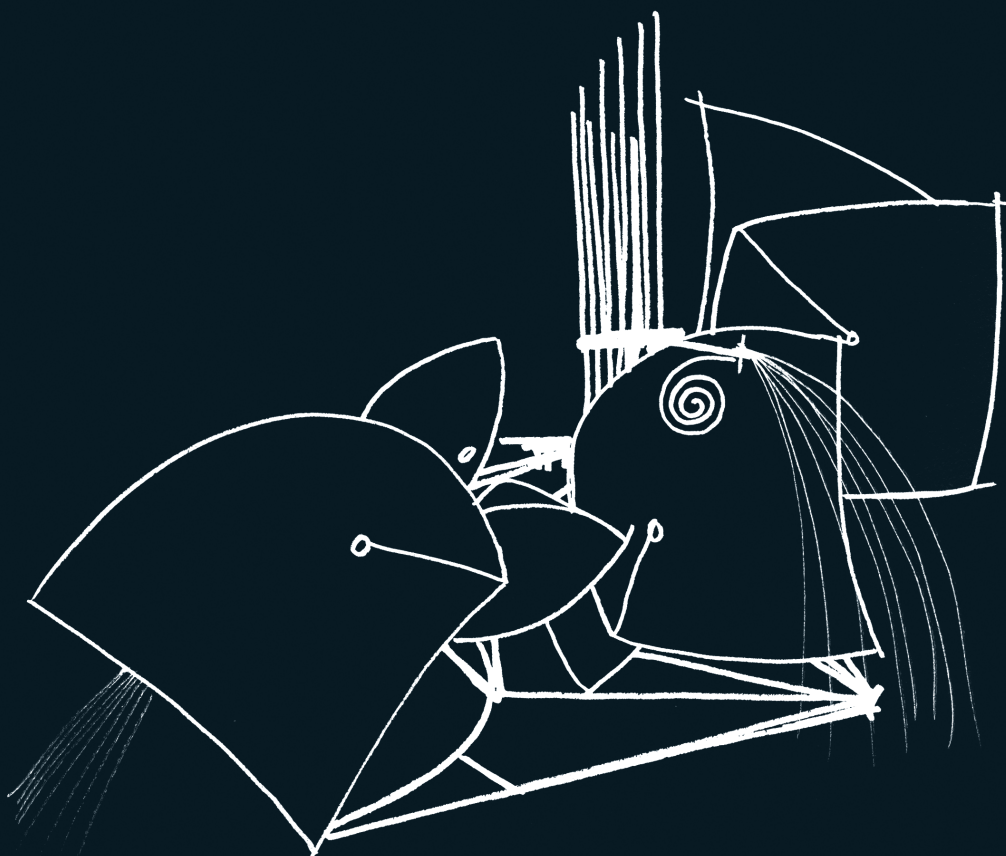


The Sound Sculptures of Bernard and François Baschet

François Baschet

Trilingual extended edition



CONTENTS

<i>Foreword</i> , by Joan Elias i Garcia	9
<i>Foreword to this edition</i> , by Martí Ruiz i Carulla.....	11
<i>Acknowledgments</i> , by François Baschet	19
<i>Notes and introduction</i> , by Trevor Taylor	21
<i>Foreword</i> , by Yehudi Menuhin	23
 The English Book 1 & 2	25
Memoirs (1964–1999).....	151
Musicians Currently Using Sound Sculptures.....	273
Organologie des Structures Sonores Baschet	291
Las esculturas sonoras de Bernard y François Baschet	313
 <i>Index</i>	483

FOREWORD

It is an honour for the University of Barcelona to be able to present this book, *The Sound Sculptures of Bernard and François Baschet*, by François Baschet. This new edition of the English text and the Spanish translation, by Edicions de la Universitat de Barcelona, has been made possible due to the support and the collaboration of the University of Barcelona's Vice-rectorship of Arts, Culture and Heritage, the same university's Humanities and Social Sciences Park, and the Metabolic Studio in Los Angeles. The text follows a historical path, from 1945 to 1964, through the forms, the sounds and the people that make up the Baschet experience. Countries and journeys; itineraries and exhibitions; cities and festivals. Memoirs that contemplate and complete the different perspectives of the Baschet universe by sharing experiences, conversations and opinions of such pre-eminent figures in art and culture as Jean Cocteau, Yehudi Menuhin, Edgar Varèse, Pierre Schaeffer, Henri Lazarof, Ravi Shankar, John Cage, David Tudor and Tōru Takemitsu.

The work of François and Bernard Baschet, pioneers in sound sculpture, comprising an instrumental corpus of more than 500 works, is already part of university teaching and research practices, by incorporating historically successful contrasting experiences.

By way of example, the collaboration between François Baschet and the young researchers of the Baschet Sound Sculpture Laboratory at the Faculty of Fine Arts has been an opportunity for and an encouraging experience of, among other things, the transfer of knowledge to society and internationalization.

Sound sculptures, the construction of new instruments and music teaching as actions of interdisciplinarity and the search for new and sought-after collaborations between different academic fields, faculties

and institutions. Physics, the plastic arts and music bring scientific vocation and creativity together on the same level—a humanist vision that demands of each and every technological advance its true and necessary social function.

Joan Elias i Garcia

Rector of the University of Barcelona

FOREWORD TO THIS EDITION

It is an honour and an indescribable joy to be able to include a few words in this book. First of all, I would like to thank all the people and institutions that have made this project possible. Eighteen years have passed since this book was published in 1999, and three since François Baschet died. One could fall into the vain temptation of summarizing the activity of these years, but that is too ambitious a project that will require a whole new book. Given that neither of the Baschet brothers ever retired, their lives in the early decades of the twenty-first century will be of great interest for completing the story told in this book. Therefore, I shall restrict myself to briefly contextualizing the reasons for this new edition, which we are not producing merely with a historicist wish, but because it is part of the creation of François's last great project.

11

From our first meeting in 2009, in his house in Calle Verdi in Barcelona, we began to work together to create a workshop, a space, a collective project, some way of continuing his work and his discoveries. When I met François he was 90 years old, and yet he was prepared right from the start to collaborate in any way he could to share his experience and his discoveries. When we founded the Baschet Sound Sculpture Workshop at the UB's Faculty of Fine Arts, thanks also to the support of his collaborators in Barcelona, François showed no interest whatsoever in the posthumous glory of his name. What did interest him was the rekindling, with his surprisingly youthful enthusiasm, of our desire to learn and do new things: to keep the wheel turning, to give him one last push to pass on the baton. This is not the place to talk about the progress of the workshop, but we must mention it to thank him for all the energy that he expended on this last great project. His family, his friends in Europe, Canada, the USA, Mexico and even Japan, were joining in this last unexpected period of rejuvenation with renewed energy. In this new phase, dozens of people deserve our gratitude, since this network of friends

scattered all over the world has contributed generously to breathing life into the projects of the new Baschet Workshop. This book is the result of this process that began, a tool for the memory and for future development. Our thanks once again to Trevor Taylor for his contribution to the creation, in 1999, of the first edition of the English part of this book, and for his kind collaboration now.

One of the many challenges we set ourselves, due to the pressing feeling of working against the clock because of the advanced age of both Baschet brothers, was the need to work to keep the memory of their work alive, to go into it in depth and make available to the public all the audio-visual material, texts and photos, and to make a catalogue raisonné. In this collective process, we have all learned and we have realized how much work still remains to be done. In this time we have indexed more than 500 unique pieces, of which we have been able to listen to, and study directly, about 60. In Barcelona we have a few dozen, as we do in France. In Japan there are about the same number, which we began restoring in 2013 to resume the cycle of possible activities—study, participative exhibition, the creation and increased awareness of sound, and so on—with the inestimable advice of the maestro Alain Villemainot. The remaining pieces are indexed, for the most part, in the digital archive on which we are working, and quite a few of them in this book. Many of them, presently lost, will require our tireless search—among institutional collections and private collectors—or reconstruction based on the information that we manage to gather. Fortunately, the network of collaborations is already achieving results thanks to working jointly with the National Autonomous University of Mexico, the Kyoto City University of Arts and the Tokyo University of the Arts. We therefore hope that this English, French and Spanish edition and its digital version contribute once again to presenting the Baschets’ work to a greater number of people all over the world. If there is anything that we for our part have to add, it is the evidence that the Baschets’ work and their texts have not remained stuck in the past—they are still alive.

We can currently claim that the contribution of the Baschet brothers to the field of organology—their intuitive method for conceiving and analysing the functions of any existing or hypothetical sound structure—is an unparalleled framework of reference for anyone interested in the creation of sound objects. The scope of the system that they conceived goes much further than their own work. Now, at last, we can say that this system is beginning to penetrate the academic world through our

inter-university collaborations, in order to be the subject of continued refinement as should be the case with all scientific ideas. At the same time, we know that the Baschets' publications have already helped self-taught people to promote their own inventions. This was always one of the great satisfactions for François; we hope, then, to contribute to this phenomenon, which seeks to encourage creativity in a consumerist world in which we tend to have available only what is offered to us commercially, without considering what each of us can do. This book serves as a guide for reading the work that makes it possible to understand complex contemporary notions about acoustics and working with them, even without having advanced scientific knowledge. In this field, our small inter-disciplinary team continues the sound design studies of tone colour, tunings, the composition of cacophonous sounds, in order to get close to other possible types of music and expressions of sound, just as Chladni himself proposed. Some of François's last sculptures—small Baschet Cristals with split diffusers in the form of a flower, which do not appear in this book—represent the development and distillation of their ideas about acoustics, and they enable us to keep researching into the relationships between form, matter and action as the method for giving shape to sound. These studies of the dynamic nature of the sound spectrum represent a field of work that we have to continue exploring. Although neuro-acoustic science is studying the impact and the mechanisms of listening, there is still much to discover about the benefits of listening to these sounds when they are produced by the listener.

In my opinion, it is obvious that the Baschets' work is a paradigm shift in art history, given that it is probably the first acknowledged artistic corpus that remains active, just as it was when its creators were still alive. The Baschet pieces are still active, just like a forest, an orchard or a garden in which the species endure and continue to offer their varied fruit for a long time after being planted, after several generations of gardeners cultivating and looking after them have come and gone. Staying with the botanical metaphor—which echoes Bernard's vocation as a tree grower—we can understand that only by knowing the characteristics of the preceding species, and looking after the living specimens, is it possible to think of new uses, new ways of making the most of their benefits. Moreover, this knowledge makes it possible to imagine new hybrids giving rise to completely new species, adapted to different contexts. Both brothers trusted in the continuity of this ecosystem, of this sound activity that they loved so much, and they agreed to our proposal to call any new constructions and inventions that we might create *Après-*

Baschet,¹ as a clear way of distinguishing their original and historical work with respect to anything that may be derived from it, without necessarily resembling it visually or sonorously. This attests to their generosity, accepting this name as a tribute and a means of public recognition, without implying future restrictions.

After Bernard's death in 2015, with whom we were also lucky to work on the cataloguing of his work, along with our colleagues in the Baschet Sound Structures Association we entered a phase of restructuring for the purpose of defining the right strategies to ensure the continuity of the global project. The time has come to reread the Baschets' work, from the discovery of this entire sound universe by new generations, to the contemporary challenges posed by an interactive body of work, and the discussion about the role that should be played by educational and museum institutions in encouraging a more participative culture. The element of public participation makes the Baschets' work a new chapter in the history of contemporary art. The very idea of sound sculpture questions preconceived ideas about the nature of art and music. What conditions are required for the multiple sound experiences that each person may have to be considered music or even art? And to what extent should we discuss in order to reach a conclusion? The fact is that the Baschets' work, rather than answering these questions, draws us even farther into its depths in an essentially Socratic way, it invites us to take an active part in the phenomena and allows us to experiment and think for ourselves.

The work of the Baschets leaves us an intellectual corpus that manifests itself in the tangible structures and in a considerable series of texts. Some of them, written for a practical and educational purpose, were addressed to vocational training students and to people interested in the construction of new structures, like *Klangobjekte*, published by Eberwald in 1993. We must also remember Danièle Frauensohn's book, *Bernard Baschet: chercheur et sculpteur de sons*, published in 2007, plus five documentaries that allow us to listen to the Baschets talking, and the articles published in various specialist journals, like the one that appears in *Experimental Musical Instruments* (Vol. III No. 3), published by Bart Hopkin in 1987. We hope to be able to republish them and translate them into various languages, alongside the process of making a catalogue raisonné of the work.

¹ With the polysemic complementariness between the reading in French ("after Baschet") and the reading in Catalan ("learned from Baschet").

I understand that, given the Baschets' active commitment to education, this book is part of their work; it is not just a review or remembrance of it. For this new edition we have considered it necessary to recover unpublished passages that were written and then discarded for the first Vancouver version,² which was never published. Some of these texts refer to theoretical notions and to specific pieces, and they are sometimes the only testimony to works that were often reconfigured or eventually converted into others without leaving any tangible trace. Thanks to our total access to all the personal archives of both Baschet brothers, we have also incorporated other fragments of unpublished memoirs, encounters and thoughts; among them, some of the subtlest that we have been able to read by François, such as the passage in which he reflects on the philosophy contained in the nuts and bolts³ of his work. We have also sought out all the photographs and original illustrations, we have digitized them, we have replaced some of the images with better-quality versions and added the illustrations that corresponded to the contents of the passages of unpublished text. The Taylor edition of 1999 included a CD with some pieces from different periods. In our edition we have preferred not to do this, given that it is now possible to find these and many others on the Internet. We hope that, in the near future, along with the cataloguing process we manage to organize an accessible database that links all the available recordings to the physical structures that were used. The Baschets did extensive research work for decades, of which they always left an account in notebooks and technical and personal diaries. All these contents were expanded and successively rewritten, so much so that at some point in their history they did the layout for a volume of technical reports in French. This text was unpublished as such, but it was the basis for making and remaking the

² After publishing some texts in *Sound Sculpture* (a book published by John Grayson of the Vancouver Aesthetic Research Center in 1975), the first version in English of the bulk of this publication was produced in order to be published in Vancouver during the 1980s. This specific document never saw the light of day back then, although some years later it was used as the basis for Trevor Taylor's 1999 edition. During our research and cataloguing we have found the Vancouver typescript and we have recovered all the technical fragments and reflections that for some reason were left out in 1999.

³ Note that the English expression "nuts and bolts" refers to the particular elements of any thing or subject, physically and figuratively, which pleasantly coincides with the fact that the Baschets' work is actually based on nuts and bolts.

document for Vancouver and the Taylor edition. Access to this volume in French, corresponding to the last third of the memoirs in our edition, has been of great help for the present translation into Spanish, both for the technical questions and for maintaining the nature of François's writing.

Furthermore, in response to a personal request by Bernard Baschet, we promised to conclude the new edition of the English text by adding the short document entitled *Organologie des Structures Sonores Baschet*. Written as a compendium by the two brothers, we have based ours on the document deposited in the Cité de la Musique in Paris in 1985, although we have found versions in English and French with different contents that we have added to our edition. This text and its diagrams contribute an even more defined view of the technical, systematic, conceptual dimension of complex sculptural acoustics. Despite the fact that in not one single Baschet text, not even in the more technical ones such as patents, do notions such as “xentonality” appear—very convenient for many of their cacophonous spectrum sounds—it is obvious that they knew perfectly well which complex acoustic phenomena they were setting in motion to offer other alternatives to the conventional temperaments of the West. This type of work on the components of the dynamic sound spectrum, which also led them to enlarge the timbric palette with an impact on the imagination of sounds from their beginnings, corresponds to their collaboration with Pierre Schaeffer's GRM, a period we are still rediscovering. Listening to the Baschet pieces, we realize that their contributions to organology are an inexhaustible source for new ways of understanding sounds and considering them. These pieces are unique examples of very rich complex systems about which there is still a lot to be learned.

For all those who were not fortunate enough to know François, this book gives them the opportunity to find out about his sense of humour and sensitivity. For those of us who knew him it is an explicit materialization of his presence. And so we remember with him stories and parables that enable us to get an idea of the philosophy, the idiosyncrasy, the positioning and the poetics of a body of work that must be experienced at first hand. Everything François experienced in his life had an impact on his unusual way of being and working. Let us approach a body of work largely unknown, because of its complex interdisciplinary nature, and unfairly ignored, doubtless due to the social commitment and the questioning of a certain order of conventions and relationships that it proposes: work of which one gets a partial view when it is observed only from the world of music or from the world of the plastic arts. With their boundless

imagination and their need to contribute significant changes for the benefit of everyone, François and Bernard represent a unique case in the art of last century. Ahead of their time, they ventured into novel projects, armed only with timeless acoustic principles, convinced of the great potential of their application for contemporary societies. Their proposals involve a reconsideration of the relationships between art and science; of the relationships between learning, research, exploration and innovation; of the real purpose of knowledge and technical progress, with the conviction that no development makes sense in itself if it is not at the service of inclusive and tolerant ethics, social commitment, personal progress, the appreciation of diversity and the defence of the freedom of action, thought and expression. It is not a chance position, or an option chosen lightly; it is a direction followed while fully aware, assuming the risks and the contradictions it entails. Nothing complex allows itself to be reduced to simple slogans. It is not enough to conserve the pieces physically: it is necessary to keep the ideas and intentions alive. Many images are required, many texts, many hours of conversation and discussion, and above all time to play with sound, to get an accurate idea of what the Baschets offer us.

Some of the episodes that appear here can also be found mixed with others in their book *Mémoires sonores*, published by L'Harmattan, and we know that there are still so many other stories to compile, featuring people scattered all over the world. We try to collect them as veritable treasures that were entrusted to us by François and his friends. Until the time comes to add to this compendium of publications, let us enjoy and learn from the successes and failures that are written about here. Let us share their happiness and frustrations. Although the twentieth century already seems like the past and the new technologies offer so many new possibilities, our world is still the same in many ways, with the same challenges facing us, if not bigger ones. The sound sculpture of the Baschet brothers is open to all and is different for everyone. François gives us his own version here: the life story of an artist, an insatiable inventor, a visionary poet, a kind revolutionary, a true master and a great friend. Long live "Baschetology".⁴

Martí Ruiz i Carulla

Baschet Sound Sculpture Workshop

⁴To access further information and updated contents of the on-going projects, consult www.tallerbaschet.cat and www.baschet.org.

ACKNOWLEDGMENTS

I would first like to thank my brother, Bernard Baschet, for it was his love of music that inspired us to combine it with my sculpture.

Additional thanks must go to my translators into English. First, the incandescent Mary Helen (Caroline) Lane, who was there from the start of this literary adventure. Then, to Candace Lyons, who not only captured the spirit of the atelier and of our work, but also has managed to capture the spirit and sense of my words and thoughts.

A special thank you goes to Terese Braunstein, who helps me to keep some order in the kilos of documents I have to dig in that go back to 1952.

By way of traditional acknowledgment, I wanted to list all the people who have helped us professionally during almost half a century (that's a very long time). But the list turned out to be several pages long and I had to give it up. However, in the book, we try to mention everyone in explaining how and when they helped us. If, unfortunately, I have overlooked anyone, please forgive me and accept my invitation to stop by the atelier so I can express my gratitude over a friendly glass of wine.

Thank you to all our friends.

François Baschet

NOTES AND INTRODUCTION

This book has been a long time in the making, but I am delighted it has finally made it into print.

My own involvement and the history of the book's contents is somewhat complicated, so perhaps you will excuse me if I take a page or two to explain how it all came about.

I first became aware of the wonderful Baschet instruments in 1972. At the time I was a percussionist specialising in music for solo percussion, especially avant garde and experimental music. I had purchased a wonderful record by the Japanese percussionist Stomu Yamashta where he played marvellous compositions by the finest composers of the day, Hans Werner Henze, Peter Maxwell Davies and the foremost Japanese composer (and one of my favourites), Tōru Takemitsu. The record was particularly well produced and contained some beautiful photographs of Stomu playing a variety of exotic percussion instruments, including a selection of Sculpture Sonores by the Baschet brothers. I was immediately entranced by their fabulous looks and incredible sounds and vowed that I too would try to use them in my performances. Some time later I conducted an interview with Stomu for a British magazine and through him made contact with the Baschet brothers, who were living and working in Paris. On contacting them I was immediately struck by their friendliness, openness, and their enthusiastic willingness to help, and a little later still I journeyed to Paris, and true to their word returned with many instruments to use, totally on trust as they hardly knew me at all.

I used the instruments for many performances at the time, both solo and in the Meta Music Ensemble of which I was a member at the time, and in various recordings I made, and eventually (and very reluctantly) returned them to Bernard Baschet in Paris.

There then began a considerable gap until any further contact, in fact nearly ten years until the early eighties, when, as I had a chain of retail music

stores, my percussionist colleague Malcom Ball and myself began importing some of the then new Baschet Percussion kits, in the hope of spreading the word, and making the instruments available for purchase by musicians in Britain. Unfortunately, the narrow mindedness and general lack of vision of younger musicians we pitched them at curtailed a strong market for the kits, although they were very reasonably priced. It was at a time when the first generation of dreadful electronic drum kits had begun to emerge, and 'acoustic' was out of fashion. But as they say what goes around comes around, and I hope one day to see these wonderful (as well as educational) instruments available to buy again. There was then another gap of around ten years before contact was made again in 1998, when as the editor of *Avant* magazine I recontacted them to do an article bringing their story up to date. This resulted in a visit to see them at their atelier in the Latin Quarter of Paris, where François told me their story and enquired if I knew a suitable publisher for a book about their lives and sound sculptures. By one of those amazing coincidences in life I had just started publishing books about music, and jumped at the chance, and so we began to discuss the planning of this book.

I should make it clear that the contents were not all newly written. The current book in fact consists of three books, the first two (which we have subtitled *The English Book*) were written in 1980 as a commission from John Grayson at the Aesthetic Research Centre in Vancouver, but unfortunately remained unpublished. The contents were mostly technical and were translated into English (in which they were to be published) by Mary Helen (Caroline) Lane. The third book was finished in 1989 about 18 years later and was planned by François to be a philosophy of his life, his understanding of 45 years in the arts, as well as memoirs of life from his youth to the present day. At the time it existed only in French and we have to thank Candace Lyons for an equally excellent translation of these fascinating memoirs. On reading it and the earlier English books it became clear to me that nearly all the material was necessary to paint a complete picture of the fascinating lives of these two great artists, and in collaboration with them both, I am proud to have made a very small contribution in making information about them more readily available.

Trevor Taylor
April 1999

FOREWORD

Since music consists of audible vibrations, I would like to consider our ears for a moment. What extraordinarily demanding instruments they are, and how indefatigable, asking constantly to be satisfied, never at rest. I find it symbolic that we have eyelids but no earlids, no means of shutting out or turning off the noises all around us. Our ears wake us out of the deepest sleep, and it is left to the deaf, whom I feel must be the loneliest of people, to conceive of a world of total silence. At best, our ears can detect sounds vibrating at less than 30 beats per second. But these sounds are only part of a much longer continuum of vibrations found throughout the universe, some of which we can hear as distinct beats, for instance the heartbeat, whose average is 72 per minute, and some of which we can only see, such as ocean waves, the cycle of day and night, the phases of the moon, the shift of the seasons.

Other vibrations lie beyond our conscious senses, though the eleven-year sunspot cycle affects us nonetheless, setting off earthquakes, breaking up icebergs, and even influencing, grimmest of all thoughts, the peak years for fine French wines. The universe offers much faster waves, too, flowing through matter and through ourselves as though nothing were there, and waves that move so infinitely slowly they take years to pass us by. Sound lies at the heart of the cycle of vibrations, beginning just where touch stops, and ending just before radio waves begin. I believe profoundly that music helps keep us in touch with the entire vibrating world, and thereby centres us in our own being. When the lowest notes are sounded on a great church organ, we feel the vibrations in our entire body, while the violin, producing sounds up to seven octaves higher, penetrates us just as surely.

Many animals can adjust the angle of their ears to collect sounds, just as the giant radio telescope at Jodrell Bank focuses on faint pulses from deep space. This brings me to another of my idiosyncratic theories: that all consciousness in space-time is simply a matter of degree. It is not something which comes suddenly to man at the moment of birth,

but rather, can be compared with different degrees of temperature, or the difference between a solid, a liquid or a gas. I believe, too, that consciousness is akin to sensitivities which can be measured in a rose or even in a stone. Long before there was life, the elements out of which our world is made responded to all kinds of vibrations, from chemical reactions to electromagnetic forces, the pull of gravity, the cycles of light and dark. Somewhere within ourselves, I believe we retain an organic sensitivity to those same waves. From the moment our most primitive animal consciousness appeared, it was already affected by these forces, the mainly unconscious sense that 'I am' is more than animal instinct, as it is more than human intellect. Through it I feel that we are irrevocably linked to the universe, just as much as any rock or plant. I cannot fathom any other way to account for such widely documented experiences as telepathy and precognition.

The incredible sensitivity of the human ear contributes to the complex interplay between hearing and our emotions. We separate the intelligible from the random, the wanted from the unwanted, holding the thread of a conversation at a crowded party or on a noisy train. Our memory allows us to put sound and meaning together, and memory relies on repetition and recognition to create language. But there is a critical distinction between music and speech. By this I do not mean the obvious fact that one has melody and the other meaning. After many a concert I have been asked what the music I played means to me; we have had to develop an elaborate set of terms to describe what music means. The key difference lies in the fact that words refer first and foremost to the real world outside of us, to things and actions for which they serve as useful, acceptable symbols. Music, on the other hand, has a special relationship to our inner being. Our feelings become entities in themselves apart from literal meaning, and music shapes and alters them.

Music, like language, has developed its own structures, grammars and vocabularies. It has had to move in a way that corresponded with human ways of thinking and acting. Within this constellation of possibilities are the remarkable inventions of the Baschet brothers, whose extensive collection of sound sculptures has created a wide vocabulary of new sounds, many of distinctive timbre. The musician in each one of us will play an important role in deciding whether these new sounds will become part of the musical and sculptural traditions of the future.

Yehudi Menuhin