Abstraction in music, 2, 34, 77–78, 173
ABZ/A (Stollery), 46
Academic community, independent artists vs., 125–126, 252n73
Access. See also Accessibility in audiovisual contexts, 221
definition of, 239n1
ease/difficulty of, 7, 228
education and, 54–59
media and, 54–59
scholarship as aid to, vii–viii
to sound-based music, 54–62
Accessibility. See also Access;
Communication
art-life separation and, 1
of art music, 2–3, 23
audiovisual presentation and, 159
Barenboim on, 1
classification and, 192
of contemporary art music, 2–3, 24
definition of, 239n1
dramaturgy and, ix, 36–37, 52
educational exposure and, 3
enhancement of, ix, 2–3, 28
history and, 132
intention and, 36
I/R project on, 38–53
and meaning, 2
media exposure and, 3
real-world sounds as aid to, 3–5, 31, 74
scholarship as aid to, vii–viii
“something to hold on to” factor
and, ix, 3, 26–35
of sound-based music, 3–5, 21–35
Acoulogy, 74, 78
Acousmatic, 71, 78, 112, 242n8, 246n8, 247n25
Acousmatic culture, 116
Acousmatic listening, 125–126
Acousmatic music, 14, 57, 73, 86–88, 246n9
Acousmatic tales, 28
Acousmètre, 90
Acousmographe, 92, 203, 204
Acoustic chains, 240n3
Acoustic communication, 107–108, 110
Acoustic Communication (Truax), 110
Acoustic design, 108, 109
Acoustic ecology, 108
Acoustic models, 236n12
Acoustics, 224–225
Added value, 91
Adkins, Matthew, 240n3
Advertisements, sound design for, 6
Aesthesis, ix. See also Listeners;
Listening
Aesthetics, ix, 5, 226, 255n3
Aesthetics of failure, 125
Affordances, 4, 240n3
Algorithmic composition, 12, 71, 79
All Music Guide to Electronica, 148
Allocentric perception, 97
Ambient Century, The (Prendergast), 69
Ambient music, 71, 148
Analysis, 198–209
aural, 200–202
basic issues in, 198–200, 256n11
interactive, 208–209
multimedia, 257n16
in PROGREMU, 84
special cases of, 207–209
spectral, 202–205
structural, 205–207
Analytical listening, 108
Analytical Methods of Electroacoustic
Music (Simoni), 203
Anamorphosis, 79
Anecdotal music, 28, 31, 79, 109, 242n7
Anempathetic sound, 91
Any Sound You Can Imagine
(Thebéerge), 223
Appleton, Jon, 243n13
Appropriation, 114–119, 151
“Aquatisme” (Parmegiani), 43
Archetypal sounds, 250n53
Architecture, 209
Archives, 192–193
Art, high vs. popular, 1–2, 23, 24, 114–119, 126, 150. See also
E-Musik; U-Musik; Visual art, sound art and
Art and Humanities Research
Council, 188
Art Bears, 146
Art criticism, 226
Art for art’s sake, 23, 36
Artikulation (Ligeti), 39
Artistic intention, ix
alteration of, by visual artists, 24
research on listeners’ experience and, 38–53
significance of, for accessibility, 36
Art-life relationship, 1, 3–5, 23, 107, 172, 227
Art music. See also Contemporary art
music; E-Musik
accessibility of, 2–3, 23
example of, 6
impact of, 21
paradigm shift in, 108–109
Art sonore, 10
Atkinson, Simon, 46, 188, 239n2
Attack-effluvium continuum, 98
Attali, Jacques, 119, 128
Audible Design (Wishart), 134, 135, 136
Audio, 11
Audio art, 10–11, 166
Audio Culture (Cox and Warner), 176
Audio vérité, 4, 112
Audio-vision, 91
Audiovisual presentation, 158–159
Auditory scene analysis, 195
Auditum, 90
Aural analysis, 200–202
Aural discourse, 34
Austin, Larry, 152
Authenticity, 115
Authorship, 115, 116
Autocentric perception, 97
Background music, 22, 108
Bahn, Curtis, 217
Barbosa, Álvaro, 167–168, 169
Barenboim, Daniel, 1
Barlow, Clarence, 144, 253n78
Barrett, Natasha, 249n47
Barrière, Jean-Baptiste, 76, 143–144
Barthelmes, Barbara, 162–163
Barthes, Roland, 24, 39
Battier, Marc, 153, 157, 212–213,
214, 239n2, 241n12, 247n25,
255n3
Bayle, François, 13, 73, 86–88, 197,
201, 205, 246n9, 247n22, 247n25,
256n7
Beat-driven music, 146, 173
Behavior, sonic, 101
Benjamin, Walter, 110
Bara, Jose Manuel, 240n9
Berenguer, Xavier, 166
Besson, Dominique, 43
Birmingham University, 47
Birnbaum, D. R., 214
Blacking, John, 21, 241n1
Blind listening, 247n20
Bodin, Lars-Gunnar, 30
Born, Georgina, 70–71, 170–171, 186, 223
Bosma, Hannah, 207
Bossis, Bruno, 207
Bottom-up composition, 34–35, 71, 112
Bouhalassa, Ned, 149
Boulez, Pierre, 25, 137–138, 142, 186
Bourges Festival of Electroacoustic Music, 56–59, 130, 186
Bourges sound, 130–131
Bowers, John, 85, 103, 155, 158, 215
Brain Opera (Machover), 193
Brecht, Martha, 203
Bridger, Michael, 39–41
Britain, music technology education in, 55
Bruitisme, 71
Brün, Herbert, 124, 251n66
Burns, Christopher, 205
Cadoz, Claude, 153
Caesar, Rodolfo, 248n34, 253n78
Cage, John, 8, 25, 39, 111, 121, 127, 134
Calon, Christian, 46–49
Camilleri, Lelio, 102, 199–200
Cascone, Kim, 118, 125, 126, 147
Casey, Michael, 103
Category, genre vs., 68, 72. See also Classification
Causality, 75, 87, 103, 153
Causal listening, 247n22
Cause attribuée, 90
Cause figurée, 90
Cause réelle, 90
CEC, 252n75
Chadabe, Joel, 160, 176, 214, 239n2, 254n92
Characterology, in PROGREMU, 84
Chemical Brothers, 155
Chion, Michael, 11, 13, 73, 74, 76, 77, 80, 83, 84, 88–91, 139, 178, 247n22, 248n33, 252n69, 256n7
Chowning, John, 29, 32
Cinéma pour l’oreille, 11, 32, 74, 89
Sième écoute (fifth mode of listening), 32, 33, 97
Clairaudience, 110, 113
Clarke, Michael, 208
Classification
accessibility and, 192
category vs. genre, 68, 72
on EARS site, 71–72
families of approaches, 70–73
genre vs. category, 68, 72
issues in, viii, 9
malleability in, 176, 179
new paradigm for, xi, 175–180, 228
nomenclature in, 127
pedagogical need for, 193–194
problems in, 175–177
research needs and, 192–193
sound, 190–192
of sound-based music, 5–9, 17, 189–194
terminology and, 9–19
of works, 192–193
Clichés, electroacoustic, 131, 180
Clicks, 15, 125
Clouds, 121
Clozier, Christian, 36
Club culture, 173
Club d’Essai, 75, 246n11
Club music, 6
Cogan, Robert, 203
Cognition, 224–225
Co-hear-ence, 173, 245n1
Coherence in sound-based music, 67–70, 245n1
Cole, Bruce, 60
Collaboration, 215–218
Collage, 209
Cologne school, 120, 138
Columbia-Princeton Electronic Music Studios, 24
Communication, 35–53. See also Accessibility; Music appreciation dramaturgy and, 36–37
as goal of music, 25
I/R project and, 38–53
Communities, 59–61, 167
Community art, 59, 60
Community development, 60–61
Composing interactions, 160
Composition. See also Poiesis
composers’ comments on, 122–123
improvisation and, 155–156
research on, 95
structural analysis and, 205–207
Composition dissertations, 142
Comprendre, 81, 93
Computer games, 7, 8
Computer music, 12, 16, 79, 187–188
Computer Music Journal, 18
Concert halls. See Performance venues
Concert presentation, music composed for, 130
Conduits d’écoutes, 247n22
Conrad, Anders, 245n5
Conservationism, 111
Contemporary art music
accessibility of, 2–3, 24
radio airtime for, 56
situation of, 3, 21–22
Contemporary Music Review (journal), 125, 255n3
Contextual listening, 105
Controllers, 214, 218
Convergence
appropriation, 114–119
festivals and, 118
fixed medium and live performance, 152–161
high and popular music, 126
hybridization and, 170–172
reduced listening and source recognition, 104–105
sound art and sonic art, 161–172
Convolution, 191, 256n5
Cook, Perry, 196
Copeland, Darren, 59
Copyleft, 251n60
Copyright, 114, 117, 251n60
Cornelius Cardew Ensemble, 25
Counterpoint, 30, 69
Couprie, Pierre, 88, 205, 239n2
Cox, Christoph, 150, 176–177
Creative Music Education (Schafer), 109
Creativity, concept of, 119
Critical musicology, 196
Critical theory, ix
CSound, 114
Cubitt, Sean, 60, 167, 169, 223
Cultural listening, 82
Cultural studies, 116, 186, 223
Culture, 186. See also Art, high vs. popular; E-Musik; National characteristics in music; U-Musik
Cut, 151
Cutler, Chris, 117
Dack, John, 82–85
Dadaism, 127
Dal Farra, Ricardo, 239n2
Dalhaus, Carl, 125
Dance, accessibility of, 243n16
Darmstadt summer school, 138
Davidovsky, Mario, 154
Davies, Hugh, 213–214, 241n10
Davis, Deta, 255n3
Day, Gary, 24
Debussy, Claude, 43
Deep Pockets (Montanaro), 46
Delalande, François, 39, 43, 85, 91–96, 177–178, 201, 228, 247n22, 248n36, 256n7
Deleuze, Gilles, 252n73
De Montfort University, 47, 239n2
De natura sonorum (Parmegiani), 29, 224
Denis, Jean-François, 131
De Poli, Giovanni, 211
Derrida, Jacques, 24
d'Escriván, Julio, 69–70
Developing countries, 227, 257n19
Devising, 215–217
De Vitry, Philippe, 23
Dhomont, Francis, 75, 85, 201
Die Reihe (journal), 75, 137–138, 141
Diffusion scores, 204, 205
DigiArts initiative, Unesco, 53, 227
Digital aesthetic, 170
DIGITALes iMED, 131
Digital interactive installations, 160
Di Giugno, Giuseppe, 25
Di Scipio, Agostino, 124, 160, 199–200, 206, 210, 211
Disciplines of Study (DoS), xii, 222–226
Discourse, 197–198
Dissertations, composition, 142
Distracted listening, 108
Dix jeux d’écoute (IRCAM and Hyptique), 204
DJ culture, 6, 150
DJ Spooky that subliminal kid (Paul D. Miller). See Miller, Paul D.
Dodge, Charles, 120–121
Donin, Nicolas, 202
Dramaturgy. See Musical dramaturgy
Drever, John Levack, 112
Drum ‘n’ bass, 149
During, Élie, 149
Duteutre, Benoît, 21–22
Ear cleaning, 109
Ecology, composition based on, 249n50
Economic studies, 223
écoute, 81
Écoute Réduite. See Reduced listening
Écoutes Signées, 202
Edison Studio, 217
Editing, 209
Education
and access, 54–59
and contemporary art music, 3
of hearing/listening capacities, 109–110
Eimert, Herbert, 75, 138, 139
Électro, 13
Electroacoustic clichés, 131, 180
Electroacoustic instruments, 241n10
Electroacoustic music, 12–14, 15–17, 240n9
Electroacoustic Music Festival, 252n75
Electroacoustic Music (Licata), 203
Electroacoustic Music Studies Network, 241n12
Electroacoustic paradigm, 177–178, 228
ElectroAcoustic Resource Site (EARS) bibliography of resources on, 183
categories within, xii–xiii, 182
classificatory scheme of, 71–72
definitions from, 10–15
description of, viii–ix, xii–xiii, 239n2
index for, 182–183
name of, 241n12
Electroacoustics, 13, 14, 18
Électroacoustique, 12
Electromechanical instruments, 241n10
Electronica, 14–15, 16, 72, 125, 147–148, 240n6
Electronic instruments, 241n10
Electronic music, 11–12, 15–16, 79, 120, 148
Electronic Music Foundation, 174
Electronic Sonata (Hiller), 211
Elektroakustische Musik und Computer Musik (Supper), 255n2
Elektronische Musik, 12, 70, 138
Empathetic listening, 94
Empathetic sound, 91
E-Musik (Ernst [serious] Musik), 23, 69, 114, 118–119, 130, 146, 150, 173, 176–177, 223, 226. See also High art
Eno, Brian, 146, 148, 152, 161
Entendre, 81
Environment, 101
Environmental music, 165
Environnement de Classification et de Recherche Intelligente des Sons (Écrins), 190
époque, 79, 113
Eshun, Kodwo, 36, 115–116, 253n78
Evocative transcriptions, 204–205
Évtind Project, 190
Exo-morphology, 104
Experienced listening, 3
Experiencing listening, 3
Experimental music, 78
Experimental popular music, 146–147, 151, 177, 254n87
Failure, aesthetics of, 125
Fairlight music computer, 114
Faktura, 212–215, 218, 226
Families of approaches, 70–175
appropriation, 114–119
formalism, 137–145
live performance, 152–161
musique concrètement, 73–105
new sounds, 119–129
popular music, 146–151
real-world music, 105–114
sound art and sonic art, 161–172
Feedback. See Triangulation
Fells, Nick, 210
Ferrari, Luc, 31, 113
Festivals, 118, 251n63, 252n75. See also individual festivals
Field, Ambrose, 4, 249n49
Field functions, 153–154
Fields, Kenneth, 224, 239n2
Figurativization, 94
Fischman, Rajmil, 26, 103
Fixed medium, music for, x, 152, 218–219
Fixed sounds, 13, 73, 89–90
Fleuret, Maurice, 77
Fontana Mix (Cage), 39
Formalism, 124–125, 137–145, 245n5
criticisms of, 139
extramusical models in, 139, 206, 253n82, 253n85
serial composition and, 138–139
software tools for, 143
sound organization and, 209
spectralism vs., 70–71, 145, 173
Formel, 142
Formes software, 143
Framework for sound-based music studies, 187–226
classification, 189–194
listening experience, 194–196
means of presentation, 218–222
modes of discourse, analysis, and representation, 196–209
Pope’s computer music taxonomy and, 187–188
sound organization, 209–212
virtuosity, 212–218
France
early sound-based music in, 70
French school of music, 112, 139
music technology education in, 55
support for contemporary music in, 91
François Bayle L’image de son/Klangbilder (Bayle), 86
Frémiot, Marcel, 198
French school, 112, 139
Fricke, Stefan, 254n97
Friedl, Reinhold, 128
Fundamentals, of sound-based music, 193–194, 230
Funktion series (Koenig), 29
Fuse box, listeners’ perceptual, 23, 24–25
Futurists, 127
Gallet, Bastien, 150, 151
Garnett, Guy E., 139, 158
Gender studies, 223
Genre, category vs., 68, 72
Genres and categories of
electroacoustic music, xii, 71, 179, 189
Germany
early sound-based music in, 70
E-Musik and U-Musik concepts in, 23
Gesang der Jünglinge (Stockhausen), 39, 70, 139, 141–142
Gesture
live performance and, 153, 157–158
Schafer’s concept of, 111–112
Smalley’s concept of, 98, 99, 100
Gibson, James, 4
Glitch, 210
Glitch movement, 125, 126, 149
Granulation, 120, 122, 123, 210, 251n65
Graphic scores, 204, 205
GRM. See Groupe de Recherches
Musicales
GRM Tools, 143
Groupe de Recherches Musicales
(GRM), 42–44, 71, 75, 76, 86, 91, 94, 133, 178, 190, 201, 203, 204, 213, 221, 246n11
Guattari, Félix, 252n73
Guide des objets sonores (Chion), 77
Hahn, David, 4
Hahn, Tomie, 217
Handbook for Acoustic Ecology
(Truax), 110
Harley, James, 251n62
Harvey, Jonathan, 208–209
Hearing, sonograms in relation to, 203
Hegarty, Paul, 127, 128
Heightened listening, 173
Helmuth, Mara, 203
Henry, Pierre, 43, 92
Hi-fi environments, 108
High art, 1–2, 23, 24, 114–119, 126
Hiller, Lejaren, 211
Hirst, David, 103
History, 225–226. See also Past,
sound-based music and the
Holistic approach to sound-based
music, 182, 185–187, 222–226
Holm-Hudson, Kevin, 117
Home listening, 219
Homogeneity of sounds, 29–30
Hoopen, Christiane ten, 103
Horizontal approach in music, 30, 69
Hörspiel, 11, 255n98
Hörspiel Studio, 166
House, 71
Husserl, Edmund, 77, 79
Hybridization, 170–172, 177, 179
Hyde, Joseph, 240n6
Hyptique, 204
Iazzetta, Fernando, 153
Idio-morphology, 104
Imaginary landscape, 134
Immersed listening, 94
Immersive environments, 221
Improvisation, 155–156, 215
Improvising Machines (Bowers), 155
Independent artists, academic
community vs., 125–126, 252n73
Indicative fields, 100, 101–102, 158
Indicative listening, 97
Indicative networks, 100
Indices sonores matérialisants, 90
Individuality, 117
Individualization, 171
Industrial music, 120, 127
Ingold, Tim, 215
Inner complexity, 132
Innovation in music
communication and, 25
in high and popular art forms,
118–119
new sounds, 29–30, 119–129, 191
possibilities of sound-based music,
27
Installations
at Bourges Festival, 57
children’s enjoyment of, 54
example of, 5–6
Installations (cont.)
interactive sound, 159–160
sound art as, 11, 161–162, 165–166
Institutions, as protection for individuals, 171
Instruments, electroacoustic, 214, 218
Integrity, artistic, 37
Intention. See Artistic intention
Intention/Reception project (I/R project), ix, 28, 38–53
category for, 39–44
data-gathering process in, 45–46
description of, 38
discussion of results from, 46–53
future of, 53, 244n21
participants in, 45
questionnaires used in, 45–46, 62–65
works in, selection criteria for, 43–44
Interactive analysis, 208–209
Interactive composing, 160, 254n92
Interactive composition, 12
Interactive contexts, 145
Interactive listening, 97
Interactive music, 254n92
Interactive sound installations, 159–160, 165–166
Interactive systems, 156–158
Interactivity, 160, 214
Interface (journal), 102
International Computer Music Conference, 145, 187, 240n8
Internet, 56, 60–61, 167–169, 215–217, 222
IRCAM, 71, 143, 164, 186, 190, 202, 204, 223
I/R project. See Intention/Reception project
I-sons, 87
Jackson, Michael, 250n58
Japanese noise (Japanoise), 127
Jarre, Jean-Michel, 162
JIM, 252n75
Journal of New Music Research, 102, 199
Kagel, Mauricio, 138
Kahn, Douglas, 128, 132, 161, 223
Kane, Brian, 246n10
Kehrver Verlag, 163
Keynote sounds, 250n53
Klangfarbenkontinuum (Stockhausen), 142
KlangForschung symposium, 183
Klangkunst, 10, 11, 163
K. . . (Manoury), 257n16
Koenig, Gottfried Michael, 29, 138, 142, 251n66
Kontakte (Stockhausen), 85
Kostelanetz, Richard, 121
Kraftwerk, 147
Kubrick, Stanley, 24
Laboratoire de Musique et Informatique de Marseille (MIM), 190
La création du monde (Parmegiani), 43
Lagrost, Jean-François, 43
Laliberté, Martin, 257n21
La Musique électroacoustique (GRM and Hyptique), 204, 221
Landscape, 253n80
Lansky, Paul, 210
Laptopia, 252n71
Laptop music, 15, 125–126, 252n71
L’art des sons fixés, 13, 73
Laske, Otto, 107
Lattice approach, 133, 135, 138, 179
Law of the musical, Schaeffer’s, 80–81
Layering of sound, 30, 69, 209, 245n4
Leicester College, 47
Les Dossiers de l'Ingénierie Éducative (journal), 55–56

Le son (Chion), 77

Le son des musiques (Delalande), 177–178

Lévi-Strauss, Claude, 181

Licata, Thomas, 203

Ligeti, György, 24, 39

Link, Stan, 128

Lippe, Cort, 191, 251n65

Listener-based research, 39–44

Listeners

composers’ choices and, 27–28

temporary art music and,

23–24
effect of repeated listening on, 52

interpretive role of, 38–39

I/R project and, 38–39, 44–53

research on, 38–53, 92–95

study of experience of, 194–196

technological emphasis of, 33, 97, 243n13

Listening. See also Listeners

acousmatic, 125–126

analytical, 108

blind, 247n20

causal, 247n22

contextual, 105

cultural, 82

Delalande’s theory of, 94

distracted, 108

empathetic, 94

experienced, 3

experiencing, 3

heightened, 173

home, 219

immersed, 94

indicative, 97

interactive, 97

natural, 82

nonlistening and, 94

Norman’s theory of, 105

ordinary, 82

passive, 22

profound, 247n20

recipe, 33, 97

reduced, 73, 75, 78, 79, 96, 97, 102, 109, 173, 247n20

referential, 105

reflexive, 97

repeated, 52

Schaeffer’s theory of, 81

semantic, 247n22

signed, 202

Smalley’s theory of, 97

sonograms in relation to, 203

specialized, 82

study of, 194–196

taxonomic, 94

theories of, 81, 94, 97, 105, 274n22

Listening behaviors, 93–94

Listening experience, 194–196

Listening to technology, 33, 97, 213

Live electronics, 212

Live performance, 152–161

audiovisual presentation, 158–159

fixed medium music, x, 152–153
gesture and, 153, 157–158

interactive sound installations,

159–160

means of presentation and, 218–222

mixed music, 154–155

movement-based music, 159–160

music composed for concert

presentation vs., 130

real-time performance, 155–158

sound art, 164

studio-based composition vs., 173

virtuosity in, 213–215

Local functions, 153–154

Local values, 61

Lo-fi environments, 108, 250n51

L’oiseau moqueur (Bayle), 205

López, Francisco, 247n20

Lotis, Theodoros, 103

Lowercase sound, 127

Lucier, Alvin, 121

Lux Aeterna (Ligeti), 24

Mâche, François-Bernard, 31

Machover, Tod, 193

Macro-level structure, 211–212
Index

Maillard, Bénédict, 95
Manoury, Philippe, 257n16
Masami Akita. See Merzbow
Masking, 135
MAX-MSP, 143
McAdams, Stephen, 196
McCartney, Andra, 41–42, 53, 110, 201
McLean, Alex, 257n72
McNutt, Elizabeth, 217
Mead, Margaret, 41
Meaning
definition of, 2
in environmental sound, 107
listeners’ construction of, 199
microsound and, 122
of real-world sounds, 4
Meat Ball Manifesto (Chemical Brothers), 155
Media
and access, 54–59
and communities, 60–61
and contemporary art music, 3
MEM. See Musicology of Electroacoustic Music
Merzbow (Masami Akita), 127
Meyer-Eppler, Werner, 138
Micro-editing, 252n69
Micro-level structure, 210–211
Microsound, 120, 121–126, 149, 210–211, 245n2, 251n66
Microsound (Roads), 123
Microstructure, 121
MIDI, 114, 204
Milicivic, Mladen, 242n4
Mille Plateaux, 252n73
Miller, Paul D. (aka DJ Spooky that subliminal kid), 115, 150–151
Mimesis, 4, 34
Minard, Robin, 165
Miranda, Eduardo Reck, 144–145
Mixed music, 154–155
Modelage, 90
Modernism, 3, 23, 115–117
Monroe, Alexi, 126
Montanaro, Larisa, 46
Moore, F. Richard, 256n4
Moozak, 108, 250n51
Morphology
in PROGREMU, 83–84
Smalley’s concept of, 98
in soundscape studies, 111
Mortuos Plango, Vivos Voco (Harvey), 208
Motion, 98
Mountain, Rosemary, 176, 229, 239n2, 246n12
Movement, sound created from, 32, 159
Müller, Ulrich, 163
Multimedia analysis, 257n16
Music
Cage’s view of, 8
sound-based works as, 5–9, 176, 229
Varèse vs. Cage on, 7–8
Musical consumption, 22
Musical dramaturgy
abstraction vs., 173
accessibility and, ix, 36–37, 52, 162
in I/R project, 47–50
sound installations and, 162
Musical objects, 74, 80, 210
Music appreciation, 25
Music-based music, 118
Musicking, 8
Musicology of electroacoustic music, xiii, 18
Musicology of Electroacoustic Music (MEM), xii, 182, 189, 196
Musiconomy, 256n4
Music technology education, 55
Musique acousmatique, 13
Musique acousmatique: propositions . . . positions (Bayle), 86
Musique concrète, 11, 12, 13, 31, 70, 71, 73–78, 112, 113, 119, 139, 166, 247n17, 247n25
Musique concrètement, 73–105
Musique inscrite, 253n78
Musique technologique, 247n25
Mutek festival, 251n63
Narrative discourse, 74, 94
National characteristics in music, 131, 207–208, 257n19
Nattiez, Jean-Jacques, 2, 201, 202, 224
Natural listening, 82
Naumann, Bruce, 162
Neill, Ben, 242n2
Networked music, 168–169, 215
Neutral spectral analysis, 201, 202–203
New Adventures in Sound Art Festival, 59
NewMix Festival, 174, 219
New sounds, 29–30, 119–129, 191
Newspapers, 56
New virtuosity, 90
New Zealand, 131
Niblock, Phill, 29
Nocturne (Atkinson), 46
Nodes, 98
Noema, 3
Noesis, 3
Noise, 126–129
 as alienating, 120
 music in relation to, 128–129
 noise music and, 127
 in Smalley’s theory, 98
 types of, 126
Noise, Water, Meat (Kahn), 128
Noise abatement, 109
Noise (Attali), 128
Noise-based music, 127
Noise music, 120, 127
Noise pollution, 108, 165
Nonlistening, 94
Norman, Katharine, 105, 113, 117, 128, 194
Normandeau, Robert, 152–153
Norris, Michael, 198–199, 200
Notes, 98

Object, 101
Objets musicaux. See Musical objects
Objets sonores, 246n10. See also Sound objects

Obst, Michael, 131
Ocean of Sound (Toop), 69
Okkels, Ingeborg, 245n5
Oliveros, Pauline, 121
On Sonic Art (Wishart), 134, 136, 253n79
Ordinary listening, 82
Organised Sound (journal), 9, 112, 131, 253n85
Organized sound, 5, 7–8, 9, 10, 15, 240n5
Originality, 117
Orton, Richard, 240n9
Ostertag, Bob, 146, 245n5
Oswald, John, 31, 115–118, 250n58
Ouïr, 81
Outer complexity, 132
Outreach, 58–59
Oval, 11
Ownership, 116
Paik, Nam June, 111
Paine, Garth, 160, 214–215
Palombini, Carlos, 224, 246n10
Pape, Gerard, 121
Paradigm
 for art music, 108–109
 definition of, xi
 electroacoustic, 177–178
 for sound-based music, xi, 175–180, 228
Parameters of sound, 29, 140–141
Parmegiani, Bernard, 29, 43, 118, 224
Participation, in art creation, 59, 160, 222. See also Collaboration; Devising
Passive listening, 22
Past, sound-based music and the, 75, 116, 117, 132, 225–226
Paynter, John, 55
PCV2, 80–81
PD, 143
Peignot, Jérôme, 78
Peirce, Charles Sanders, 87
Pennycook, Bruce, 241n1, 245n25
Perception, 38, 224–225
Perception of the Environment, The (Ingold), 215
Performance Practice and Presentation (PPP), xii, 182, 189, 212
Performance venues, 161, 164–165, 219, 220–221
Pertinences, 93, 199
Petitot, Jean, 86
Phenomenology, 3, 79, 113, 224
Philosophy, 224
Phoné (Chowning), 32
Phoniurge, 90
Phonoculture, 253n78
Phonography, 31–32, 109
Physical modeling, 191, 256n5
Piché, Jean, 258n26
Pink Floyd, 147
Pitch, 136
Pitch–effluvium continuum, 98
Plunderphonics, 31, 116–119, 210
Poème électronique (Varèse), 8, 40
Poiesis, ix, 199–200, 206–207, 208, 213. See also Composition
Polansky, Larry, 117
Polysonic, 30
Pope, Stephen Travis, 187–188
Popp, Markus, 11
Popper, Frank, 160
Popular culture, 1–2
Popular music, 23, 114–119, 126, 146–151. See also U-Musik
Portraits Polychromes (Groupe de Recherches Musicales), 42–44, 204
Poss, Robert M., 254n87
Postmodernism, 115–117
Pousseur, Henri, 138
Pouts-Lajus, Serge, 55
Pregnance, 248n27
Prendergast, Mark, 69, 150, 152
Presentation means, 218–222
Preservation, 192–193
Presque rien avec filles (Ferrari), 113
Presque rien no. 1 (Ferrari), 32
Pressing, Jeff, 171, 245n5
Primacy of the ear, 68, 75, 76, 80, 92, 96, 136, 194, 200
Prochaine Station (Calon and Schryer), 46–49
Profound listening, 247n20
Programme de la Recherche Musicale (PROGREMU), 82
Program notes, 36
Programs in music, 31–32
PROGREMU. See Programme de la Recherche Musicale
Pro-Tools, 143
Psychoacoustics, 224–225
Psychomusicology, 107
Public art, 165
Punkte, 251n66
Pure music, 247n20
Quatre écoutes, 81, 97
Questionnaires for I/R project, 45–46, 62–65
Radiophonic art/radio art, 11, 15, 31, 56, 73, 166–167, 255n98
Ramstrum, Momilani, 257n16
Reactive sound installations, 160
Real time, 212
Real-time performance, 155–158
Real-world music, 105–114
Real-world sounds
accessibility of, 3–5, 31, 74
composition using, 105
in I/R project, 43, 46–49
in musique concrète, 31
in soundscape compositions, 41–42
Reception. See Listeners; Listening
Reception theory, ix
Recipe listening, 33, 97
Recorded music. See Fixed medium, music for
Recycled sounds, 31–32
Red Bird (Wishart), 135, 208
Reduced listening, 73, 75, 78, 79, 96, 97, 102, 109, 173, 247n20
Referential listening, 105
Reflexive listening, 97
Regional characteristics in music, 131, 207–208
Rémus, Jacques, 163
Repeated listening, 52
Representation of sound-based music, 88, 205, 210
Requiem pour une avant-garde (Duteutre), 21
Re-synchronization, 253n78
Richard, Dominique M., 224
Richards, John, 127
Riddell, Alistair M., 128
“Rien à voir” festival, 251n63, 252n75
Risset, Jean-Claude, 43, 75, 155, 176
Riverrun (Truax), 122
Roads, Curtis, 121, 123–125
Rodgers, Tara, 115
Row, Robert, 145, 156–157
Roy, Stéphane, 96, 201–202
Rubin, Anna, 257n13
Rudy, Paul, 103
Russian Constructivism, 212
Russolo, Luigi, 113
Salience, 248n27
Sampladelia, 115–116
Sampler, 114, 119
Sampling, 114–116, 198
Satie, Erik, 22
Savouret, Alain, 253n78
Sawdust software, 251n66
Schachtel, Ernest, 97
Schaeffer, Pierre, 4, 33, 34, 73–86, 92, 102–103, 109, 112, 133, 166, 175, 190, 194, 201, 224, 247n15, 247n17, 248n33, 248n36
Schallspiel, 255n98
Schat, Peter, 178
Schedel, Margaret, 255n26
Schillinger, Joseph, 67
Schizophrenia, 110–111, 115
Schoenberg, Arnold, 25
Scholarship
access/accessibility aided by, vii–viii
framework for, 187–226
holistic approach in, 182, 185–187, 222–226
on new sounds, 120
and perception studies, 248n37
problems in, 186
on sampling, 116
single aspect treatises in, 182
soundscape vs. musique concrète, 113–114
technological emphasis of, 67, 73, 188
Schönig, Klaus, 166–167
Schreyer, Claude, 46–49
Schulz, Bernd, 128
Schwellenreiten, 144
Science, 225
Scores, graphic, 204, 205
Scratch notation, 149
Screens of sound, 121
Search for law of organization, 94
Seeger, Charles, 25
Semantic listening, 247n22
Semiotics, 224
Sequencing, 209
Serial composition, 138–139
Serialism, 71
Serra, Xavier, 225
Settel, Zack, 191
Shared sonic environments, 167–168
Signed music project, 202
Simoni, Mary, 203
Site-specific works, 162, 165–166
Sleeve notes, 36
Small, Christopher, 8
Smallley, Denis, 30, 33, 46–48, 50, 85, 93, 96–103, 111, 129, 137, 155–156, 175, 194, 197, 199–200, 201, 209, 243n10, 248n34, 250n52, 256n7
Smith, Sophy, 149
Social function of sound-based music, 61–62
Sociocultural studies, 222–224
Soft Machine, 147
Solfège, Schaeffer’s, 82
Solfège de l’objet sonore (Schaeffer and Reibel), 85
“Something to hold on to” factor, ix, 3, 26–35
abstract works and, 132
context and, 162
examples of, 28–33, 243n14
language grid and, 33–35
as source of coherence, 69–70
“Sommeil” (Henry), 92–93
Sonic art, 10–11, 13, 15, 16–17, 161–172, 240n6
Sonic Arts Network, 252n75
Sonic Arts Research Centre, Belfast, 164
Sonic signatures, 130, 245n25
Sonograms, 112, 202, 203
Sonography, 112
Sound art, 161–172
definition of, 11, 15, 240n7
example of, 5–6
as music, 5–9, 163
Sound-based art works, 240n11. See also Sound-based music
Sound-based music
accessibility of, 21–35
access to, 54–62, 228
art-life relationship and, 3
balance of communication and innovation in, 25
classification of, 5–9, 17
cohesion in, 67–70
cultural dimension of, 186
definition of, 17
emancipatory character of, 8, 15, 18, 127, 128, 130
families of approaches to, 70–175
framework for study of, xi, 175–180, 187–226, 228
fundamentals of, 193–194, 230
future of, 227–230
inclusive, 129–130
music in relation to, 5–9, 176, 229
paradigm for (see framework for study of)
past of, 75, 116, 117, 132
research on listeners’ experience of, 38–53
social function of, 61–62
technological emphasis and, 33, 67, 73, 243n13
terminality of, 9–19, 226–227
venues for, 220
Sound classification, 190–192
Sound design, 6, 56
Sound diffusion, 219–220
Sound event, 111
Sound House, 164, 220
Sounding models, 101–102
Soundmarks, 109, 250n53
Sound masses, 121
Sound objects, 4, 74, 78, 79–80, 111, 246n10
Sound organization from micro- to macro-level, 209–212
terminality of, 9–19, 226–227
Sound pollution, 109
Sound Production and Manipulation (SPM), xii, 182, 189, 212, 213
Sounds
homogeneity of, 29
new, 29–30, 119–129, 191
parameters of, 29
real-world, 3–5, 31, 43, 46–49, 74
recycled, 31–32
Soundscape, 106, 253n80
Soundscape design, 106
Soundscape ecology, 106, 108
Soundscape scholarship, 113–114
Sound sculpture, 163
Sound signals, 250n53
Sound synthesis, 12
Sound transformations, 102, 134, 135
Soundwalks, 59, 110
Source-cause discourse, 99, 103
Source recognition, 5, 103, 104, 135, 210
Space, 100, 101, 219–220, 249n44
Spatial texture, 100
Spatiomorphology, 97, 100, 103
Specialized listening, 82
Spectral analysis, 202–205
Spectralism, 70–71, 145, 173, 245n5
Spectralisme, 71
Spectral typology, 98
Spectrogram, 202
Spectromorphology, 96, 97, 103, 133, 156, 201, 209, 244n20, 250n52
Spectrum photos, 203
Speech Songs (Dodge), 121
Spektastik, 144
Spiegel, Laurie, 211
SSP software, 251n66
Stelkens, Jörg, 183
Sterne, Jonathan, 223
Stochastic music, 71
Stockhausen, Karlheinz, 39–40, 70, 85, 124, 127, 128, 136, 138, 141–142, 206, 251n66
Stollery, Pete, 46
Strange Sounds (Taylor), 223
Stravinsky, Igor, 25, 250n57
Stria (Chowning), 29
Stroppa, Marco, 254n93
Structural analysis, 205–207
Structure
from micro- to macro-level, 209–212
Smalley’s concept of, 99
in sound-based music, 137
Structure, Musical (Str), xii, 182, 189, 209
Stuart, Caleb, 126
Stuckenschmidt, Hans-Heinz, 75, 138
Studies of sound-based music, 18
Studio
as compositional tool, 152
historical significance of, 178
virtuosity in, 213
Studio-based composition, 173
Substance, 101
Sud (Risset), 43
Suitable (convenable) objects, 80
Supper, Martin, 144, 239n2, 255n2
Surrealism, 31, 127
Surrogacies, 99, 158
Surround sound, 220
Sweet spot, 220
Synchresis, 91
Synchronism (Davidovsky), 154
Synclavier music computer, 114
Synthesis, in PROGREMU, 84–85
S/Z (Barthes), 39
Takala, Tapio, 191
Tanzi, Dante, 60–61, 215, 240n2, 241n5, 244n21
Tape concerts, 218–219
Tape music, 12
Taxonomic listening, 94
Taylor, Timothy, 223
Techno, 127
Technological music, 178
Technology
high-popular convergence and, 114
listener emphasis on, 33, 97, 213, 243n13
scholarship’s focus on, 67, 73, 188
studies in field of, 225
Telemusik (Stockhausen), 40
Telepresence, 221
Television, 6, 56
Tenney, James, 121
Terminology, 9–19, 226–227
Terre de Feu (Mâche), 31
Teruggi, Daniel, 192, 241n12
Textbooks, 258n27
Textuality, 224
Texture
homogeneity of, 29
layers of, 30, 69, 245n4
Smalley’s concept of, 111–112
Terminology, 9–19, 226–227
Telemusik (Stockhausen), 40
Telepresence, 221
Television, 6, 56
Tenney, James, 121
Terminology, 9–19, 226–227
Terre de Feu (Mâche), 31
Teruggi, Daniel, 192, 241n12
Textbooks, 258n27
Textuality, 224
Texture
homogeneity of, 29
layers of, 30, 69, 245n4
Smalley’s concept of, 111–112
Terminology, 9–19, 226–227
Telemusik (Stockhausen), 40
Telepresence, 221
Television, 6, 56
Tenney, James, 121
Terminology, 9–19, 226–227
Terre de Feu (Mâche), 31
Teruggi, Daniel, 192, 241n12
Textbooks, 258n27
Textuality, 224
Thaemlitz, Terre, 114–115, 118, 119, 241n3
Théberge, Paul, 223
Thema: Omaggio a Joyce (Berio), 30
Theories of sound-based music, 174–175. See also categories of music under Families of approaches
Thibault, Alain, 170, 179, 180, 254n97
Thomas, Jean-Christophe, 91, 93, 95, 256n7
Thome, Diane, 217
Thomson, Phil, 125, 251n66
Timbral acousmatic tales, 32
Timbre, 29, 84, 136, 141–142, 249n43, 256n10
TOM. See Traité des objets musicaux (TOM) (Schaeffer)
Tonicality, 178
Tonkunst, 10
Toop, Richard, 69, 150
Top-down composition, 34–35, 71
Tournage sonore, 89
Traité des objets musicaux (TOM) (Schaeffer), 77
Trance music, 147
Transcontextuality, 101
Transformational discourse, 100
Triangulation, 37, 42, 53, 93
Trichotomy of the audible, 87
Trois rêves d’oiseau (Bayle), 88
Truax, Barry, 18, 106–110, 121–122, 132, 208, 210, 242n2, 250n51, 250n52
Turenas (Chowning), 29
Turntablism, 149, 217–218
2001—A Space Odyssey (film), 24
Typological discourse, 100
Typology, in PROGREMU, 83
Typo-morphology, 84

U-Musik (Unterhaltungsmusik [entertainment/popular music]), 23, 69, 114, 118–119, 146, 150, 176–177, 223, 226. See also Popular music
Unesco, 53, 227
Ungvary, Tamas, 203
Unités Sémiotiques Temporelles (UST), 190
University of East Anglia, 125
Utterance, 100–101
Vaggione, Horaccio, 30, 154
Välimäki, Vesa, 191
Valley Flow (Smalley), 46–50
Valorization, 22, 139, 198, 214
Vande Gorne, Annette, 85
Vanhanen, Janne, 126
Varèse, Edgard, 5, 7–8, 10, 15, 40, 127, 240n5
Vaughan, Michael, 103, 187–188
Veitl, Anne, 14
Venues. See Performance venues
Video games, 7, 8
Virtuosity, 212–218, 257n21
Visage (Berio), 39
Vision, Smalley’s concept of, 101
Visual art, sound art and, 162–164, 254n97
Visual element of performance, 126, 158–159, 218–222
Visual representation, 205, 210
Visu-audition, 91
Voice, 30, 207, 253n79
Voorvelt, Martijn, 146–147, 151, 177
Wachka, Rodney, 152
Waisvisz, Michel, 32
Walkman headphones, 250n51
Wanderley, Marcelo, 153
Warner, Daniel, 150, 176–177
Waters, Simon, 38–39, 61, 70, 116, 119, 166, 170–172, 177, 179, 197, 203
Wayfinding, 215
Weale, Rob, 46, 50, 239n2, 243n14
Webern, Anton, 138
Weinberg, Gil, 168–169
Westerkamp, Hildegard, 41, 112, 113
What’s the Matter with Today’s Experimental Music? (Landy), 21
What you see is what you get (wysiwyg), in live performance, 157–158, 165
Wikipedia, 147, 148
Windsor, Luke, 4, 109, 240n3
Winkler, Tod, 254n92
Wishart, Trevor, 101, 102, 103, 129, 133–137, 153, 160, 179, 194, 201, 208, 252n74
Worby, Rob, 127
Word pairs, 124
Worrall, David, 225
Wysiwyg (what you see is what you get), 157–158, 165
Xenakis, Iannis, 29, 121, 124, 138, 139, 206, 210
Xenochrony, 253n78
Yamaha DX-7, 114
Young, John, 103–104
Zappa, Frank, 150, 253n78