



LIVE MUSIC NOW FRANCE
International Symposium : »The Benefits of Music on the Brain »
Paris, November 9th to 11th 2018

Summary of Scientific Presentations

Introduction, Michael Meurer :

Music has been a part of human life and society for thousands of years, but in many ways it remains mysterious: what makes it enjoyable? What gives it its power to affect our emotions and memories? And how can clinicians effectively harness this power? Three scientific and one clinical presentation illuminated some of the answers to these questions: the scientific statements covered a broad range of topics, from the fundamental properties of auditory perception that allow us to perceive music, to specific brain regions - as detected by novel neuroimaging techniques-and the chemical or hormonal transmitters that are involved in the positive effects of music on the central nervous system and the nature of the connection between music and memory. The clinical statements gave an excellent overview of the literature on the effects of music on health and quality of life in children and adults and provided impressive examples of these effects in various clinical populations; these include patients with neurodegenerative disorders such as Parkinson's or Alzheimer's disease and patients with depression, recovering from a stroke or from post-traumatic stress.

Thomas Hans Fritz: Encouraging Music Evoked Brain Plasticity

Prof. Fritz in his lively presentation gave inspiring examples how music strongly engages humans across their lifespan from infants in the womb who learn to recognize music even before birth, to elderly dementia patients who often remember music better than non-musical stimuli. While even passive listening to music activates the dopaminergic system - a chemical reward pathway in the brain - active participation in music has even greater benefits for clinical and non-clinical populations. Especially Jymmin™, an exercise program linking music to motor movements has been shown to be highly effective for increasing endurance, mood, self-efficacy and reducing anxiety, pain as well as perceived exertion in different populations.

Katia FONBERG, David TEROSIER, Sylvain RENOLLEAU, Laurent DUPIC:
LMN France at the Hôpital Necker-Enfants malades, Paris

Caregivers at the Necker Hospital have organized several musical interventions including beatboxing, a musical expression of the body through the imitation of sounds and the crafting of music by only using mouth,throat and nose for children with serious, often life-threatening conditions. According to testimony from hospital staff, doctors and musicians, these interventions are important tools of expression and emotional communication and a rare source of happiness for hospitalized children, parents, and caregivers. Meta-analyses show a clear beneficial effect of musical interventions in clinical settings, even when including individual studies that (perhaps due to small sample size) found no significant effects. These musical interventions are always optional, and only performed after establishing the child's non-opposition to the event.

Daniel PRESSNITZER: The deep links between auditory perception and memory

Perception and memory are deeply intertwined, and both involve making inferences about the world from incomplete sensory information. However, listeners are typically unaware of this process of inference, sometimes resulting in unwarranted confidence in interpretations of ambiguous stimuli. This is illustrated by auditory illusions such as a sound clip, recently popular online, heard as “Laurel” by roughly half the population and “Yanny” by the other half. Encoding perception into memory also takes place automatically and without awareness, as illustrated by experiments involving repeated presentation of noise, which can be learned even during sleep. Musicians are particularly aware of these truths about perception, perhaps because examples of repeated stimuli and ambiguous stimuli are often found in music.

Hervé PLATEL: Music and memory: from neuroimaging to clinical applications.

Prof. Platel first applied neuroimaging techniques to visualize regions of the brain where music is perceived and thus he was able to delineate a brain map of musical memory in non-musicians and musicians alike. Among other findings, these studies suggest that musical practice could help to stimulate, perhaps even to preserve, memory mechanisms sensitive to aging. Music activates many levels of memory, including semantic memory (recognition of a familiar song) and episodic memory (remembering a time when you heard a song). Distinct patterns of brain activation have been observed by neuroimaging for tasks requiring different kinds of musical memory. In elderly patients with dementia, music can be learned better than other novel stimuli, and musical exercise can stimulate memories. Music has been known for a long time to be an important mediator in the regulation of mood; but now it has been shown to be also a cognitive stimulator that activates previously unsuspected learning abilities in patients with dementia even at a severe stage of their illness.

Michael Meurer, Jackson Graves : Discussion and summary

The attendants of the International Symposium expressed their gratitude to LMN France and in particular to all speakers for their lectures and demonstrations which were regarded as being highly relevant to their work and experience as LMN members organizing concerts for sick and elderly listeners. In addition, the high quality of the scientific and clinical presentations made it clear that today's sophisticated research methods have confirmed and considerably expanded the concept of our founder and mentor Yehudi Menuhin of music as a healing force which - still is the essence of our engagement for Live Music Now.

Pictures

Welcome adress Ian STOUTZKER

It was always Yehudi's desire that Live Music Now should reach out beyond the United Kingdom. Paris was near to his heart living there in his youth. The resurrection of a branch in France would have given him special pleasure. That Paris should be the centre of an initiative to bring together other countries where Live Music Now has taken root, to exchange ideas and develop collaboration, is a fulfillment of his dream.

Ian Stoutzker, CBE Founder President LMN UK





Concert with LMN musicians : ELMIRE QUARTET

November 10th, 2018



Gipsy music : LMN France musicians Nicolas ARSENIJEVIC, saxophone and Noé CLERC, accordion



Thomas Hans FRITZ : Encouraging Music Evoked Brain Plasticity



David TÉROSIER : LMN musician, Beat-Box demonstration



Sylvain RENOLLEAU : Testimony of musical interventions at the Hôpital Necker-Enfants Malades



***Katia FONBERG, David TEROSIER, Sylvain RENOLLEAU, Laurent DUPIC :
Testimony of musical interventions at the Hôpital Necker-Enfants Malades***



Michael MEURER, LMN Dresden : presentation of the 2. part of the symposium



Daniel PRESSNITZER : The deep links between auditory perception and memory



Hervé PLATEL : Music and memory: from neuroimaging to clinical applications



*Maison de la Radio, Paris : Finale du Concours Long-Thibaud
Intermission with Renaud Capuçon, Hon President LMN France,
Zamira Menuhin-Benthall, Hon President LMN Germany and LMN Austria,
Ian Stoutzker, Founder President LMN UK*

November 11th, 2018



Carol Main Symposium, LMN International Activities



Some LMN members : Elisabeth, Françoise, Julia, Barbara



***Zamira Menuhin-Benthall, Hon President LMN Germany and LMN Austria and
Gérard Berrut, owner Bedford Hotel***