex. *Journal of Neurophysiology*, **94**, 4373-4386.

Navarra, J., Vatakis, A., Zampini, M., Soto-Faraco, S., Humphreys, W., & Spence, C. (2005). Exposure to asynchronous audiovisual speech increases the temporal window for audiovisual integration of non-speech stimuli. *Cognitive Brain Research*, **25**, 499-507.

Strybel, T. Z., & Vatakis, A. (2004). A comparison of auditory and visual apparent motion presented individually and with crossmodal moving distractors. *Perception,* **33**, 1033-1048.

Abstract (Peer-Reviewed) Publications:

Angelaki, S., & Vatakis, A. (2014). The unity effect for non-speech stimuli: A top-down or bottom-up process? *Procedia - Social and Behavioral Sciences*, **126**, 156-157.

Tsilionis, E., & Vatakis, A. (2014). Audiovisual speech integration in the brain: Semantics and temporal synchrony. *Procedia - Social and Behavioral Sciences*, **126**, 160-161.

Kostaki, M., & Vatakis, A. (2014). Crossmodal binding rivalry: An alternative hypothesis for the double flash illusion. *Procedia - Social and Behavioral Sciences*, **126**, 158-159.

Sellis, M., Maragos, P., & Vatakis, A. (2014). Synchrony perception and inverse effectiveness: Are they complementary or contrasting in audiovisual speech integration? *Procedia - Social and Behavioral Sciences*, **126**, 166-167.

Margiotoudi, K., Spencer, K., & Vatakis, A. (2014). Audiovisual temporal integration of speech and gesture. *Procedia - Social and Behavioral Sciences*, **126**, 154-155.

Bakirtzi, V., & Vatakis, A. (2014). The perception of integrated events in Autism Spectrum Disorders: The role of semantic relatedness and timing. *Procedia - Social and Behavioral Sciences*, **126**, 212-213.

Vatakis, A., Sgouramani, E., Gorea, A., Hatzitaki, V., & Pollick, F. E. (2014). Time to act: New perspectives on embodiment and timing. *Procedia - Social and Behavioral Sciences*, **126**, 16-20.

Indraccolo, A., Spence, C., Vatakis, A., & Harrar, V. (2014). The effect of motor response, sensory modality, and intensity on temporal reproduction. *Procedia - Social and Behavioral Sciences*, **126**, 226.

Rouchitsas, A., & Vatakis, A. (2014). Explicit and implicit temporal learning using an action video game. *Procedia - Social and Behavioral Sciences*, **126**, 255-256.

Bakou, A., Margiotoudi, K., Kouroupa, A., & Vatakis, A. (2014). Temporal and sensory experiences in the dreams of sighted and congenital blind individuals. *Procedia - Social and Behavioral Sciences*, **126**, 188-189.

Papavasiliou, P., & Vatakis, A. (2014). Emotional responses to musical intervals with specific acoustical properties and the effect of the induced emotions in duration perception. *Procedia - Social and Behavioral Sciences*, **126**, 237-238.

Vagia, A., Chandridi, G.-A., , Orfanidou, E., Vatakis, A. (2014). Is it possible to have a short, leftward past and face a long, rightward future? *Procedia - Social and Behavioral Sciences*, **126**, 174-175.

Sgouramani, H., Muller, C., Van Noorden, L., Leman, M., & Vatakis, A. (2013). Synchronization and continuation during a dance act. *Frontiers in Human Neurosciences*.

Sgouramani, H., Muller, C., Van Noorden, L., Leman, M., & Vatakis, A. (2013) Synchronization and continuation during a dance act. *Frontiers of Human Neuroscience*.

Sgouramani, E., & Vatakis, A. (2013). Alternating speed on dance videos influences duration judgments in dancers and non-dancers. *Multisensory Research*, **26(1)**, 103.

Vatakis, A., Pastra, K., & Dimitrakis, P. (2012). Acquiring object affordances through touch, vision, and language. *Seeing and Perceiving*, **25**, 64.

Vatakis, A., & Spence, C. (2012). Assessing audiovisual saliency and visual-information content in the articulation of consonants and vowels on audiovisual temporal perception. *Seeing and Perceiving*, **25**, 29.

Arvaniti, M., Sagiv N., Lecoutre L., & Vatakis A. (2012). Is A always red? Multisensory integration of synesthetic stimuli in synesthetes and non-synesthetes. *Seeing and Perceiving*, **25**, 83.

Sgouramani, E., Muller, C., van Noorden, L., Leman, M., & Vatakis, A. (2012). From observation to enactment: Can dance experience enhance multisensory temporal integration? *Seeing and Perceiving*, **25**, 188.

Vatakis, A. (2011). Current advances and directions on Time perception: Theoretical, Psychophysical, Neuroimaging, and Applied Perspectives. In B. Kokinov, A. Karmiloff-Smith, & N. J. Nersessian (eds.) *European Perspectives on Cognitive Science*. Bulgaria: New Bulgarian University Press.

Fotiadis, F. A., Protopapas, A., & Vatakis, A. (2011). The effect of cue naming in probabilistic category learning. In B. Kokinov, A. Karmiloff-Smith, & N. J. Nersessian (eds.) *European Perspectives on Cognitive Science*. Bulgaria: New Bulgarian University Press.

Spence, C., Navarra, J., Vatakis, A., Hartcher-O'Brien, J., & Parise, C. (2009). The multisensory perception of synchrony. *Perception*, **38** (Suppl.), 113.

Vatakis, A. (2008). Examining the possibility of an acquired deficit in audiovisual temporal perception for speech and musical events. *Annals of General Psychiatry*, **7**(Suppl 1): S137.

Vatakis, A., Krekelberg, B., & Kourtzi, Z. (2004). Processing of global motion from form cues in the human visual cortex. *Society for Neuroscience Abstracts*, Program No. 301.19, 85.

Greek Paper Publications:

Sgouramani, H., Vagia, A., & Vatakis, A. (2012). Ο κήπος των αισθήσεων με τα διακλαδωτά μονοπάτια: Ο πόνος ως ξεχωριστή τροπικότητα, αλληλεπιδράσεις με τις λοιπές αισθήσεις και αντιμετώπιση του; [Pain as a separate modality and its interactions with the other senses]. *Σύναψις*, **24**, 46-54.

Arvaniti, M., & Vatakis, A. (2012). Όταν ο πόνος σου γίνεται και δικός μου: Το φαινόμενο της συναισθησίας πόνου [Pain and synesthesia]. *Σύναψις*, **24**, 55-61.

Roumani, D., & Vatakis, A. (2011). Τυφλή όραση: Αντιλαμβανόμαστε πάντα αυτό που βλέπουμε; [Blind sight: Do we always perceive what we see?]. *Σύναψις*, **21**, 12-25.

Argyrioy, E., Vatakis, A., Tsoukas, E., Papadelis, G., Eydokimidis, I., & Smyrnis, N. (2010). Χαρακτηριστικά του ακουστικού - κινητικού συγχρονισμού με ισόχρονα ρυθμικά σχήματα [Aspects of auditory-motor synchronization with isochronous rhythmic patterns]. *Proceedings of the Hellenic Acoustic Society*, 435-443.

Fotiadis, F., & Vatakis, A. (2010). Εξω-Σωματικές Εμπειρίες: Μια Επιστημονική Προσέγγιση στην Σωματική Συνείδηση [Out of body experiences: A scientific approach to bodily consciousness]. *Σύναψις*, **19**, 16-27.

Roumani, D., Vatakis, A., & Moutousis, K. (2010). Όταν ο εγκέφαλος προσπαθεί να βγάλει νόημα: η περίπτωση του διοφθάλμιου ανταγωνισμού [When the brain is trying to extract meaning: The case of binocular rivalry]. *Σύναψις*, **11**, 65-74.

Vatakis, A., & Kourtzi, Z. (2010). Η αντίληψη του προσώπου – Είναι γνωσιακά διαπερατή; [Face perception – Is it cognitively penetrable?]. *Νόησης*, **6**, 99-105.

Vatakis, A. (2008). Οπτικοακουστική Αντίληψη του Χρόνου [Audiovisual temporal perception]. *Σύναψις*, **4**, 65-74.

Talks & Poster Presentations:

Talks:

Vatakis, A. (2014). Time in mental activity. Invited talk at the *ESOF2014*, June 23, Copenhangen, Denmark.

Vatakis, A. (2014). Timing and the senses in complex events. Invited seminar at the *Centre for the Study of the Senses, University of London*, May 8, London, UK.

Sgouramani, E., & Vatakis, A. (2014). "While we dance…": The effects of expertise, space, speed, and prediction on duration judgments. Invited talk presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Vatakis, A. (2013). Synchronizing my lips with my voice. Invited talk at the *Speech and Time Talk Series at Aiginition Hospital*, Athens, Greece.

Vatakis, A., & Maniadakis, M. (2013). Timing in humans and robots. Invited tutorial presented at the *Joint ROBOTDOC and POETICON++ Spring School on Developmental Robotics and Cognitive* Bootstrapping, 18-20 March, Athens, Greece.

Sgouramani, E., & Vatakis, A. (2013). Alternating speed on dance videos influences duration judgments in dancers and non-dancers. Talk presented at the *14th International Multisensory Research Forum (IMRF)*, 3-6 June, Jerusalem, Israel.

Sgouramani, E., & Vatakis, A. (2013). The influence of speed on duration estimation in dancers and non-dancers. Talk included in the symposium "Time in perception: Binocular rivalry-temporal distortions", *14th Conference of the Hellenic Psychological Society*, 15-19 May 2013, Alexandroupoli, Greece.

Vatakis, A., Pastra, K., & Dimitrakis, P. (2012). Acquiring object affordances through touch, vision, and language. Talk presented at the *13th International Multisensory Research Forum*, 19-22 June, Oxford, UK.

Sgouramani, E., Muller, C., van Noorden, L., Leman, M., & Vatakis, A. (2012). In search of lost time: Does dance experience enhance time perception on audiovisual asynchronies and whole-body synchronization-continuation? Invited talk presented at the *Institute for Psychoacoustics and Electronic Music (IPEM)*, 23 February, Ghent University, Belgium.

Vatakis, A. (2012). Η χρονική αντίληψη πολυαισθητηριακών ερεθισματών [Time perception for multisensory stimuli]. Invited talk at the *Symposium of Science and art-Science & Art: Time as the 4th dimension* organized by the Hellenic Society of Physics and Charokopeio University, January 20-22, Athens, Greece.

Vatakis, A. (2011). Improving literacy by engaging the senses. Invited talk presented at the *Eugenidio Foundation,* November 19th, Athens, Greece.

Vatakis, A. (2011). Temporal recalibration: Asynchronous audiovisual speech exposure extends the temporal window of multisensory integration. Talk presented at the EBBS2011 Satellite Meeting "Neurobiology of Time: From Normality to Dysfunction", Seville, Spain.

Vatakis, A. (2011). Οπτικοακουστική χρονική ευαισθησία και η επίδραση της βαρύτητας στις κινήσεις αντικείμενων [Audiovisual temporal sensitivity and the effect of gravity of moving objects]. Talk presented at the *13th Hellenic Conference of Psychological Research*, Athens, Greece.

Vatakis, A., Pastra, K., & Dimitrakis, P. (2011). Ανακαλύπτοντας τον ορισμό ενός αντικειμένου και τις δυνατότητες χρήσης του (affordances) μέσω της γλώσσας [Uncovering the definition of an object and it's affordances through language]. Talk presented at the *13th Hellenic Conference of Psychological Research*, Athens, Greece.

Vatakis, A. (2010). Audiovisual temporal perception and integration: Acquired deficits in audiovisual temporal perception for complex stimuli. Talk presented at the "Time and Cognition: From behavioral studies to brain imaging" Symposium at the International Neuropsychological Society (INS), June 30-July 3, Krakow, Poland.

Vatakis, A. (2010). Time in mental activity: theoretical, behavioral, bioimaging, and clinical perspectives. Invited talk presented at the *3rd COST 2102 International Training School*, 15-17 March, Caserta, Italy.

Vatakis, A. (2009). The concept of psychological time and the case of audiovisual temporal perception. Invited talk presented at the *ESF SCSS Exploratory Workshop: Qualities in Perception Science*, 2-6 November, Rovereto, Italy.

Spence, C., Navarra, J., Vatakis, A., Hartcher-O'Brien, J., & Parise, C. (2009). The multisensory perception of synchrony. Talk presented at the *Symposium: Multisensory Integration at the 32nd European Conference on Visual Perception (ECVP)*, August 24-28, Regensburg, Germany.

Vatakis, A. (2008). Asynchronous audiovisual speech exposure extends the temporal window of multisensory integration. Paper presented at the *2nd Annual Meeting of the Hellenic Society for Neuroscience,* October 16-19, Athens, Greece.

Vatakis A. (2008). Η αντίληψη του χρόνου στην πειραματική ψυχολογία [Temporal perception in Experimental Psychology: An overview]. Invited talk at the '*A symposium on Time*', September 12-14, Kozani, Greece.

Vatakis, A. (2008). Time perception: A multidisciplinary approach. Invited talk presented at the *POETICON 2nd Technical Meeting*, Collaboration Activities, July 7-8, Athens, Greece.

Vatakis, A. (2008). Investigating temporal perception in infants using complex stimuli. Paper presented at the *13th International Conference of the Association of Psychology and Psychiatry for Adults and Children (A.P.P.A.C.),* May 20-23, Athens, Greece.

Vatakis, A., & Spence, C. (2007). Investigating the factors that influence the temporal perception of complex audiovisual events. Paper presented at the *2nd European Cognitive Science 2007 Conference (EuroCogSci07), May 23-27*, Delphi, Greece.

Vatakis, A. (2006). Synchrony perception and temporal recalibration of complex audiovisual stimuli. Invited talk presented on *Oct. 31st at the Department of Biological Psychology and Neuropsychology, University of Hamburg, Research Group-Dr. Brigitte Roeder*, Hamburg, Germany.

Vatakis, A. (2006). Temporal perception of audiovisual speech stimuli. Invited talk presented on *Sept. 13th at the REVES Research Group-Dr. George Drettakis*, INRIA Sophia-Antipolis, France.

Vatakis, A., & Spence, C. (2006). Factors modulating the temporal perception of audiovisual speech stimuli. Paper presented at the *7th Annual Meeting of the International Multisensory Research Forum, June 18-21*, Dublin, Ireland.

Sanabria, D., Lyons, G., Vatakis, A., & Spence, C. (2006). Perceptual grouping and hand posture effects on crossmodal interactions. *Experimental Psychology Meeting, April 10-12,* Birmingham, UK.

Vatakis, A. (2005). Audiovisual synchrony perception for complex stimuli. Paper presented at the *2nd year Graduate Student Presentations, Department of Experimental Psychology, University of Oxford*, Oxford, UK.

Vatakis, A. (2005). Audiovisual synchrony perception for complex stimuli: How 'special' is speech? Invited talk presented on *May 25th at St. Edmund Hall College, University of Oxford, UK.*

Kourtzi, Z.,Vatakis, A., & Krekelberg, B. (2005). Global motion from form in the human visual cortex. Paper presented at the *Annual Meeting of the Vision Sciences Society*, Sarasota, Florida.

Vatakis, A., & Strybel, T.Z. (2003). Auditory and visual apparent motion with crossmodal moving distractors. Paper presented at the *Spring Meeting of the Western Psychological Association*, Vancouver, B.C.

Posters:

Vatakis, A., Pastra, K., & Dimitrakis, P. (2014). Exploratory Acts for the Acquisition of Object Knowledge. Poster presented at the *4th Joined IEEE International Conference on Development and Learning and on Epigenetic Robotics (IEEE ICDL-EPIROB 2014)*, 13-16 October, Genoa, IT.

Vatakis, A., Pastra, K., & Dimitrakis, P. (2014). Acquisition of object knowledge through Exploratory Acts. Poster presented at the *15th International Multisensory Research Forum (IMRF)*, 11-14 June, Amsterdam, NL.

Sellis, M., Beskow, J., Salvi, G., & Vatakis, A. (2014). Multisensory gain: A linear inverse or inverted U pattern? Poster presented at the *15th International Multisensory Research Forum (IMRF)*, 11-14 June, Amsterdam, NL.

Sgouramani, H., & Vatakis, A. (2014). Move still: A direct comparison of real and implied motion in duration perception. Poster presented at the *15th International Multisensory Research Forum (IMRF)*, 11-14 June, Amsterdam, NL.

Kostaki, M., & Vatakis, A. (2014). Could the unequal number of sensory inputs lead to a crossmodal binding rivalry? Poster presented at the *15th International Multisensory Research Forum (IMRF)*, 11-14 June, Amsterdam, NL.

Kostaki, M., & Vatakis, A. (2014). Crossmodal binding rivalry: An alternative hypothesis for the double flash illusion. Poster presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Sellis, M., Maragos, P., & Vatakis, A. (2014). Synchrony perception and inverse effectiveness: Are they complementary or contrasting in audiovisual speech integration? Poster presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Vagia, A., Chandridi, G., Orfanidou, E., & Vatakis, A. (2014). Is it possible to have a short, leftward past and face a long, rightward future? Poster presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Tsilionis, E., & Vatakis, A. (2014). Audiovisual speech integration in the brain: semantics and temporal synchrony. Poster presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Rouchitsas, A., & Vatakis, A. (2014). Explicit and implicit temporal learning using an action video game. Poster presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Papavasiliou, P., & Vatakis, A. (2014). Emotional responses to musical intervals with specific acoustical properties and the effect of the induced emotions in duration perception. Poster presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Angelaki, S., & Vatakis, A. (2014). The "unity effect" for non-speech stimuli: A top-down or bottom-up process? Poster presented at the *International Conference on Timing and Time perception*, March 31-April 3, Corfu, Greece.

Sgouramani, H., Muller, C., Van Noorden, L., Leman, M., & Vatakis, A. (2013) Synchronization and continuation during a dance act. Poster presented at the *14th Rhythm Production and Perception Workshop,* 11-13th September, Birmingham, UK.

Sgouramani, E., & Vatakis, A. (2013). Does speed modulate perceived duration in dancers and non-dancers? Poster presented at the *International Interdisciplinary Summer School Embodied Inter-subjectivity the 1st-person & the 2nd-person Perspective*, 9-15 June, Aegina, Greece.

Sgouramani, E., Muller, C., van Noorden, L., Leman, M., & Vatakis, A. (2013). Does dance experience enhance audiovisual temporal integration? Poster presented at the *4th Conference of Hellenic Cognitive Science Society*, 6-8 June, Athens, Greece.

Sgouramani, E., & Vatakis, A. (2013). The effect of fast and slow dance videos on dancers and non-dancers' time estimation. Poster presented at the *4th Conference of Hellenic Cognitive Science Society*, 6-8 June, Athens, Greece.

Arvaniti, M., Sagiv N., Lecoutre L., & Vatakis A. (2012). When a letter is a colour: Audiovisual integration of crossmodal correspondences and synesthetic grapheme-colour associations. Poster presented at *TIMELY Workshop on Temporal Processing Within and Across Senses*, 4-5 October, Tübingen, Germany.

Sgouramani, E., & Vatakis, A. (2012). Time goes fast: How speed modulates perceived duration in dancers and non-dancers. Poster presented at the TIMELY Workshop on Temporal Processing Within and Across Senses, 4-5 October, Tübingen, Germany.

Vatakis, A., & Spence, C. (2012). Assessing audiovisual saliency and visual-information content in the articulation of consonants and vowels on audiovisual temporal perception. Poster presented at the *13th International Multisensory Research Forum*, 19-22 June, Oxford, UK.

Arvaniti, M., Sagiv N., Lecoutre L., & Vatakis A. (2012). Is A always red? Multisensory integration of synesthetic stimuli in synesthetes and non-synesthetes. Poster presented at the *13th International Multisensory Research Forum*, 19-22 June, Oxford, UK.

Sgouramani, E., Muller, C., van Noorden, L., Leman, M., & Vatakis, A. (2012). From observation to enactment: Can dance experience enhance multisensory temporal integration? Poster presented at the *13th International Multisensory Research Forum (IMRF)*, 19-22 June, Oxford, UK.

Sgouramani, E., Muller, C., van Noorden, L., Leman, M., & Vatakis, A. (2012). How do dance experience and actual enactment of the stimulus affect audiovisual temporal integration? Poster presented at the *International Workshop on Joint Action, Models of Music and Movement Interactions in Time (JAMMMIT)*, 12 - 13 June, Ghent, Belgium.

Verriopoulou, D., & Vatakis, A. (2011). Using video games and brain training software to modulate human time perception. Poster presented at the *5th European Conference on Games Based Learning*, 20-21 October, Athens, Greece.

Bakou, E., Margiotoudi, K., & Vatakis, A. (2011). Μια σύγκριση της πολυαισθητηριακής γλώσσας των ονείρων από αναφορές βλεπόντων και τυφλών ατόμων [Comparing the multisensory language used in the dreams of blind and sighted individuals]. Poster presented at the *13th Hellenic Conference of Psychological Research*, Athens, Greece.

Margiotoudi, K., Bakou, E., & Vatakis, A. (2011). Ο χρόνος στη γλώσσα των ονείρων [Time in the language of dreams]. Poster presented at the *13th Hellenic Conference of Psychological Research*, Athens, Greece.

Verriopoulou, N., & Vatakis, A. (2011). Διαμόρφωση της χρονικής αντίληψης μέσα από την ενασχόληση με βιντεοπαιχνίδια και λογισμικών νοητικής άσκησης [Modulating time perception through training with video games and brain training software]. Poster presented at the *13th Hellenic Conference of Psychological Research*, Athens, Greece.

Verroiopoulou, N., & Vatakis, A. (2011). Modulating time perception through training with video games and brain training software. Poster presented at the *TIMELY Training School,* Groningen, Netherlands.

Vatakis, A. (2008). Temporal perception of audiovisual speech and non-speech stimuli. Poster presented at the PROUST, *SSA "The temporal dimension of functional genomics" (LSSG-CT-2006-037654), Conference: "GENES AT WORK ON TIME", October 15-18*, Turin, Italy.

Vatakis, A. (2008). Διερεύνηση της αντίληψης του χρόνου σε βρέφη χρησιμοποιώντας σύνθετα οπτικοακουστικά ερεθίσματα. Poster presented at the *1st National Conference of Developmental Psychology in Greece 2008, May 29-June 1*, Athens, Greece.

Vatakis, A., Portouli, V., & Bekiaris, E. (2008). Investigating the effects of continuous positive airway pressure (CPAP) treatment on driving and attentional performance of patients with sleep impairments. Poster presented at the *5th International Workshop on Wearable, Micro and Nano Technologies for the Personalised Health, pHealth 2008,"From Research into Practice", May 21-23*, Valencia, Spain.

Vatakis, A., & Spence, C. (2007). Crossmodal binding: Evaluating the 'unity assumption' using complex audiovisual stimuli. Poster presented at the *19th International Congress on Acoustics (ICA), September 2-7*, Madrid, Spain.

Vatakis, A. (2007). Examining the possibility of an acquired deficit in audiovisual temporal perception for speech and musical events. Poster presented at the *3rd International Congress on Brain and Behavior* and *16th Thessaloniki Conference of the South-East European Society for Neurology and Psychiatry*, Nov. 28-Dec.2, Thessaloniki, Greece.

Vatakis, A., & Spence, C. (2007). An assessment of the effect of physical differences in the articulation of consonants and vowels on audiovisual temporal perception. Poster presented at the *One-day meeting for young speech researchers*, University College London, London, UK.

Vatakis, A., & Spence, C. (2006). The influence of synchronous audiovisual distractors on audiovisual temporal order judgments. Poster presented at the *Annual Autumn School in Cognitive Neuroscience*, Oxford, UK.

Vatakis, A., & Spence, C. (2005). Audiovisual synchrony perception for complex stimuli: How 'special' is speech? Poster presented at the *6th Annual Meeting of the International Multisensory Research Forum*, Rovereto, Italy.

Navarra, J., Vatakis, A., Zampini, M., Soto-Faraco, S., & Spence, C. (2005). Exposure to asynchronous audiovisual speech extends the temporal window for audiovisual integration. Poster presented at the *6th Annual Meeting of the International Multisensory Research Forum*, Rovereto, Italy.

Zvyagintsev, M., Menning, H., Swirszcz, K.,Vatakis, A., Kourtzi, Z., & Mathiak, K. (2005). Audio-visual perception of self-induced apparent motion. Poster presented at the *8th Perception Meeting*, Tuebingen, Germany.

Strybel, T. Z., & Vatakis, A. (2004). Effect of crossmodal distractors on auditory and visual apparent motion presented in the periphery. Poster presented at *the 45th Annual Meeting of the Psychonomic Society*, Minneapolis, Minnesota.

Vatakis, A., Krekelberg, B., & Kourtzi, Z. (2004). Processing of global motion from form cues in the human visual cortex. Poster presented at the *Annual Meeting of the Society for Neuroscience*, San Diego, CA.

Maxfield, L., Juroe, M., Reece, N., Vatakis, A., & Wright, C. (2004). Enhancing prospective memory with enactment and social motivation. Poster presented at the *84th Annual Convention of the Western Psychological Association*, Phoenix, AZ.

Vatakis, A., & Strybel, T. Z. (2003). Auditory and visual apparent motion in the presence of moving and nonmoving cross modal distractors. Poster presented at *the 44th Annual Meeting of the Psychonomic Society*, Vancouver, B.C.

Clinical Setting Experience:

Employment Specialist, CSU Long Beach, Center for Career Studies, USA, 2002-04

Substance Abuse Counselor, Southern California Alcohol & Drug Programs, Downey, USA, 2002

Career Services Specialist, City of Westminster, USA, 2001-02

Summer Youth Counselor, City of Westminster, USA, 2001

Intern-Certified Domestic Violence Counselor, Su Casa Family Crisis & Support Center, Long Beach, USA, 1997-99

Volunteer Student Assistant, Long Beach Community Hospital, Department of Mental Health, USA, 1995-96

Relevant Work Experience:

Managing the publishing line of Experimental Psychology for the publishing house "Pedio" [www.pediobooks.gr].

Website administrator for the publishing company "Κοινός Τόπος" for the journal "Σύναψις" (Collective journal for Psychiatry-Psychology-Neuroscience-Philosophy; www.sinapsis.gr).

Graduate Student Marker for Undergraduate Psychology Admissions, University of Oxford, UK, 2004-07

Graduate Assistant, *Visual Search Practicum*, University of Oxford, UK, 2004

Graduate Student Intern, Boeing Corp., Phantom Works, Long Beach, USA, 2003-04

Relevant Certifications, Workshops, Coursework, & Exhibitions:

Coursera Verified Certification:

- 7-week course: What a plant knows (and other things you didn't know about plants), Tel Aviv University, 2014-15 (coursera.org/verify/HXV828DDGW)

Graduate Skills Course, Medical Sciences Division's Skills Training Programme, University of Oxford, UK, January 2007
Funded by: Medical Sciences Division, University of Oxford
Good practice in citation and the avoidance of plagiarism, Certification course

UK GRAD School, Medical Sciences Division's Skills Training Programme, University of Oxford, UK, March 2006
Personal Development for Graduates and Post-docs, 4-day Graduate course
Funded by: Medical Sciences Division, University of Oxford

Interdisciplinary Center for Neural Computation (ICNC), Hebrew University of Jerusalem, Israel, February 2006
Changing your mind about the brain, 2-week Course & Workshop
Funded by: European Union Improving Human Potential Programme

Preparing Future Faculty (PFF) in Psychology Initiative, Association of American Colleges and Universities (AAC&U) & Council of Graduate Schools (CGS), September 2004

Preparing Future Faculty in Psychology, University of New Hampshire, GRAD980 Course
Funded by: American Psychological Association (APA)

Languages:

English – native language; speak fluently and read/write with high proficiency

Greek – native language; speak fluently and read/write with high proficiency

Peer-Reviewing:

Advisory Committee member for the "Archives, The International Journal of Medicine".

Editorial Board Member for the "The International Journal of Medicine – Greek Pages" (Ελληνικές Σελίδες Ιατρικής).

Peer-reviewing journal articles on an *ad-hoc* basis for the following journals:
Proceedings of the Royal Society B: Biological Sciences, Journal of Cognitive Neuroscience, Perception & Psychophysics, PLoS ONE, Vision Research, Perception, Journal of Speech, Language, and Hearing Research, Experimental Brain Research, Medical Science Monitor, Proceedings of the European Cognitive Sciences 2005-08, *Journal of Vision, Brain Research, Attention, Perception, & Psychophysics, Restorative Neurology and Neuroscience, Journal of Experimental Psychology: Human Perception*

and Performance, Cognition, Cerebral Cortex, Speech Communication, PLOS Computational Biology, Acta Psychologica.

IT & Other Skills/Experiences:

Certified fMRI scanner operator; Driving simulator experience, Eye-tracker systems, & PC/Mac skills.

European Computer Driving License (ECDL) Certification.

Advanced European Computer Driving License (AECDL) Certification - Advanced Presentations

Programming languages: Presentation, Visual Basic, MATLAB, OpenSesame.

MS Office-Word, Works, Excel, Visio, Power Point, Front Page, Access, Publisher, and Outlook, Smart Draw, BrainVoyager 2000, SPM, SAS, SPSS, MiniTab, 3DS MAX, Graph Pad, EndNote, Neurolucida, VSearch (Mac), I-Web (Mac), I-Maker (Mac), Adobe- Premier 6.0, Audition, After-Effects and Creative Suite, Sony Vegas, PRAAT, Transcriber, Callisto, Anvil, ELAN, Audacity.