

山澤昭彦

RnA

gat caa gcc acc

AKIHIKO YAMAZAWA

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[プログラム]

```

mus_c_gnm=function( part=c( 1,2) ,tempo=120,ts="4,4",scle="c d e f g a b",octv=5,lgth="2
4",q=100,qf=0,fluc=0,inst=1,script="R Music Generator",pan=0,vrnd=20,msr=NA,sp="
",sdef="0,0,0,0,0,0",rev=0,cho=0) {
  script=iconv( gsub( "%n", "",script), "UTF-8", "SHIFT_JIS")
  data=as.numeric( charToRaw( script))
  datw=c()
  for(j in seq(1,length(data),by=3)) {
    datw=c( datw,data[j]+data[j+1]+data[j+2])
  }
  data=datw
  for(i in 1:length(part)) {
    if(is.na( pan[i] )==T) pan[i]=pan[1]
    if(is.na( inst[i] )==T) inst[i]=inst[1]
    if(is.na( octv[i] )==T) octv[i]=octv[1]
    if(is.na( scle[i] )==T) scle[i]=scle[1]
    if(is.na( lgth[i] )==T) lgth[i]=lgth[1]
    if(is.na( q[i] )==T) q[i]=q[1]
    if(is.na( qf[i] )==T) qf[i]=qf[1]
    if(is.na( sp[i] )==T) sp[i]=sp[1]
    if(is.na( fluc[i] )==T) fluc[i]=fluc[1]
    if(is.na( vrnd[i] )==T) vrnd[i]=vrnd[1]
    if(is.na( rev[i] )==T) rev[i]=rev[1]
    if(is.na( cho[i] )==T) cho[i]=cho[1]
  }
  nnum=length( data)
  tone=matrix( nrow=length( part) ,ncol=512)
  leng=matrix( nrow=length( part) ,ncol=512)
  for(i in 1:length( part)) {
    set.seed( sum( data))
    for(j in 1:512) {
      tone[i,j]=sample( strsplit( scle[i], " ") [[1]],1)
      leng[i,j]=sample( strsplit( lgth[i], " ") [[1]],1)
    }
  }
  not=matrix( nrow=length( part) ,ncol=nnum)
  len=matrix( nrow=length( part) ,ncol=nnum)
  mml=c()
  for(i in 1:length( part)) {
    not[i,]=tone[i,data]
    len[i,]=leng[i,data]
    mml[i]=paste( "o",octv[i], "%n",sep="")
    for(j in 1:nnum) {
      if( data[j]==32 & sp[i]!="") {note=sp[i]} else {note=not[i,j]}
      mml[i]=paste( mml[i], "l",len[i,j], "q",q[i]+qf[i]*RandomSelect( c( -1,1) ),note," ",sep="")
    }
  }
  seed=paste( "System.RandomSeed=",sum( data),sep="")
  kflg=paste( "KeyFlag= (",sdef,")",sep="")
  titl=paste( "TrackName= {",script,"}",sep="")
  tmpo=paste( "TimeSignature=",ts," Tempo=",tempo,sep="")
  trk=c()
  for(i in 1:length( part)) {
    trk[i]=paste( "TR=",part[i], " P=",64+pan[i], " @",inst[i], " v.Random=",vrnd[i], "
t.Random=",fluc[i], " REV=",rev[i], " CHO=",cho[i], " ",mml[i],sep="")
  }
  if( is.na( msr) ==T) { ptime="" } else { ptime=paste( "PlayFrom ( -1:3:0) PlayTo ( ",msr+1," :1:0)
",sep="") }
  md=data.frame( code=data)
  for(i in 1:length( part)) {
    md[paste( "note_",i,sep="")] =not[i,]; md[paste( "lgth_",i,sep="")] =len[i,];
  }
  return( list( seed,kflg,titl,tmpo,paste( trk,collapse="%n"),ptime,md) )
}

play=function( score) {
  write( paste( score[ 1:ifelse( is.data.frame( score[ [ length( score) ] ] ) ==T,length( score) -1,length
(score) ) ],sep="%n"),file="tmp.mml")
  shell( "csakura -p tmp.mml> nul")
}

```

```
# D20111
score=mus_c_gnm (
  part=c (1,2,3),
  tempo=60,
  ts="4,4",
  scle=c ("d e f g a b c","d e f g a b c","d e f g a b c"),
  octv=c (6,5,4),
  lgth=c ("1 2 4","1 4 2","2 1 1"),
  q=c (98,98,98),
  qf=c (0,0,0),
  fluc=c (20,20,20),
  inst=c (1,1,1),
  pan=c (-32,+32,0),
  vrnd=c (60,60,60),
  rev=c (80,80,80),
  cho=c (2,2,2),
  sp=c ("","",""),
  sdef="",
  script="
gatcaagccaccagctgccctacgatggcctaacaggagtgccattggcagattacacatgtaaataatgacctcagacaaaaaggaaccagaggcccaa
gggcaataataaggtggaattncaggtcagcccaggaattggcagaggaagtaggtgtctgataaccctttgtggagaatgagattccccccacctgtgtg
agaaaaataaacagctctggagtcttgnctgactccagaggaacgagagcattccaggaaagagagattccctggaaaattgaaatgtgaatcctagg
gggaaattggggattgntcttccctgttgaatgttngntgggaataaatatcttcaggaaccataaa
"
)
play (score)
```

```
# D20121
score=mus_c_gnm (
  part=c (1,2,3),
  tempo=30,
  ts="4,4",
  scle=c ("c d e g 'ga'", "d e f g 'ea'", "d e f g a b c"),
  octv=c (6,5,4),
  lgth=c ("1 2 4","1 4 2","2 4 1"),
  q=c (98,98,98),
  qf=c (0,0,0),
  fluc=c (0,0,0),
  inst=c (1,1,1),
  pan=c (-32,+32,0),
  vrnd=c (60,60,60),
  rev=c (80,80,80),
  cho=c (2,2,2),
  sp=c ("","",""),
  sdef="",
  script="
gatccaggccaaggcactggctgnagtggcagagttggctgtaacctttgccctaacacgaggaactcgtttnaagggggcagcgtagattgtnnattt
gccacctggatgaaggcagacatcaacatgggtcagcacgttnagtacgggagtgggaaattacatgaggcctggncctctnctttcccaagctgtgcgtt
ctggaccagctactganttattaatctcacttagcgaaagtnacggatgagcagtaagtaagtaagntggggnnttaacttgaggggttcctcctgactag
cctntnttacaggantgtggnaatattaantgcaaatttacaactgcaaa
"
)
play (score)
```

```

# D20131
score=mus_c_gnm (
  part=c (1,2,3),
  tempo=48,
  ts="4,4",
  scle=c ("d e f g a","a g f e d","c e g b"),
  octv=c (6,5,4),
  lgth=c ("1 2 4","1 4 2","2 4 1"),
  q=c (98,98,98),
  qf=c (0,0,0),
  fluc=c (20,20,20),
  inst=c (1,1,1),
  pan=c (-32,+32,0),
  vrnd=c (60,60,60),
  rev=c (80,80,80),
  cho=c (2,2,2),
  sp=c ("","",""),
  sdef="",
  script="
cggaattcatggttggtctacgaaatgcttgctcaggctcagagggacctcacccctgagcaggctgcagagagactaagggcacttcctgaggtnctta
ccactggggcagnaggacaggagacagcaaccatcgntgaccacgccgaccacagggccttgaatcctttttgtttcaacagtcttgctgaattaag
cagaaagggccttgaatcctggcctggaattgggcagatatagcattaataaaaactgtgcactcaaa
"
)
play (score)

```

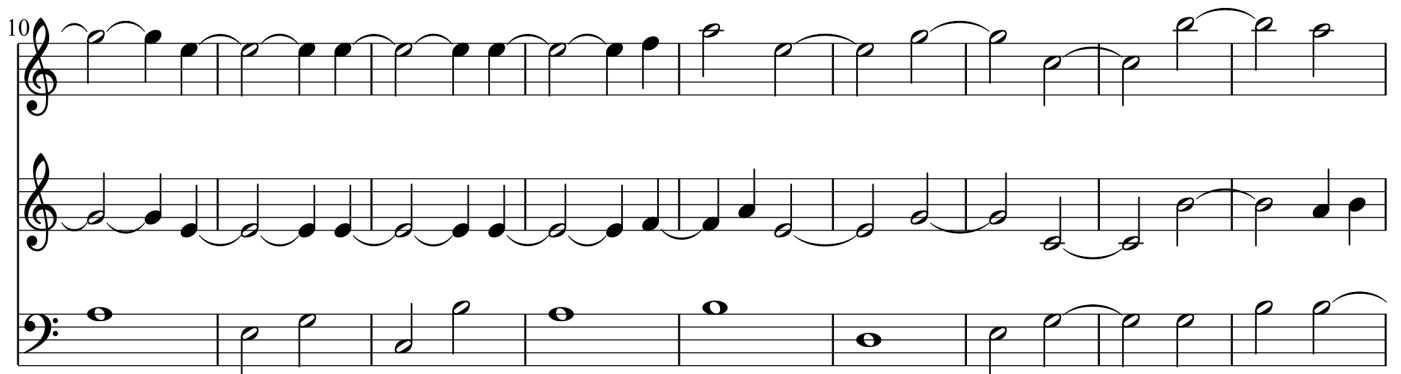
```

# D20141
score=mus_c_gnm (
  part=c (1,2,3),
  tempo=30,
  ts="4,4",
  scle=c ("def" 'ace' 'ega' r 'dfg',"c+d" 'df+g' 'fgf' r 'gab',"<a>ceg' '<a>dea' 'efab' 'egbc' 'cegb"),
  octv=c (5,6,5),
  lgth=c ("1 2 4","1 4 2","4 2 1 1"),
  q=c (98,98,98),
  qf=c (0,0,0),
  fluc=c (20,20,20),
  inst=c (1,1,1),
  pan=c (-32,+32,0),
  vrnd=c (60,60,60),
  rev=c (80,80,80),
  cho=c (2,2,2),
  sp=c ("","",""),
  sdef="-1,-1,0,0,0,-1,-1",
  script="
gatccacctctccacctccgaaagtgtgggattataggcatgagccaccgtgctcgccagaggcttcttttaagtgtgactccaagataaacacttttc
atatattgntaccttggtgattatgacagaaatctgccatcctgttaataggaatgatattccttgtaatgctgtgcagcttctgaagtgttcacatgtgatactc
ctaagccacacttncatattcgggaagttaatacaaaatgggttttaactccttaatatgggcctttttgttctaaggaaaatncatttcaatatagggaaggnccta
actatttcttttgga
"
)
play (score)

```

D20111

Akihiko YAMAZAWA



28

System 1 (Measures 28-36): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

37

System 2 (Measures 37-45): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

46

System 3 (Measures 46-54): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

55

System 4 (Measures 55-63): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

63

System 1 (Measures 63-71): Treble staff contains a series of eighth and sixteenth notes with slurs, followed by whole notes. Bass staff contains whole notes and eighth notes.

72

System 2 (Measures 72-80): Treble staff continues with eighth and sixteenth notes and slurs. Bass staff contains whole notes and eighth notes.

81

System 3 (Measures 81-89): Treble staff contains eighth and sixteenth notes with slurs. Bass staff contains whole notes and eighth notes.

90

System 4 (Measures 90-93): Treble staff contains eighth and sixteenth notes with slurs, ending with a double bar line. Bass staff contains whole notes and eighth notes, ending with a double bar line.

D20121

Akihiko YAMAZAWA



21



This system contains measures 21 through 29. The top staff features a melodic line with eighth and sixteenth notes, including a triplet in measure 21. The middle staff provides harmonic support with chords and single notes. The bottom staff has a bass line with eighth and sixteenth notes, including a triplet in measure 21.

30



This system contains measures 30 through 36. The top staff continues the melodic line with eighth and sixteenth notes. The middle staff features a more active bass line with eighth and sixteenth notes. The bottom staff continues the bass line with eighth and sixteenth notes.

37



This system contains measures 37 through 43. The top staff continues the melodic line with eighth and sixteenth notes. The middle staff features a more active bass line with eighth and sixteenth notes. The bottom staff continues the bass line with eighth and sixteenth notes.

44



This system contains measures 44 through 50. The top staff continues the melodic line with eighth and sixteenth notes. The middle staff features a more active bass line with eighth and sixteenth notes. The bottom staff continues the bass line with eighth and sixteenth notes.

51

System 1 (Measures 51-57): Treble clef contains a melodic line with eighth and sixteenth notes, some beamed. Bass clef contains an accompaniment with eighth and sixteenth notes, some beamed. Middle staff contains chords and single notes.

58

System 2 (Measures 58-64): Treble clef contains a melodic line with eighth and sixteenth notes, some beamed. Bass clef contains an accompaniment with eighth and sixteenth notes, some beamed. Middle staff contains chords and single notes.

65

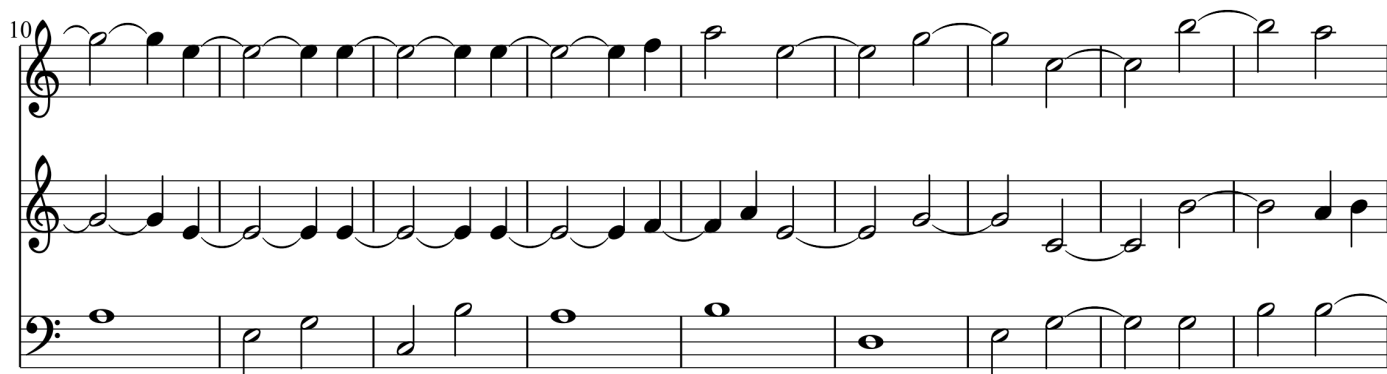
System 3 (Measures 65-71): Treble clef contains a melodic line with eighth and sixteenth notes, some beamed. Bass clef contains an accompaniment with eighth and sixteenth notes, some beamed. Middle staff contains chords and single notes.

72

System 4 (Measures 72-78): Treble clef contains a melodic line with eighth and sixteenth notes, some beamed. Bass clef contains an accompaniment with eighth and sixteenth notes, some beamed. Middle staff contains chords and single notes.

D20131

Akihiko YAMAZAWA



28

System 1 (Measures 28-36): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

37

System 2 (Measures 37-45): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

46

System 3 (Measures 46-54): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

55

System 4 (Measures 55-63): Treble staff contains a series of eighth and sixteenth notes with slurs. Bass staff contains a series of eighth and sixteenth notes with slurs.

63

System 1 (Measures 63-66): Treble clef contains eighth-note runs in measures 63-64, a half note in measure 65, and a whole note in measure 66. Bass clef contains half notes in measures 63-64, a whole note in measure 65, and a half note in measure 66.

71

System 2 (Measures 71-74): Treble clef contains eighth-note runs in measures 71-72, a half note in measure 73, and a whole note in measure 74. Bass clef contains half notes in measures 71-72, a whole note in measure 73, and a half note in measure 74.

79

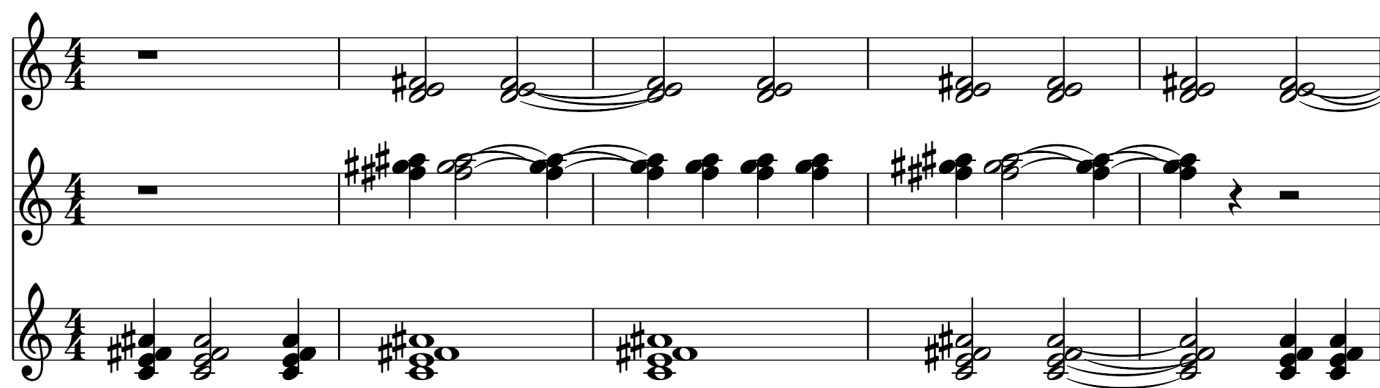
System 3 (Measures 79-82): Treble clef contains eighth-note runs in measures 79-80, a half note in measure 81, and a whole note in measure 82. Bass clef contains half notes in measures 79-80, a whole note in measure 81, and a half note in measure 82.

88

System 4 (Measures 88-91): Treble clef contains eighth-note runs in measures 88-89, a half note in measure 90, and a whole note in measure 91. Bass clef contains half notes in measures 88-89, a whole note in measure 90, and a half note in measure 91.

D20141

Akihiko YAMAZAWA



16

21

26

31

36

System 36: Three staves of music. The top staff features a melody with eighth and quarter notes, including a half rest. The middle staff has a continuous eighth-note accompaniment with various accidentals. The bottom staff provides a harmonic foundation with chords and moving lines.

40

System 40: Three staves of music. The top staff continues the melodic line with some half notes. The middle staff's accompaniment includes a half rest. The bottom staff maintains the harmonic texture with complex chordal structures.

44

System 44: Three staves of music. The top staff has several measures with half rests. The middle staff features a more active accompaniment with eighth notes and accidentals. The bottom staff continues with dense harmonic support.

49

System 49: Three staves of music. The top staff includes a half rest. The middle staff has a half rest in the second measure. The bottom staff concludes the system with a final chordal structure.

54

System 54 consists of three staves. The top staff features a melody with notes G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with various rests and accidentals. The middle staff contains chords and single notes, including G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with some notes marked with a flat (b). The bottom staff shows a complex texture with many beamed sixteenth notes and chords, primarily in the lower register.

59

System 59 consists of three staves. The top staff has a melody with notes G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with various rests and accidentals. The middle staff contains chords and single notes, including G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with some notes marked with a flat (b). The bottom staff shows a complex texture with many beamed sixteenth notes and chords, primarily in the lower register.

66

System 66 consists of three staves. The top staff has a melody with notes G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with various rests and accidentals. The middle staff contains chords and single notes, including G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with some notes marked with a flat (b). The bottom staff shows a complex texture with many beamed sixteenth notes and chords, primarily in the lower register.

72

System 72 consists of three staves. The top staff has a melody with notes G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with various rests and accidentals. The middle staff contains chords and single notes, including G#4, A#4, B4, C#5, D5, E5, F#5, and G#5, with some notes marked with a flat (b). The bottom staff shows a complex texture with many beamed sixteenth notes and chords, primarily in the lower register.

