Title	Computational analysis of the world's music				
Sub Title					
Author	Savage, Patrick				
Publisher	慶應義塾大学				
Publication year	2022				
Jtitle	学事振興資金研究成果実績報告書 (2021. )				
JaLC DOI					
Abstract	Thanks to the support of the Keio University Academic Development Funds for Individual Research, we were able to successfully carry out our proposed research, publish 9 original research papers, and give 22 presentations at international conferences (all virtual due to COVID-19). Specifically, the fund allowed us to pay for student part-time work to undertake research and to present and publish our research findings at international journals and conferences such as Behavioral and Brain Sciences, Current Biology, the International Society for Music Information Retrieval, the International Conference on Music Perception and Cognition, and the Cultural Evolution Society World Conference. Our major findings were that there is both substantial cross-cultural variation and cross-cultural universals in music perception and production, and that social bonding is a unifying factor that shapes this cross-cultural diversity and universality. We obtained these findings using new methods from computer science and cognitive science to analyze and compare music from arour the world. In the future we hope to build on these results to apply these techniques at larger scale to tackle challenges such as automatic music recommendation and understanding global variatio in music perception and production. We are grateful for the financial support of the Keio Universit Academic Development Funds for Individual Research				
Notes					
Genre	Research Paper				
URL	https://koara.lib.keio.ac.jp/xoonips/modules/xoonips/detail.php?koara_id=2021000003-20210156				

慶應義塾大学学術情報リポジトリ(KOARA)に掲載されているコンテンツの著作権は、それぞれの著作者、学会または出版社/発行者に帰属し、その権利は著作権法によって 保護されています。引用にあたっては、著作権法を遵守してご利用ください。

The copyrights of content available on the KeiO Associated Repository of Academic resources (KOARA) belong to the respective authors, academic societies, or publishers/issuers, and these rights are protected by the Japanese Copyright Act. When quoting the content, please follow the Japanese copyright act.

## 2021 年度 学事振興資金(個人研究)研究成果実績報告書

研究代表者	所属	環境情報学部	職名	准教授	── 補助額	500			
	氏名	サベジ パトリック	氏名(英語)	Patrick SAVAGE		500	( <del>11</del> 0)11		
Computational	analysis of the	world's music							
	研究課題(英訳)								
Computational	analysis of the	world's music							
		1.4	研究成果実績の	D概要					
Thanks to the carry out our p due to COVID-	support of the proposed resear -19).	EKeio University Academic D ch, publish 9 original research	evelopment Fi papers, and g	nds for Individual Research, ve 22 presentations at intern	we were able t ational conferen	o suo ces (	cessfully all virtual		
Specifically, the fund allowed us to pay for student part-time work to undertake research and to present and publish our research findings at international journals and conferences such as Behavioral and Brain Sciences, Current Biology, the International Society for Music Information Retrieval, the International Conference on Music Perception and Cognition, and the Cultural Evolution Society World Conference.									
Our major findings were that there is both substantial cross-cultural variation and cross-cultural universals in music perception and production, and that social bonding is a unifying factor that shapes this cross-cultural diversity and universality. We obtained these findings using new methods from computer science and cognitive science to analyze and compare music from around the world. In the future we hope to build on these results to apply these techniques at larger scales to tackle challenges such as automatic music recommendation and understanding global variation in music perception and production. We are grateful for the financial support of the Keio University Academic Development Funds for Individual Research.									
		2. 研究	成果実績の概	要(英訳)					
Thanks to the support of the Keio University Academic Development Funds for Individual Research, we were able to successfully carry out our proposed research, publish 9 original research papers, and give 22 presentations at international conferences (all virtual due to COVID-19).									
Specifically, the fund allowed us to pay for student part-time work to undertake research and to present and publish our research findings at international journals and conferences such as Behavioral and Brain Sciences, Current Biology, the International Society for Music Information Retrieval, the International Conference on Music Perception and Cognition, and the Cultural Evolution Society World Conference.									
Our major findings were that there is both substantial cross-cultural variation and cross-cultural universals in music perception and production, and that social bonding is a unifying factor that shapes this cross-cultural diversity and universality. We obtained these findings using new methods from computer science and cognitive science to analyze and compare music from around the world. In the future we hope to build on these results to apply these techniques at larger scales to tackle challenges such as automatic music recommendation and understanding global variation in music perception and production. We are grateful for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the Keit University Academic Area and a for the financial support of the financial support of the financial support for the financial support of the financial support for the financial support of the financial support of the financial support for the financial support of the financial support for the financial support of the financial support of the financial support of the financial support for the financial support of the financial support for the financial support of the financial s									
		3.本4	研究課題に関う	トる発表					
発表 (著者・		発表課題名 (著書名・演題)		- 発表学術誌名 発表学術誌名 著書発行所・講演学会)	学術誌系 (著書発行年月	を行す 引・計	 ≓月 <b>購演年</b> 月)		
Savage, P. E., Chiba, G., C Suzuki, H., & A	Passmore, S., Currie, T. E., tkinson, Q. D.	Sequence alignment of folk melodies reveals cross-c regularities of musical evoluti	song Currer cultural ion.	t Biology	February 2021				
Savage, P. E., B., Schachner L., Mithen, S., &	Loui, P., Tarr, , A., Glowacki, & Fitch, W. T.	Music as a coevolved syste social bonding [one of two articles, accompanied by commentaries + author response	em for Behavi target y 60 onse]	oral and Brain Sciences	September 2021		September 2021		
Matsumae, H., Savage, P. Currie, T. K Koganebuchi, Sato, T., Tana A., Brown, S., Shimizu, K. Bickel, B.	Ranacher, P., E., Blasi, D., E., Sato, T., K., Nishida, N., ibe, H., Tajima, Stoneking, M., K., Oota, H.,	Exploring correlations in g and cultural variation language families in Northeas	genetic Scienc across t Asia	e Advances	August 2021				
Youngblood, M & Savage, P. E	., Baraghith, K.,	Phylogenetic reconstruction cultural evolution of elec music via dynamic com detection (1975-1999)	of the Evolution and Human Behavior November 2021 tronic munity						

Ozaki, Y., McBride, J., Agreement among human and	Proceedings of the 22nd November 2021
Benetos, E., Pfordresher, P., automated transcriptions of global	International Conference on Music
Six, J., Tierney, A. T., songs	Information Retrieval (ISMIR 2021)
Proutskova, P., Sakai, E.,	
Kondo, H., Fukatsu, H., Fujii,	
S., & Savage, P. E.	