

Contemporary Gayageum Notation

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Origin of Gayageum

Gayageum, the 12 silk stringed zither, is a Korean traditional instrument with a history of over 2,000 years. The gayageum means the gum("string instrument")of the Gaya, a name of an ancient Korean country. According to Samguk Sagi ("History of the Three Kingdoms"), King Kasil of the Gaya built the gayageum in the 6th century. When the Gaya was vanquished, a gayageum master, Uruk, went over to King Chinhung of Shilla (r. 540-576).

Since the time, his music and the instrument had been perpetuated throughout Shilla Dynasty. However, the archeological evidences show that the gayageum had already existed in the Korean peninsula before the 6th century. An ancient Chinese treatise, the Sanguochi("A story of the Three Kingdoms"), describes that there were Korean native string instruments in the Samhan period (3rd-4th centuries AD). A few pottery figures and clay dolls, that were found in Kyongju, the capital of the Shilla Dynasty (57 BC-AD 935), clearly depict the gayageum. An ancient string instrument which was found in Kwangju in 1997 shows that it might be made before the Christian era. Therefore, we can assume that the gayageum has been built and developed from the time when the Korean people settled down in the peninsula. Also Shiragi-koto(the string instrument of Shilla Dynasty of An 8th- century) is preserved in Shoshoin Repository in Nara Japan.

The classification of the gayageum

There are two kinds of gayageum ; the Pungryu gayageum (also called chongak gayageum or popkum) and Sanjo gayageum. The former was played in chongak pieces (such as the suite Yongsan Hoesang) that is the music of the court and the aristocrats. The latter is smaller in its size than that of the former and was developed in the late 19th century when the minsogak (Such as the solo instrumental piece, sanjo), the music of the common people, began to flourish. Unlike these two kinds of traditional instruments, of twelve silk strings, many contemporary instruments have thirteen, fifteen, eighteen, twenty-one, and twenty-five strings and have polyester strings in order to perform newly-composed pieces.

The structure of gayageum is divided into three parts : the body, twelve strings and the movable bridges (called anjok) over which the strings set. The body of the Pungryu gayageum is fashioned from a single piece of paulownia wood, while that of the Sanjo gayageum is a combination of the top from paulownia wood and the rear from chestnut. The Pungryu gayageum has a wooden peg, called yangidu (lit. "ram's horns"), at the bottom of the instrument that hold the strings, while the Sanjo gayageum does not have one.

Music for gayageum

There are three kinds of music for the gayageum : chongak, minsogak, and newly-composed music(Contemporary Music). Chongak is the music of the court and the aristocrats, for example, Yominlak and Yongsan Hoesang, and is played by the pungryu gayageum. Minsogak is the music of the common people, for instance, sanjo (a solo instrumental music), sinawi (an improvisatory instrumental ensemble music), and gayageum pyongchang (a musical genre that the gayageum performer simultaneously sings a song), and is played by the sanjo gayageum.

Court Music(Chongak)

In the chongak music we can feel the beauty of the space that has the same feeling of Korean traditional paintings. The sound of the wooden body and the silk string provides us the sound of the nature. The slow tempo of the music gives the atmosphere of the literati who enjoys the beauty of the nature in a peaceful mood.

Folk Music(Minsokak)

The folk music provides different mood from the chongak music. While the chongak music gives a sense of the painting of the aristocrats, the sanjo can be compared to the painting which depicts the life of the common people. The sanjo is much faster and lighter than the chongak music and gives an enjoyable touch of the common people.

Contemporary Music

Since the 1960s many composers write music for the gayageum. These newly-composed pieces are performed by the traditional instrument or innovated instruments.

The playing technique of the gayageum

The gayageum is played with the lower end pointing somewhat away from the performer's left ; the top end is supported on the right knee. The strings are plucked with the fleshy part of the fingers of the right hand(thumb and first three fingers), as well as by an outward flick using the finger-nails. Two or three fingers of the left hand press down on the strings or tremble the strings a few centimeters to the left of the moveable bridges, thereby making intermediate pitches available and producing various ornaments. This left hand technique makes the wide vibrato, called nonghyon (lit. "playing with the string"). Contemporary pieces require numerous new techniques.

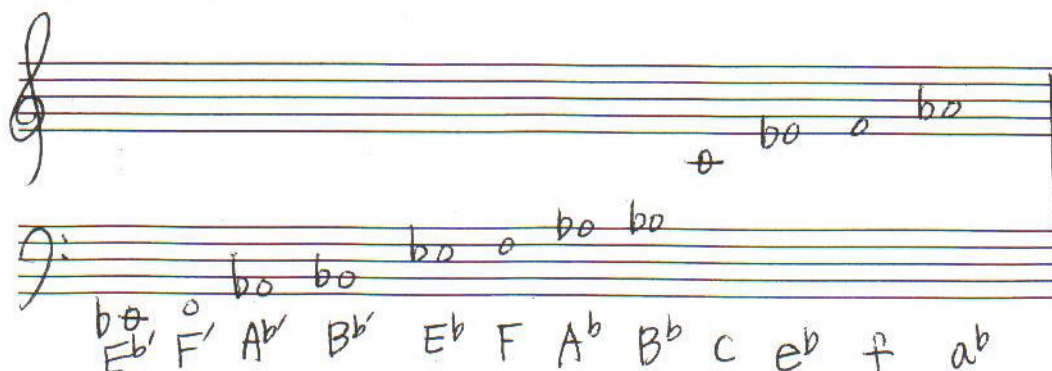
The notation system for the gayageum

The earliest gayageum score is Cholchang Mallok, written by Chol Ong in 1796. This score contains the gayageum accompanimental melody for the traditional lyrical songs, called kagok. Most gayageum scores are notated by chonggan-po system. The nation system, invented by King Sejong (1397-1450), is a combination of square in which notes are written down. The chongak music has been written in this system. The minsogak has been transmitted in the oral tradition. Since the import of the western music, however, the music has been transcribed by western staff notation. Most of newly-composed pieces are written in western staff notation.

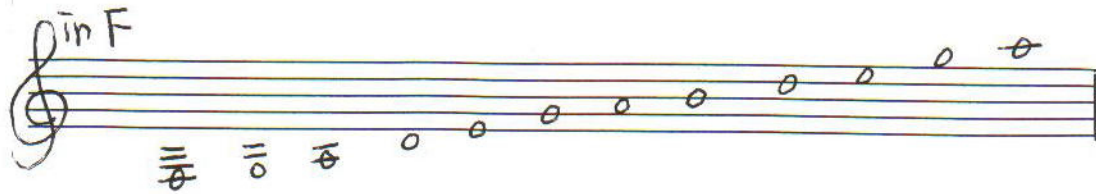
The tuning system of the gayageum

Originally, the range of the gayageum is two and a half octave. Contemporary pieces, when they are composed for the traditional gayageum, employ twelve pitches within the range. Due to the structure of the gayageum, a composer can make wider or narrower range by moving bridges or using the pudul and can make different scales such as a chromatic scale. We can also make different scales by moving bridges with left hand during the performance. The conventional tuning systems of the Traditional tuning system of the chongak gayageum and sanjo gayageum, 18-string, 25-string gayageum are as follows

Chongak gayageum

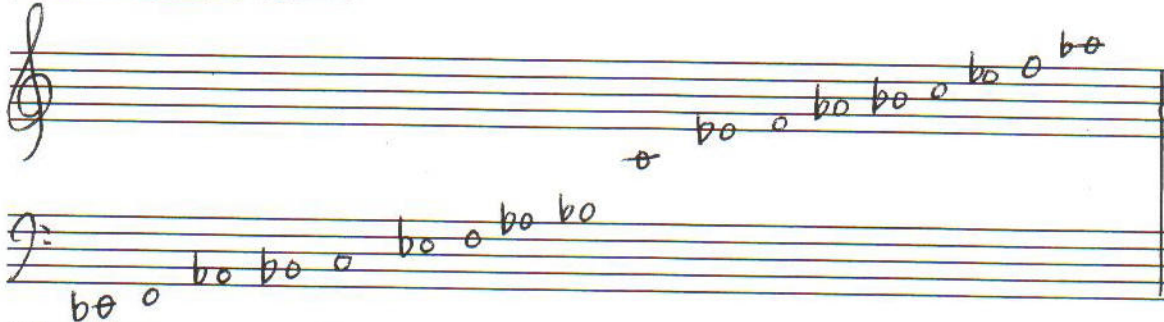


Sanjo gayageum

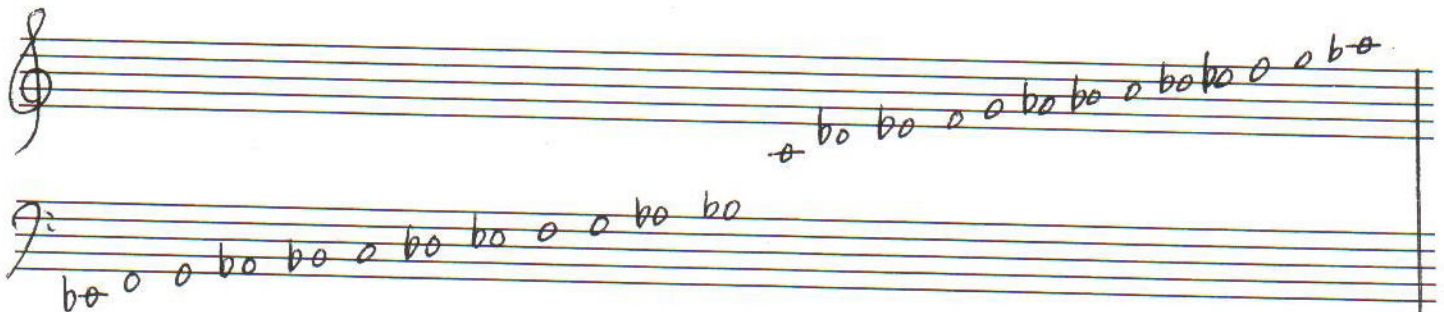


Notation: D G A d e g a b d' e' g' a'
 Sound: G' C D G A C d e g a c' d'

18-strings gayageum



25-strings gayageum



Notation for contemporary gayageum pieces

Traditionally, gayageum court music have been notated by Chonggab-bo which was invented during the reign of King Sejong (1397-1450). When the gayageum sanjo notated, the Western staff notation was used. Most contemporary pieces have been notated by Western staff notation. Various symbols, conventional and newly-designed ones, are employed to write down various techniques.

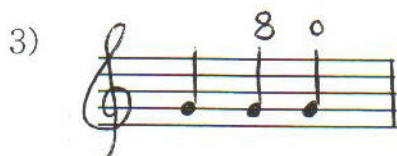
Symbols for the right hand technique

1) 1.2.3.4.5.

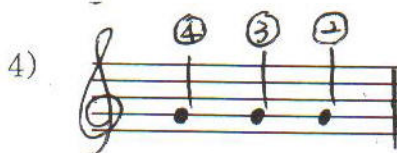
- Finger numbers from the thumb to the little finger(Not necessarily marked)



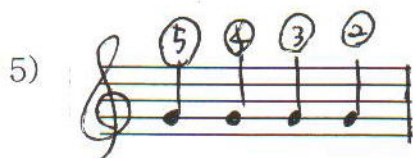
- Flicking with the index finger to make a different tone color when the same tone is repeated



- Double flicking with the middle finger and the index finger



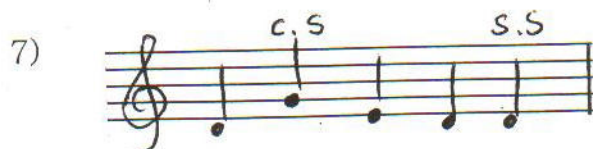
- Flicking with the 4th, 3th, and 2th fingers



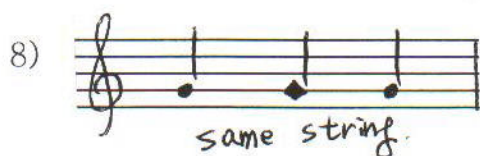
- Flicking with the 5th, 4th, 3th, and 2th fingers



- Glissando



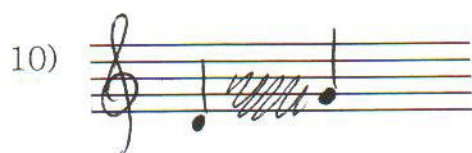
- c.s - Abbreviation for the con sordino : stopping with the palm of the right hand to make stopping effect
- s.s - Abbreviation for the senza sordino : return to the standard right hand technique after the consordino



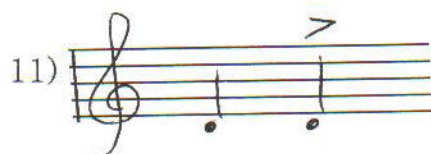
- To make an octave higher tone : it can also make c.s. effect by stopping the half of a string



To play with the right hand



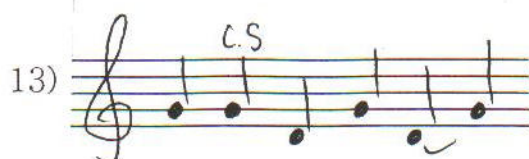
- To scratch with the thumb finger



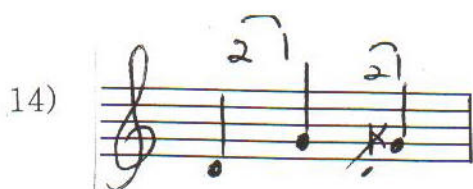
- To play with the nail of the thumb finger



- To pluck with the top side of nails.



To make the s.s. effect while the c.s. is continued



- To pick up a string with the index finger and the thumb



- Tremolo with finger nail



- Tremolo with finger skin

Symbols for the left hand technique



- To vibrate widely



- To vibrate softly



- To vibrate after the plain sound



- To vibrato before the plain sound



- To make an accent on a specific tone



- To push a string violently and shortly



- To make a wide downward sound from a half higher tone



- To slide up a tone from a lower tone



- To slide down a tone from a higher tone



- To slide down a tone



- To slide up a tone



- To rolling up a tone from a lower tone



- To rolling down a tone from a higher tone



- To rolling down a tone



- To rolling up a tone



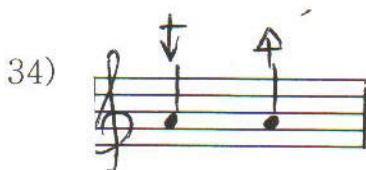
- Conventional symbol to slide down a tone



- To push a string to make a higher tone which is made by the upper string
: it can make a different tone color when the same tones are repeated



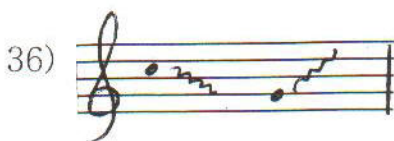
- To push a string to make a higher tone which is made by the next to an upper string








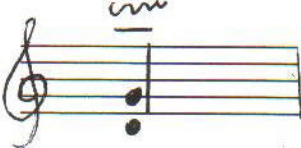
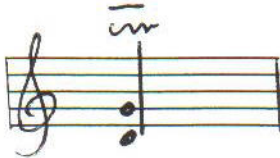
- To return to the standard tuning after the two above techniques




- To make an ornament with the thumb of the left hand



- To slide up or down with a slight vibration

- 37)  • After plucking the first note, press the string at the second beat and make "g" by the lingering sound.
- 38)  • Right after plucking the first note, make the sound up by pressing the string, then make "g" at the second beat.
- 39)  • right after plucking the first note, make "g" by pressing the string with vibrato at the second beat.
- 40)  • To pluck with the left hand
- 41)  • Not to make a vibration
- 42)  • To make an vibrato with the upper string when two strings are played simultaneously
- 43)  • To make an vibrato with the down string when two strings are played simultaneously

44)  • To make an upward or downward effect with micro tones

The musical notation shows a treble clef with a five-line staff. A solid black dot is on the first line (F4). To its right, four 'x' marks are placed on the staff at positions corresponding to quarter notes: the first 'x' is on the first space (G4), the second on the second line (A4), the third on the second space (B4), and the fourth on the third line (C5). Below the staff, a series of vertical lines connect the positions of the notes, showing a stepwise upward and then downward movement.

45)  • Stakato

The musical notation shows a treble clef with a five-line staff. A single solid black dot is on the second line (D4). A vertical line with a flag extends upwards from the dot, and a small dot is placed below the staff, indicating a staccato or stakato effect.

The left hand technique of the gayageum makes various sound effects. They are not as strong as bowed instruments. However, we can make confined effects by vibration or putting up or down the string with the left hand. We can make 4th or 5th degree higher tone by pulling down a string.

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중광곡 (重光曲)

가야금보

대마리역음

상령산 (上靈山)

二장				초장				一三〇
中 1	中 1	横	琳 -	中 1	琳 1	琳 1	①	
2 >	2 。	中 -	中 -	2 >	2 >	2 >		
	横							
中 L	琳 -	中 L	中 L	中 L	横	横 L		
横 -	中	中 -	中 -	横 -	依	琳 -	i	
琳	2 。	横	琳 -	琳	2 。	横 L		
中 L	横	琳 - 2	中 -	中 L	横			
横	琳	中 1	横	横	琳	琳 1	○	
中 -	黄 -	2 >	琳 -	中 -	横 -	2 >		
					琳			
琳	無 -	中 L	中 -	琳	横	琳 。	①	
横	琳		横	横		⋮		
中 -	中	横 -	琳 -	中 -	中 -	横 -		
琳	横	琳	中	琳	横	2 >		
横	琳 - 2	中 L	琳 -	横 2	琳 -	.		

figure 2. Sanjo

다스름 (Introduction)

우조

The musical score is written on nine staves. The first staff begins with a treble clef and a key signature of one sharp (F#). The notation includes various note values, rests, and ornaments. The second staff has a treble clef and a key signature of one sharp. The third staff has a treble clef and a key signature of one sharp. The fourth staff has a treble clef and a key signature of one sharp. The fifth staff has a treble clef and a key signature of one sharp. The sixth staff has a treble clef and a key signature of one sharp. The seventh staff has a treble clef and a key signature of one sharp. The eighth staff has a treble clef and a key signature of one sharp. The ninth staff has a treble clef and a key signature of one sharp.

Figure 3. Shinbyulsok - composed by Baek Byungdong

新別曲

가야금

매우느리게

3/4

4/4

3

5/4

6/4

7/4

mf

f

ff

p

mf

mf

Figure 4. Playground - composed by Yi Sung-chun

가야금을 위한 모음곡 <놀이터>

- 01세속 제2회 발표회 위촉작품 -

Moderato (Approximately Andantino)

I. 정경

이성천(1966)

The musical score is written for multiple staves, likely representing different parts of the Gayageum. It includes various musical notations such as treble and bass clefs, time signatures (3/4, 4/4, 5/4, 3/8), and dynamic markings (mp, mf, ff, molto cresc., molto accel., a tempo). The score is divided into sections with tempo markings like 'Moderato (Approximately Andantino)' and 'Tempo di rubato'. There are also performance instructions like 'L. H.' and 'R. H.'.

Figure 5. nah/fern - composed by Ku bonu

Handwritten musical score for a piano piece, featuring multiple staves with complex rhythmic patterns and dynamic markings. The score includes measures numbered 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.