Sloboda, John A, and J. Ginsborg. "25 years of ESCOM: achievements and challenges." *Musicae Scientiae* , (2018).

Part 1

ESCOM was founded to provide a European platform to promote and support scholarly activity in the cognitive sciences of music. As befits any international society, it has always been open to scholars outside Europe, and indeed many scholars from other continents have attended and presented at our events, become members, and written in our journal. There has been particularly active participation from Australia, Canada, and the USA, as well as consistent support from Israeli colleagues.

But it is the participation of Europeans which gives ESCOM its distinctiveness and its reason to exist. How well has it done over its history in encouraging and manifesting that participation? Which European countries have participated in ESCOM? How has this participation changed over time? Can we draw any lessons from this about how ESCOM should respond in its second 25 years?

From its inception ESCOM has taken the broadest possible view of what is meant by Europe. Europe does not mean the European Union, but rather those 50 countries which have historically been included in Europe, including members of such bodies as the Council of Europe founded after the Second World War. It includes Turkey and Russia, and extends eastwards as far as Kazakhstan.

To explore this issue we analyse two data sets. First, we look at the country and institutional distribution of authors in *Musicae Scientiae*, ESCOM's journal. Second, we examine the country distribution of the members of ESCOM, i.e. those who have paid an annual subscription. For full members this entitles them to receive the journal, vote, and serve on the committees of ESCOM. For student members this entitles them to receive the journal at a substantial discount.

There is a third data set which deserves compiling and analyzing, which is the attenders and presenters at our conferences and other scholarly meetings. However this is a huge task, involving the greatest number of people overall, which would need the co-operation of many different organisers over time, and is a task for the future (probably a collaborative one).

1.1 Musicae Scientiae

We begin with the journal, not least because the raw data are available in the public domain. Anyone can check the data for themselves by going to a library where the full run of journals exists. Our current publisher SAGE has also provided an excellent service in listing the contents of every issue (and all abstracts) on its website, available to anyone to consult free of charge. So most but not all of the data are online. For some reason, not every author has their country or institutional affiliation listed on the SAGE website. For a complete listing one has to go to the paper version.

We reviewed each issue from Volume 1 (1997) through to Volume 21 (2017). Our analysis confined itself to peer-reviewed original scholarly contributions. We excluded book reviews, editorial material, prefaces, obituaries, tributes, and other announcements. Even so, the number of named authors over the period as a whole was 885, that's an average of more than 40 per year. Of course there were fewer articles than this, because many articles were co-authored by more than one person. But it is the people, and the countries in which they worked, that is of relevance.

Our first analysis took the entire body of papers, from 1997 through to 2017. Of the 50 European countries, contributions came from only 22 of them. 28 countries provided no contributors at all. Some of these are tiny countries (such as the Vatican City, or Lichtenstein) whose absence is neither of surprise or of concern. But the absence of substantial countries, with longstanding higher education, is of more concern. Why nothing from Bulgaria, Czech Republic, Russia, Serbia, Slovakia?

Column 2 of Table 1 shows the absolute number of authors from each country. As this shows, the UK and Germany far outscore any other country, with respectively 182 and 165 contributors. The next highest is France with 78 followed closely by Finland with 66. All other countries are quite far below this.

But simply taking absolute numbers is not the best measure of participation, since the overall populations of Europe's individual countries are very different. The UK has a population of 66 million, whereas Finland, for example, has only 5 million. If the participation rate of these two countries were the same, we would expect 12 times as many contributions from the UK as from Finland, but the UK actually only contributes 3 times as many.

To get a fairer measure of comparative contribution, we have corrected the participation figures for the population of each country, to the nearest million. Column 3 gives the population of each country, and column 4 is a comparative measure which shows how far each country is above or below the average participation per million of population for all 22 participating countries combined, where 1 is the average.

Table 2 shows these data re-sorted with the highest scoring country at the top, and the lowest at the bottom. There's a group of eight countries who achieve or exceed the average participation rate, headed by Finland, way ahead of any other country. Tiny Estonia is also very far ahead of the rest. The UK and Germany remain in this top group, even though corrected for their large populations.

Then there is a second group of eight countries, ranging between 75% and 25% of the average participation. The positive surprises here are perhaps that Ireland, Lithuania and Greece find their way into this group on account of their small populations, even though the numeric total of authors is small. On the other hand, high-participating France has moved into this group from the top four, because of its large population.

The third group, containing the remaining seven countries, are all at 10% or less of the average participation. This group contains three countries with populations of over 35

million, Spain, Poland, and Turkey, with Denmark having lowest participation rate above zero (one author in 20 years).

These categories are displayed on a map in Figure 1, so that the spatial distribution is clearer.

What becomes apparent when the data are mapped in this way is that the highest concentration of participation is focused in the north and west of Europe, with lower participation in the south and east.

If one of ESCOM's aims has been to encourage participation we should hope to have seen a spread over time in the number of participating countries, and also have seen the participation rate increasing over time, particularly in those countries with initial low participation rates.

In order to see whether this has been true, we split the data into two time periods, 1997-2009 (accounting for 450 authors) and 2010-2017 (accounting for 435 authors).
Table 3 shows these data, for each country, organised as earlier by the three levels of participation, high, medium, and low.

For the eight high-participation countries, there has been no change overall, when the countries are combined. The most notable within-group changes are a large rise in authors from Germany in period 2, with a corresponding fall in authors from the UK.

For the eight medium-participation countries, there has been a substantial drop in participation overall, with particularly large drops from France and Italy.

For the seven low-participation countries, there has been a small rise in participation overall, although Poland and Hungary went against this trend by reducing their already tiny contributions.

Our overall conclusion from this analysis is that the participation of European countries over the 20 year period of the journal's existence is primarily marked by stability. Countries with high participation at the start remain high participators at the end. Similarly countries with low or zero participation remain low at the end.

Since the two time periods are not equal (the first is 13 years, and the second is 7.5 years) the number of participating authors per year has actually increased over the period. The average number of Europeans participating per year in the first period was 27, and in the second period 42. So although the number of countries from which authors come has not increased, the number of participating authors from those 22 countries has increased.

Does the disciplinary distribution of contributions shed any light on our understanding of these changes over time?

In order to assess this, the first author undertook a subjective categorization of the main disciplinary provenance of each article, and assigned this category to each author. This is quite rough, and could benefit from a reliability check.

Included within musicology was any contribution where the main focus of attention was the musical materials. Where there was some empirical component, this would normally be in the form of measurements or analysis of materials generated in an artistic rather than a scientific context (e.g. a pre-existing score or public performance).

Included within modelling was any contribution where predictions or patterns of some kind were generated by primarily computational means, in some cases based on, or in comparison to, data from musical materials.

Included within psychology was any contribution where primary data were collected by the authors from the behaviour of living individuals, or where the theoretical basis drew primarily on the psychological domain.

Included within anthropology those articles which treated broad historical or geographical trends in the human manifestations of musicality, often from an evolutionary perspective.

These were the four main categories. A tiny number were categorized as falling outside any of these disciplines.

Table 4 shows the absolute number of contributions in each category for the two time periods, also expressed as a percentage of the total for that period. Psychology has been the dominant discipline in both periods. The main difference over time is an increasing concentration of articles in the psychological domain, and a corresponding drop in all other categories. Musicology still figures in the later period, but with a lower proportion. Modelling and Anthropology have all but disappeared.

Does this mean that the institutional settings of authors have changed over time? Table 5 shows the main institutional affiliations (department or faculty) of those authors who gave this information (not all did).

What is interesting is the relative stability of institutional affiliation over time. There is even a slight drop in the number of people giving a psychology department as their affiliation. So what appears to have happened is that the psychological approach has been adopted by a greater number of authors, regardless of their institutional affiliation. That means that more psychological work is being submitted from conservatoires, musicology departments, and education departments.

Some of this may be due to shifts in editorial policy or decision making, but demand cannot be fulfilled without supply, and it is a noticeable feature of the last decades that increasing numbers of departments and institutions of music are training and employing psychologists, and have set up programmes of music psychology. The psychologizing of *Musicae Scientiae* may be a broad reflection of the psychologizing of many European music institutions over the lifetime of the journal. However, the data we have presented are only capable of describing trends – they are not really capable of disentangling cause from effect.

1.2 Membership of the Society

Membership records of the society have been maintained by society officials. These are confidential documents, as they name individuals and their financial contributions to the society. We thank the past and present General Secretaries of ESCOM for providing access to membership lists. From these lists, we have simply extracted the country of residence of each member on a year by year basis.

Rather than present annual country data for each of the 25 years of the society's existence, which would be an unwieldy data set, we have sampled at roughly 5 year points: 1993, 1997, 2002, 2007, 2013, 2016. 1993 was chosen rather than 1992, because 1992 was the founding year, and it seemed appropriate to sample a full year after initial set up. Similarly, 2016 was taken rather than 2017 because we were only half way through 2017 at the time of analysis.

Table 6 shows that, of the years sampled, 1997 had the largest membership, at 190. In 1993 the membership was 179. In 2016 it had dropped to 129.

Over the periods sampled, members came from 23 countries, pretty much identical to the countries from which journal authors came. The distribution of members between countries is also very similar in the two data sets. Countries which supply more authors tend to supply more members, while countries with few authors have few members. For the period up to 2009, there is a positive correlation of 0.85 between the average membership from each country and the number of authors from that country publishing in *Musicae Scientiae.* For the period from 2010 onwards that correlation is 0.95. Again, we don't know the causal direction, and I am not sure that these data are capable of telling us.

1.3 Summary and conclusions

The data reviewed here show that there has been a healthy participation in the affairs of ESCOM from 16 European countries, those indicated as high or medium involvement in my journal author analysis. Another seven countries have shown a small amount of involvement, but one which has not grown over the 25 years in any substantial way. 28 European countries have remained uninvolved in ESCOM's affairs.

John Sloboda was present at the founding ESCOM conference in Trieste in 1991. It was at this conference that the initial constitution was approved and the first executive committee appointed.

He recalls the excitement of that period, coming as it did so shortly after the fall of the Soviet Union, and the re-integration of Eastern European countries into the political, economic, and cultural life of the continent.

People from these Eastern countries spoke passionately about the opportunity afforded to them to become equal participants in a wider endeavor, freed from the political and physical constraints that had permeated every aspect of their lives for a generation.

As a person with Polish heritage, John was particularly proud to see Polish colleagues step forward. Well before the founding of ESCOM, Poland had set up a Psychology Unit within one of its conservatoires (the Chopin Academy of Music, as it was then). It may well have been the first music higher education institution to do this in recent times. Andzrej Rakowski, a Professor at the Chopin Academy of Music, Warsaw, was an early Executive Council member, and served a term as President.

But somehow, this early enthusiasm was not translated into growth in participation. Sadly, at the present time ESCOM has no Polish members, and no Polish contributors to the journal. In fact, in shocking news recently received, we learned that the Psychology Unit at the Fryderyk Chopin University of Music is to be closed, and the last staff will have left their posts by the time this paper is published. A staff member of that institution had a paper accepted for this conference, but has had to withdraw her participation because of lack of funds.

We mention Poland only because one of us knows it so well, but similar remarks can be made about most of the countries of former Soviet influence. Hungary and Romania have had tiny involvement, and several other countries, including Russia, have had none. Is this something ESCOM can be more pro-active with in its next phase? We do hope so. An encouraging sign is the first ESCOM-supported conference to be held in Poland, at the University of Katowice, in May 2018 (www.psychomuzy.us.edu.pl).

The challenges are not only in the East. There are some countries in Western Europe whose participation is considerably below what one would expect given their level of development, their scholarly infrastructure, and the known interest in music sciences that exists in these countries. Both Spain and Portugal contain scholars with active interest in our topics, yet they hardly figure in our affairs. Spain has recently founded its own national society AEPMIM (Spanish Society for the Psychology of Music and Music Interpretation). It held a major conference in Madrid in October 2017 with the title "Psychology in Music: Creation, Educational Practice and Performance"). ESCOM is listed as one of the sponsors, which is great: but why are Spanish scholars not more visible in ESCOM itself? What can we do to assist them?

We would just make one conjecture. ESCOM has always had English as its dominant language. Over time English has predominated more and more. The countries that participate substantially in ESCOM tend to be countries where scholars are familiar with, and comfortable with speaking and writing in English. In other countries, the level of familiarity and comfort with English is much less. For example there are many established Spanish scholars who do not speak English, and whose scholarly connections tend to be predominantly to the Spanish speaking countries of South America.

Given these observations, we may ask is whether it is really possible to have a vibrant pan-European Society when it is so monolingual in its operation? Clearly, becoming sufficiently fluent in another language to participate at a scholarly level is a long-term project for individuals and institutions. ESCOM can do little about that. But are there feasible short-term solutions? Can we provide translation facilities in a way that does not quickly exhaust

our very limited financial capacities? And can we be sure that language is, in fact, a significant factor in participation? Or is there a more fundamental intellectual or cultural barrier?

Part 2

We want to reflect further on three issues, all of which have been pointed to in Part 1.

In the conference programme, organizer Marc Leman identifies ESCOM's "existential crisis" – essentially: "who are we, what do we stand for, where do we go?" He places ESCOM in the context of the cognitive sciences, and describes the "drifting apart of sister disciplines" as both a "treat and a challenge"; he argues that action should be taken to "promote the convergence of all music sciences". In elaborating on this first issue we explore what we mean by the term "cognitive sciences of music" and ask if there can there really be "convergence" between them?

Second, we explore further what has been described in Part 1 as the "psychologizing" of European music institutions. How can we exploit the opportunities this offers most effectively, and meet the inevitable challenges?

Third, and following on from the prior analysis of European participation in ESCOM, we reflect on the importance of ESCOM as a European society. In our view, it has never been more vital to facilitate interaction between researchers who live and work in, and across different countries. But ESCOM also has, potentially, a role in the wider world – as befits a society that's 25 years old.

2.1 Why "Cognitive Sciences of Music"?

People often ask why ESCOM is called ESCOM. Who chose the name? Why is it the European Society for the "cognitive sciences of music" and not, for example, "music psychology"? The founding committee, which met for the first time in Liège in December

1990, chose both the names of the Society, in French and English – because the Society was bilingual at that time – and its abbreviation to ESCOM: *Association européenne pour les sciences cognitives de la Musique /* European Society for the Cognitive Sciences of music. The founding committee consisted of John Sloboda from the UK, Irène Deliège from Belgium, Stephen McAdams from France, Kari Kurkela from Finland, Mario Baroni from Italy, Andrzej Rakowski from Poland and Dirk Povel from the Netherlands

Irène Deliège has provided a detailed account of the founding of the Society in the 2010 Special Issue of *Musicae Scientiae.* She takes personal credit only for designing the logo, which we still use today.

Regarding the phrase "the cognitive sciences of music" it is relevant to recall that the term cognitive science was coined in the early 1970s by a British physicist, chemist and pioneer of artificial intelligence named Christopher Longuet-Higgins. In an article published in 1971 he reported the successful attempt "to discover formal rules for transcribing into musical notation the fugue subjects of the Well-Tempered Clavier" by writing a program that could correctly group the notes of each subject into metrical units, assign every fugue to the right key and notate every accidental in the subject (Longuet-Higgins & Steedman, 1971). In this way he aimed to model the cognitive processes involved in understanding melodies. He was made a founding Honorary Life Member of ESCOM in 1991 in honour of the huge influence he had on research in music cognition via the work of researchers including Lerdahl and Jackendoff, and Carol Krumhansl.

Given that science can be defined as "the pursuit and application of knowledge and understanding of the natural and social world following a systematic methodology based on evidence" (UK Science Council, 2009) why was cognitive "sciences" – in the plural – chosen for the name of ESCOM? The answer is that it reflects the wide range of disciplines represented at the first Symposium on Music and the Cognitive Sciences held at IRCAM in Paris in 1988, which was attended by theorists, composers, computer scientists, musicologists, psychologists, mathematicians and neurologists. Its five themes are shown in the leftmost column of Table 7 (below): *The notion of musical language; Form-bearing elements in music; Experimental and theoretical approaches to listening and*

comprehension; Modelling approaches to listening and comprehension and Music performance.

Stephen McAdams and Irène Deliège articulated the challenge presented by combining such a wide range of disciplines in their Preface to the proceedings of the first Symposium, published in 1989 in French as *La Musique et les sciences cognitives* and in English as Music and the Cognitive Sciences, when they wrote that they had

> sought voluntarily, if perhaps somewhat dangerously, to address a *very* broad range of approaches to music cognition … [that] bore witness **to a diversity of basic assumptions, vocabularies, concepts, aims, methods, interpretations, and reasoning methods that often seemed at first view to be irreconcilable** (McAdams & Deliège, 1989, p. vii).

Two years after the first Symposium, a second Symposium on Music and the Cognitive Sciences was hosted by Ian Cross at Cambridge University in September 1990. At this Second Symposium the organising team aimed to **facilitate communication across disciplines** by inviting submissions to reflect different research methods: *ethnomusicology, empirical psychology, computational modelling* and *cognitive musicology* or the application of findings to theory and practice of music – although it was reported that relatively few papers submitted to the Cambridge symposium "actually demonstrated the applications of cognitive science to musicological concerns and thus fell under the heading of *cognitive musicology*" (Cross & Deliège, 1993, p. 4). The conference themes themselves are listed in the middle column of Table 7, below.

We mention these two symposia in some detail because, looking back, it is clear that there was considerable research activity in our field in the years before ESCOM was founded, but these were the symposia that were actually *called* Music and the Cognitive Sciences. Their themes have been listed because we go on to compare them with the themes of the last two ESCOM conferences including this anniversary conference.

Crucially, however, it was at the second symposium in Cambridge that the all-important decision was taken to found a European *Society* for the Cognitive Sciences of Music. After the founding committee met in December 1990, Irène Deliège organised the first ESCOM Colloquium in October 1991 in Trieste where the first General Assembly of the Society took place. So ESCOM was really born at that conference. One can see the diversity of themes from the published list of topics: *Education and cognitive sciences of music; Theoretical and historical aspects; Contribution of ethnomusicology; Influence of the environment; Neuropsychology and clinical aspects; Modelling and Cognition; Experimental Approaches*, shown for comparison with the themes of the 1988 and 1990 symposia in the rightmost column of Table 7. Proceedings are available online at http://www.escom.org/conferences-triennial.html.

The complete list of conferences available on the ESCOM website shows that the first Colloquium was followed by the first joint conference of ESCOM and the International Conference on Music Perception and Cognition. It was held in Liège in 1994 and has taken place every six years since then: at Keele in 2000, in Bologna in 2006, in Thessaloniki in 2012 and will be hosted by Graz in Graz itself, La Plata, Sydney and Montreal in 2018.

A further legacy of these early years comes in the form of books that were published following conferences. The first was a Summer School organised by Irène Deliège called "Psychological Organisation of Acoustical Musical and Temporal Perception from the Foetal Stage to the End of Childhood" which took place in 1993 at City University, London; the book arising from it is called *Naissance et développement du sens musical* (1995) in French and *Musical Beginnings* in English (1996).

Perception and Cognition of Music (1997) was compiled from papers presented at the Liège conference in 1994. A second colloquium organised by Irène Deliege in 2000 was held at the Theatre de la Monnaie in Brussels and was called *Musique contemporaine: théories et philosophie* – again, this produced books in French (Deliège, 2001) and English (Paddison & Deliège, 2010). And ESCOM's 10th anniversary conference, which returned to Liège in 2002, produced *Musical Creativity: Multidisciplinary Research in Theory and Practice* (Deliège & Wiggins, 2006).

This account of the pre-history and history of ESCOM under Irène Deliège's guidance shows that the wide diversity of topics, approaches and methods goes far beyond music psychology – which is just one set of disciplines – and indeed combines approaches from the arts and humanities as well as the sciences. The founding committee chose "Cognitive sciences of music", in the plural, with good reason. We can ask ourselves if it is still valid. We can also ask if there is really a possibility for these "sister disciplines" to converge, particularly as the differences between approaches are so great. Nevertheless the enterprise of *aiming* for convergence is a worthwhile one.

2.2. The psychologizing of the discipline.

In relation to the "psychologizing" of European music institutions it would be interesting to trace the history of the development of the broad themes identified – anthropology, linguistics, modelling, musicology, neurophysiology, philosophy and psychology – over the past 25 years. The original intention was that no limitations or exclusions should be imposed on submissions in terms of presenters' or authors' topics or methods so it would be fair to say that, at least until Irène Deliège stepped down in 2009, research themes and orientations have evolved naturally. This may be the case to a lesser extent nowadays, as researchers respond to specific calls from both conference organisers and indeed journal editors, and it would also be well worth looking at *all the* ESCOM conferences since 1991.

Someone else will have to trace this development, but what we have done is to make a comparison between conference themes now, taking a snapshot of two recent conferences and setting it alongside the themes of the first two symposia predating the foundation of ESCOM, and the first ESCOM conference in 1991 as listed above and shown in Table 7. The names of the sessions used as headings in the programmes for the Ninth Triennial Conference held in 2015 and the 25th anniversary conference held in 2017 are shown in the left- and right-hand columns, respectively, of Table 8. Each session typically consisted of three oral presentations. The content of each presentation may not always have reflected the heading accurately, so using these thematic headings doesn't capture all the detail, but

it gives some idea of what our field looks like today. Jane Ginsborg has clustered the themes, loosely, in order of popularity, as shown in Table 8.

Thus it can be seen, for example, that – taking the two conferences together – a total of 22 sessions were devoted to aspects of performance and composition. Thematic headings in the 2015 conference programme consisted of “Cognitive motor control”; “Jazz and popular music”; “Movement”; “Performance”; “Piano”; “Singing”; and “Composition”; equivalents in the 2017 programme were “Cross-modal and conducting”; “Dance”; “Ensemble performance”; “Gesture and embodiment”; “Jazz expertise”; “Performance and vocal expression”. Similarly, there were five sessions in 2015 entitled “Emotion” or “Music and sadness” and two in 2017 entitled “Emotion. According to this analysis, musical development remains as important now as it was in 1991. While perception is still a core topic, applications of music cognition to therapy and well-being seem to have been rarer in the early days. Music learning, education and training are also core topics, as are aesthetic experience and preferences, and cognition including expectation, pitch and tonality. Audiation, imagery and audio-visual stimulation have been grouped together, perhaps wrongly, and the list of topics common to both conferences includes brain, memory and amusia. There are also, of course, some topics that the two programmes do not have in common.

If the changes that have come about are in part because of what we have called the “psychologizing” of music institutions, then this can present wonderful opportunities for researchers. We can exploit these most effectively by undertaking projects of mutual interest in collaboration with colleagues. But musicians – particularly performers and composers at conservatoires – have to undergo such time-consuming and intensive training that it is often very difficult for them to learn the skills and ways of thinking that are needed to carry out scientific research. In our joint experience of working in conservatoires, challenges include unrealistic expectations on the part of managers and students, limited resources and the inevitability of having to make compromises. But it is nevertheless worthwhile to acknowledge, and to try to meet these challenges. One way we have of doing

so is by communicating as clearly as we can; another way is to raise and to target resources, and the Executive Committee is open to ideas as to how to do this.

2.3. ESCOM as a European Society

Communication is crucial to ESCOM as a European society. But it's also problematic, because it's difficult, not just because few of us have the time to become experts in more than one or two disciplines, but also because some of us are fluent in only one or at most two languages. In this respect Irène Deliège and the founding committee did what they could to facilitate understanding between researchers.

The statutes of the Society were written in French and English, as were many of the publications that emerged from its conferences, symposia and colloquia. Abstracts of all articles in *Musicae Scientiae* used to appear in German and Italian as well as French and English, but this is no longer the case. Whereas the majority of articles in the earliest volume of *Musicae Scientiae* were published in languages other than English, and it is still permissible to submit articles in French or German, the most recent article published other than English was in December 2015. This makes life hard for those for whom English is not their first language!

But Irène Deliège has done something else for people who only speak English; with the help of a small editorial committee she set up the Irène Deliège Translation Fund in 2010 so that certain key texts, available only in French and German, could be translated into English. The first book, Carl Stumpf's *Die Anfange der Musik* (1911) appeared in 2012 as *The Origins of Music*. Three more projects are under way, Carl Stumpf's *Tonpsychologie* (1885) in two volumes, Andre Schaeffner's *Origines des Instruments de Musique* (1936); and Ernst Kurth's *Musikpsychologie* (1931). Further projects are currently under discussion.

There is a tension between trying to make it possible for researchers who live and work in different countries to interact in a single language or *lingua franca*, thereby aiming for convergence, and supporting researchers to communicate with others in their own family of

languages through national societies such as the Deutsche Gesellschaft für Musikpsychologie and the previously mentioned Spanish Society for the Psychology of Music and Music Interpretation. It is hard to see how this tension is to be resolved but – particularly in the current world situation – it seems more important than ever that we go on trying to resolve it. As Samuel Beckett famously said in *Worstward Ho* (1983), "Try again. Fail again. Fail better" (p. 7).

ESCOM was born in 1991, and so was Jane Ginsborg's daughter. Like ESCOM, she's 26 now, and very much aware that it is only now – having been a student for most of the past eight years – that she is properly entering adulthood, and thinking about what she is going to do in the world and how she wants to make a difference.

ESCOM too has a role in the world. It's important when celebrating a big birthday to enjoy looking back at the past and noticing all the changes that have taken place. But it's also important to look forward. We are inspired by the plans that Richard Parncutt and Renée Timmers have for the next joint conference of ESCOM and ICMPC, and even more inspired by the motivation that lies behind them: to look beyond Europe to the world, and the role that researchers like us can play in setting an example of mutual cooperation in respecting the sustainability of our planet.

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Table 1 – Authors in Musicae Scientiae (1997-2017) by country

country	authors	population (m)	authors/pop (mean = 1)
Austria	16	9	0.98
Belgium	22	11	1.1
Cyprus	1	1	0.55
Denmark	1	6	0.01
Eire	4	5	0.44
Estonia	8	1	4.41
Finland	66	5	7.29
France	78	67	0.64
Germany	165	81	1.12
Greece	5	11	0.25
Hungary	2	10	0.11
Italy	29	61	0.26
Lithuania	2	3	0.36
Netherlands	22	17	0.71
Norway	4	5	0.44
Poland	2	38	0.02
Portugal	4	10	0.05
Romania	2	20	0.05
Spain	6	46	0.07
Sweden	22	10	1.21
Switzerland	15	8	1.03
Turkey	4	78	0.02
UK	182	65	1.54

Table 2 – Authors in Musicae Scientiae – in descending order of country participation

Country	authors	Population (m)	Authors/pop(m)
Group 1 - high			
Finland	66	5	7.29
Estonia	8	1	4.41
UK	182	65	1.54
Sweden	22	10	1.21
Germany	165	81	1.12
Belgium	22	11	1.1
Switzerland	15	8	1.03
Austria	16	9	0.98
Group 2 medium			
Netherlands	22	17	0.71
France	78	67	0.64
Cyprus	1	1	0.55
Eire	4	5	0.44
Norway	4	5	0.44
Lithuania	2	3	0.36
Italy	29	61	0.26
Greece	5	11	0.25
Group 3 - Low			
Hungary	2	10	0.11
Spain	6	46	0.07
Portugal	4	10	0.05
Romania	2	20	0.05
Poland	2	38	0.02
Turkey	4	78	0.02
Denmark	1	6	0.01

Table 3 – Musicae Scientiae authors by time period

	1997-2009	2010-2017	change
High			
Finland	34	32	
Estonia	2	6	UP
UK	102	80	DOWN
Sweden	16	6	DOWN
Germany	62	103	UP
Belgium	11	11	
Switzerland	12	3	DOWN
Austria	9	7	
	248	**248**	**NO CHANGE**
Medium			
Netherlands	8	13	UP
France	61	17	DOWN
Cyprus	0	1	UP
Eire	4	0	DOWN
Norway	2	2	
Lithuania	2	0	DOWN
Italy	23	6	DOWN
Greece	3	2	
	103	**41**	**DOWN**
Low			
Hungary	2	0	DOWN
Spain	1	5	UP
Portugal	0	4	UP
Romania	0	2	UP
Poland	2	0	DOWN
Turkey	1	3	UP
Denmark	0	1	UP
	6	**15**	**UP**
Grand total	**357**	**314**	
per year average	27.46153846	41.86666667	

Table 4 – Musicae Scientiae authors by discipline and time period

	1997-2009			2010-2017	
discipline	number	Percent	.	number	Percent
anthropology	24	5.3		2	0.5
linguistics	2	0.4		1	0.2
modelling	49	10.9		6	1.4
musicology	100	22.2		37	8.5
neurophysiology	2	0.4		0	0
philosophy	1	0.2		0	0
psychology	272	60.4		387	89.2
Total	**450**			**434**	

Table 5 – Musicae Scientiae authors by institutional setting and time period

department/faculty	1997-2009		2010-2017	
	number	percent	number	percent
Computer Science	30	6.7	11	2.5
Conservatoire	45	10	59	13.6
Education/Pedagogy	10	2.2	21	4.8
Musicology	157	34.9	135	31.1
Psychology	133	29.6	104	24

Table 7 – The themes of the first two symposia and first colloquium

IRCAM 1988	CAMBRIDGE 1990	TRIESTE 1991
The notion of musical language	Music in culture (ethnomusicology)	Education and cognitive sciences of music
Form-bearing elements in music	Music in action (empirical psychology)	Theoretical and historical aspects
Experimental and theoretical approaches to listening and comprehension	Representing musical structure (computational modelling)	Contribution of ethnomusicology; Influence of the environment
Modelling approaches to listening and comprehension	Cognitive musicology (application of findings to theory and practice of music)	Neuropsychology and clinical aspects; Modelling and cognition
Music performance		Experimental approaches

Table 8 – Conference themes in 2015 and 2017 (numbers within parentheses indicate the number of sessions delivered on the same theme)

ESCOM 2015	ESCOM 2017
Cognitive motor control of performance, Composition (2), Jazz and popular music, Movement (2), Performance (2), Piano (2), Singing (2)	Cross-modal and conducting, Dance, Ensemble performance (2), Expressive performance, Gesture and embodiment (2), Jazz expertise, Performance, Vocal expression
Emotion (3), Music and sadness (2)	Emotion (2)
Musical development (4), Musical ability and sophistication	Children
Perception (2), Time and rhythm perception, Listening	Perception
Therapy (2), Dementia	Music therapy, Well-being (2)
Music learning (2), Music training	Education and Training
Preferences and cross-modality, Understanding audiences	Aesthetic experience, Preference and familiarity
Expectation, Pitch and tonality	Cognition
Audiation, Imagery	Audio-visual stimulation
Music and the brain	Brain
Memory	Memory
Amusia	Amusia
Miscellaneous	
Background music, Effects (3), Flow, Models, Social, Technology	(A)synchrony, Consumption, Semiotics and politics

Figure 1 (online version). Participation by country

Group 1 countries (high participation) are red, Group 2 (medium participation) are dark orange, Group 3 (low participation) are light orange, and the remaining group, of non-participating countries, are grey.

Figure 1 (print version). Participation by country

Group 1 countries (high participation) are black, Group 2 (medium participation) are dark dark grey, Group 3 (low participation) are light grey, and the remaining group, of non-participating countries, are cream.