

Maximilian
M A R C O L L

**Amproprification #9:
Schrift/Bild/Schrift, Bernhard Lang**

for Ensemble and automated Amplification

Setup & Staging Instructions

Commissioned by Ensemble Mosaik

Duration: 22'

First performance:

May 23rd 2019

Kesselhaus, Kulturbrauerei Berlin

Ensemble Mosaik

Enno Poppe

Maximilian Marcoll

Introduction

"Amproprifications" is a series of pieces for performers and electronics. The title is a combination of the terms "Appropriation" and "Amplification": In short, all Amproprifications are elaborate amplification layers for preexisting pieces by other composers. The parts of the performers consist in the performance of scores by other composers. One specific score is performed for each piece in the series. Not a single note of the original's text is being altered, nothing is added, nothing is omitted, nothing is being changed in any way. The electronics on the other hand solely consist of amplification. No additional sound whatsoever is being produced. The possibilities of interference span a large variety of movements, from almost inaudibly slow fadings to extremely fast and brutal chopping. In a figure of speech, all Amproprifications are "silent" pieces. They themselves do not contain or produce any sound. They do, however, constitute filters, readings, processings of the original pieces. The development of the amplification layers are very different each time and stem from aspects regarding structure and content that are based in the respective original: The originals are being superimposed with external layers which have their origin in the works itself.

Amproprification #9 is a tribute to one of my favourite living composers, Bernhard Lang. In his work he explores both the concepts of looping/repetition and the trans- or recomposing of other composer's pieces.

"Schrift/Bild/Schrift" is one of the last pieces he wrote before starting to work on the "Difference/Repetition" series, which heavily focusses on loops and repetitions as a means to build musical progressions.

Hence, in Amproprification #9 the amplification layer is comprised mostly of loops and repeating structures that remain fixed or change slowly, while the music underneath has a very different pace of development.

Instrumentation

Flute
Oboe
Clarinet (also Bass-Clarinet)
Percussion
Piano
Violin
Viola
Cello

Technical Requirements

10-12 microphones
(for the strings clip mics are recommended)
8 head- or earphones
(9 if a conductor is involved)
Headphone Amplifier (1 in, 8/9 out)
8 Loudspeakers
Mixing Board (min 21 ch.) and/or
Audio Interface with sufficient Mic Preamps &
ADCs, Computer running MaxMSP

Realisation & Staging

The sounds of the instruments are to be individually picked up by microphones. For the strings, ideally, clip mics should be used in order to guarantee close miced signals. Multiple mics are required for the percussion setup and the piano.

The outputs of the microphones are to be pre-mixed to one channel per instrument, and then to be fed into the amplification process. In most situations it is beneficial to individually compress the signals slightly before sending them into the amplification.

To be precise, there actually is one thing that is changed about the underlying piece of music: The timing of the performance is fixed. Almost all the liberty concerning timing is handed over to the automated amplification. Synchronisation is achieved using a monitor/click track.

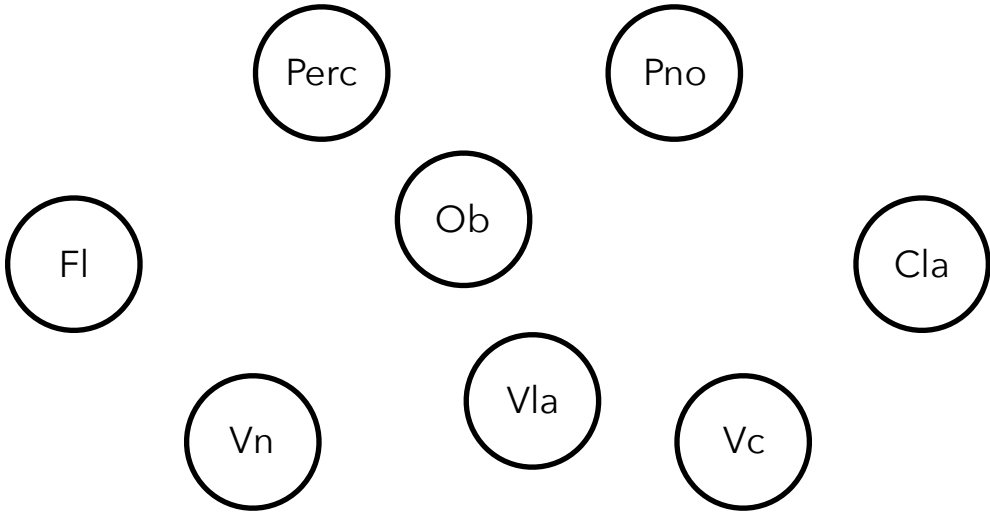
The timing of the piece and the monitor track has been fixed in collaboration with Ensemble Mosaik and Enno Poppe especially for this purpose.

The amplification track itself is available as a 8 channel audio file containing volume levels from -90dBfs to 0dBfs, as DC values. A Max/MSP-Patch is available on marcoll.de to do the actual amplitude modulation.

Measures should be taken to prevent the audience from getting too much direct sound from the performers. Considering the number of instruments involved it is recommended to position the performers in a second room, adjacent to the main performance space.

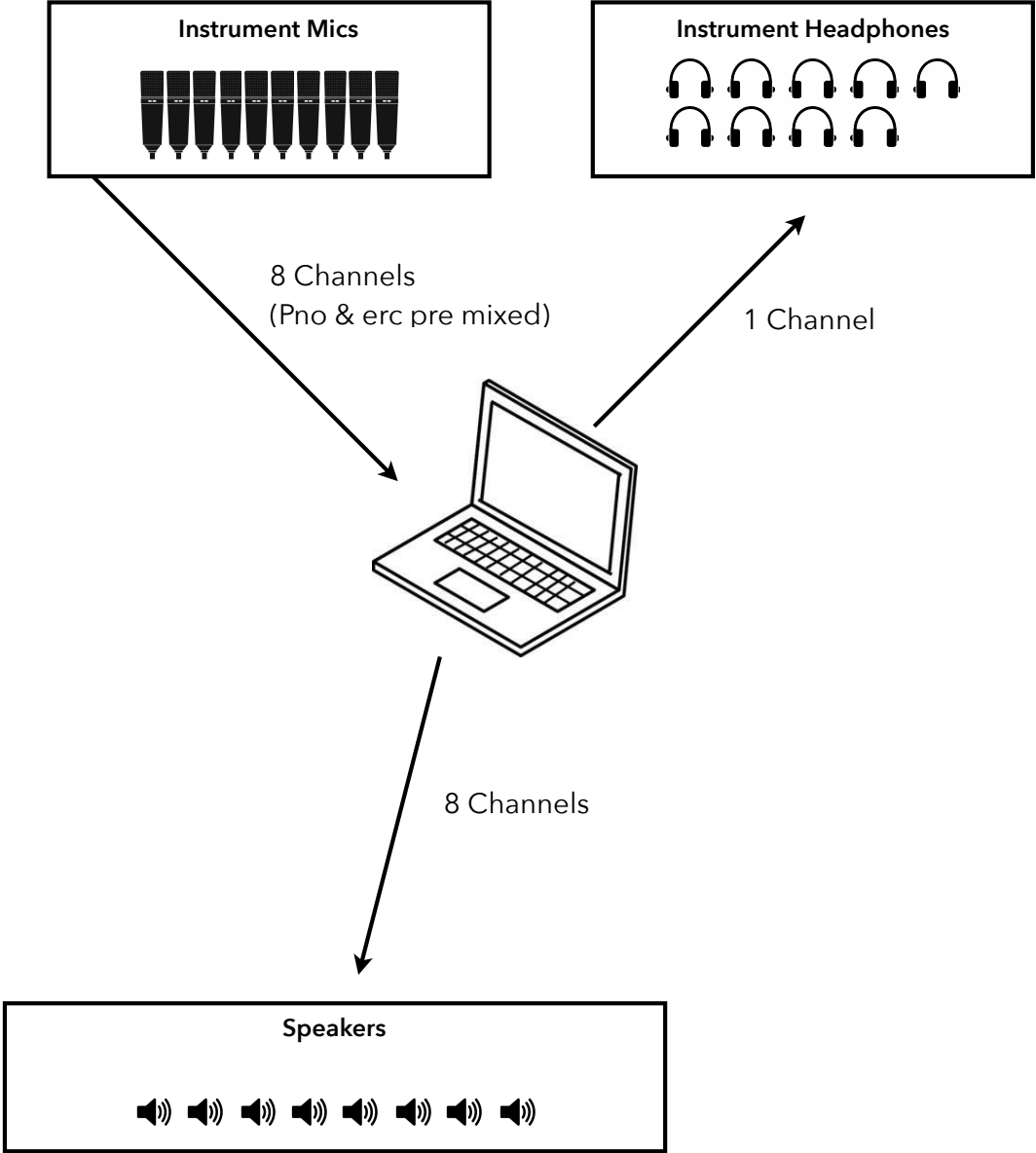
The resulting amplified signals are to be played back through an array of eight loudspeakers, arranged on the main stage as shown in the drawing below.

Speaker Setup (on stage)



AUDIENCE

Tec Setup



Time Stamps

On the next pages you will find a table with time stamps for each measure in the piece, so during rehearsals, performance can begin anywhere in the piece.

Sections 1 - 4 / 5 / 6 - 9

	section 1			section 2			section 3			section 4		
1	3,820	1,688		73	107,891	0,938	162	211,963	1,125	241	324,650	1,688
2	5,508	1,500		74	108,829	0,938	163	213,088	1,125	242	326,338	1,688
3	7,008	1,312		75	109,767	0,750	164	214,213	1,500	243	328,026	0,750
4	8,32	1,312		76	110,517	0,750	165	215,713	1,875	244	328,776	0,938
5	9,632	1,688		77	111,267	0,938	166	217,588	1,500	245	329,714	1,500
6	11,32	1,500		78	112,205	0,750	167	219,088	1,500	246	331,214	1,688
7	12,82	1,688		79	112,955	0,750	168	220,588	1,125	247	332,902	1,500
8	14,508	1,500		80	113,705	0,750	169	221,713	1,500	248	334,402	1,500
9	16,008	1,312		81	114,455	0,750	170	223,213	0,750	249	335,902	1,312
10	17,32	1,688		82	115,205	0,938	171	223,963	1,125	250	337,214	1,125
11	19,008	1,688		83	116,143	1,312	172	225,088	1,500	251	338,339	1,125
12	20,696	1,500		84	117,455	1,312	173	226,588	1,500	252	339,464	1,500
13	22,196	1,500		85	118,767	0,750	174	228,088	1,500	253	340,964	1,688
14	23,696	1,312		86	119,517	0,750	175	229,588	1,500	254	342,652	2,625
15	25,008	1,500		87	120,267	0,750	176	231,088	1,312	255	345,277	1,500
16	26,508	1,312		88	121,017	0,750	177	232,4	1,875	256	346,777	1,500
17	27,82	1,312		89	121,767	0,938	178	234,275	1,688	257	348,277	1,688
18	29,132	0,750		90	122,705	0,750	179	235,963	1,688	258	349,965	1,500
19	29,882	0,750		91	123,455	0,938	180	237,651	1,125	259	351,465	1,688
20	30,632	0,750		92	124,393	1,312	181	238,776	1,688	260	353,153	0,750
21	31,382	1,500		93	125,705	1,312	182	240,464	0,750	261	353,903	1,500
22	32,882	1,500		94	127,017	0,750	183	241,214	1,688	262	355,403	1,500
23	34,382	1,500		95	127,767	1,125	184	242,902	1,312	263	356,903	1,500
24	35,882	1,688		96	128,892	0,750	185	244,214	0,938	264	358,403	0,938
25	37,57	1,688		97	129,642	1,125	186	245,152	1,125	265	359,341	1,312
26	39,258	1,500		98	130,767	1,312	187	246,277	1,125	266	360,653	1,312
27	40,758	1,875		99	132,079	1,688	188	247,402	1,125	267	361,965	1,500
28	42,633	1,500		100	133,767	1,125	189	248,527	1,125	268	363,465	1,500
29	44,133	1,688		101	134,892	1,312	190	249,652	1,125	269	364,965	1,875
30	45,821	1,125		102	136,204	1,125	191	250,777	1,125	270	366,84	1,688
31	46,946	1,500		103	137,329	1,312	192	251,902	1,312	271	368,528	1,500
32	48,446	1,125		104	138,641	0,750	193	253,214	1,688	272	370,028	1,500
33	49,571	1,500		105	139,391	0,750	194	254,902	1,125	273	371,528	0,750

34	51,071	1,312		106	140,141	1,312		195	256,027	1,688		274	372,278	1,500
35	52,383	1,688		107	141,453	1,125		196	257,715	1,312		275	373,778	1,500
36	54,071	1,688		108	142,578	1,125		197	259,027	1,312		276	375,278	1,875
37	55,759	1,312		109	143,703	1,125		198	260,339	1,312		277	377,153	1,500
38	57,071	1,875		110	144,828	1,125		199	261,651	0,750		278	378,653	1,875
39	58,946	1,688		111	145,953	1,312		200	262,401	1,500		279	380,528	1,125
40	60,634	1,500		112	147,265	1,688		201	263,901	1,500		280	381,653	1,125
41	62,134	1,500		113	148,953	1,125		202	265,401	1,125		281	382,778	0,750
42	63,634	1,500		114	150,078	1,312		203	266,526	2,062		282	383,528	1,500
43	65,134	1,875		115	151,39	1,125		204	268,588	1,688		283	385,028	1,312
44	67,009	2,062		116	152,515	0,938		205	270,276	1,125		284	386,34	1,688
45	69,071	1,500		117	153,453	1,125		206	271,401	1,125		285	388,028	1,688
46	70,571	1,500		118	154,578	1,312		207	272,526	1,312		286	389,716	1,875
47	72,071	0,938		119	155,89	0,938		208	273,838	1,500		287	391,591	1,500
48	73,009	1,125		120	156,828	1,125		209	275,338	2,250		288	393,091	1,500
49	74,134	0,938		121	157,953	1,125		210	277,588	1,875		289	394,591	1,688
50	75,072	0,938		122	159,078	1,125		211	279,463	1,875		290	396,279	1,312
51	76,01	1,688		123	160,203	1,312		212	281,338	1,688		291	397,591	1,500
52	77,698	1,125		124	161,515	1,125		213	283,026	1,500		292	399,091	1,125
53	78,823	1,875		125	162,64	1,312		214	284,526	1,688		293	400,216	1,688
54	80,698	1,875		126	163,952	2,062		215	286,214	1,125		294	401,904	1,688
55	82,573	1,500		127	166,014	1,500		216	287,339	1,125		295	403,592	1,500
56	84,073	0,750		128	167,514	0,750		217	288,464	2,250		296	405,092	1,500
57	84,823	1,500		129	168,264	0,750		218	290,714	1,500		297	406,592	1,125
58	86,323	1,500		130	169,014	1,500		219	292,214	1,875		298	407,717	1,125
59	87,823	2,250		131	170,514	1,125		220	294,089	2,062		299	408,842	1,500
60	90,073	1,500		132	171,639	1,125		221	296,151	1,875		300	410,342	1,500
61	91,573	1,875		133	172,764	0,750		222	298,026	1,125		301	411,842	1,125
62	93,448	1,875		134	173,514	1,125		223	299,151	1,500		302	412,967	1,125
63	95,323	1,125		135	174,639	1,125		224	300,651	1,312		303	414,092	1,125
64	96,448	1,312		136	175,764	1,500		225	301,963	0,750		304	415,217	1,125
65	97,76	1,688		137	177,264	1,312		226	302,713	1,500		305	416,342	1,500
66	99,448	1,688		138	178,576	1,125		227	304,213	1,312		306	417,842	0,938
67	101,136	1,125		139	179,701	1,312		228	305,525	0,750		307	418,78	1,875
68	102,261	0,750		140	181,013	0,750		229	306,275	1,875		308	420,655	1,875
69	103,011	0,938		141	181,763	1,688		230	308,15	1,125		309	422,53	1,312

70	103,949	0,750		142	183,451	1,875		231	309,275	1,688		310	423,842	1,500
71	104,699	1,500		143	185,326	1,875		232	310,963	1,312		311	425,342	2,438
72	106,199	1,688		144	187,201	1,875		233	312,275	1,500		312	427,78	1,125
	107,887			145	189,076	1,125		234	313,775	1,500		313	428,905	1,125
				146	190,201	0,750		235	315,275	1,500			430,03	
				147	190,951	1,688		236	316,775	1,500			<u>430,034</u>	
				148	192,639	2,062		237	318,275	1,125				
				149	194,701	1,688		238	319,4	1,312				
				150	196,389	0,938		239	320,712	1,500				
				151	197,327	1,125		240	322,212	2,43				
				152	198,452	1,500			324,642					
				153	199,952	1,500								
				154	201,452	1,500								
				155	202,952	1,500								
				156	204,452	1,500								
				157	205,952	1,500								
				158	207,452	0,938								
				159	208,39	1,500								
				160	209,89	1,500								
				161	211,39	0,562								
					211,952									

430,034	45,9	45,9	
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92	838,934	4,000	
	842,934	45,9	
	888,834		

	section 6				section 7				section 8				section 9		
-1	885,834	1,500		80	992,9	1,500		152	1090,773	1,688		222	1194,846	0,938	
0	887,334	1,500		81	994,4	1,125		153	1092,461	1,125		223	1195,784	1,688	
1	888,834	1,500		82	995,525	1,312		154	1093,586	1,500		224	1197,472	1,125	
2	890,334	1,312		83	996,837	1,500		155	1095,086	1,688		225	1198,597	1,688	
3	891,646	1,125		84	998,337	1,500		156	1096,774	1,688		226	1200,285	1,500	
4	892,771	0,750		85	999,837	1,125		157	1098,462	1,875		227	1201,785	1,500	
5	893,521	1,125		86	1000,962	1,312		158	1100,337	1,312		228	1203,285	1,500	
6	894,646	0,750		87	1002,274	1,125		159	1101,649	1,125		229	1204,785	0,938	
7	895,396	1,312		88	1003,399	1,125		160	1102,774	1,125		230	1205,723	0,750	
8	896,708	1,688		89	1004,524	1,125		161	1103,899	1,500		231	1206,473	0,750	
9	898,396	1,125		90	1005,649	1,125		162	1105,399	1,125		232	1207,223	1,125	
10	899,521	2,062		91	1006,774	0,938		163	1106,524	1,688		233	1208,348	0,938	
11	901,583	1,125		92	1007,712	1,500		164	1108,212	1,500		234	1209,286	0,938	
12	902,708	1,125		93	1009,212	1,875		165	1109,712	1,875		235	1210,224	1,500	
13	903,833	1,500		94	1011,087	1,312		166	1111,587	1,125		236	1211,724	2,812	
14	905,333	1,500		95	1012,399	1,125		167	1112,712	2,250		237	1214,536	1,500	
15	906,833	1,688		96	1013,524	1,125		168	1114,962	2,438		238	1216,036	1,500	
16	908,521	1,875		97	1014,649	1,312		169	1117,4	1,500		239	1217,536	1,875	
17	910,396	1,500		98	1015,961	1,125		170	1118,9	3,000		240	1219,411	1,500	
18	911,896	1,688		99	1017,086	1,125		171	1121,9	1,500		241	1220,911	1,500	
19	913,584	1,125		100	1018,211	1,688		172	1123,4	1,500		242	1222,411	1,125	
20	914,709	1,500		101	1019,899	1,500		173	1124,9	1,500		243	1223,536	1,125	
21	916,209	1,500		102	1021,399	1,125		174	1126,4	1,500		244	1224,661	0,938	
22	917,709	1,125		103	1022,524	1,125		175	1127,9	1,500		245	1225,599	1,125	
23	918,834	1,875		104	1023,649	1,875		176	1129,4	1,500		246	1226,724	0,750	
24	920,709	1,875		105	1025,524	1,500		177	1130,9	1,500		247	1227,474	1,688	
25	922,584	0,750		106	1027,024	0,938		178	1132,4	1,125		248	1229,162	0,750	
26	923,334	1,125		107	1027,962	0,938		179	1133,525	1,125		249	1229,912	1,688	
27	924,459	1,312		108	1028,9	1,125		180	1134,65	0,750		250	1231,6	2,250	
28	925,771	1,688		109	1030,025	1,125		181	1135,4	0,750		251	1233,85	1,500	
29	927,459	1,125		110	1031,15	1,500		182	1136,15	0,750		252	1235,35	1,688	
30	928,584	1,125		111	1032,65	1,875		183	1136,9	1,125		253	1237,038	1,500	
31	929,709	1,688		112	1034,525	1,125		184	1138,025	1,125		254	1238,538	1,125	
32	931,397	2,062		113	1035,65	1,125		185	1139,15	1,875		255	1239,663	1,875	
33	933,459	1,500		114	1036,775	1,125		186	1141,025	2,250		256	1241,538	1,500	
34	934,959	1,500		115	1037,9	0,750		187	1143,275	1,688		257	1243,038	1,500	

35	936,459	1,500		116	1038,65	1,125		188	1144,963	1,500		258	1244,538	1,125
36	937,959	1,500		117	1039,775	1,500		189	1146,463	1,125		259	1245,663	1,312
37	939,459	1,125		118	1041,275	1,312		190	1147,588	1,312		260	1246,975	1,688
38	940,584	1,125		119	1042,587	1,500		191	1148,9	1,125		261	1248,663	1,500
39	941,709	1,125		120	1044,087	1,125		192	1150,025	1,500		262	1250,163	1,125
40	942,834	1,688		121	1045,212	1,312		193	1151,525	1,500		263	1251,288	1,500
41	944,522	1,688		122	1046,524	1,312		194	1153,025	1,875		264	1252,788	1,312
42	946,21	0,750		123	1047,836	1,312		195	1154,9	0,750		265	1254,1	2,250
43	946,96	1,875		124	1049,148	1,312		196	1155,65	1,500		266	1256,35	1,500
44	948,835	1,125		125	1050,46	1,125		197	1157,15	0,750		267	1257,85	0,938
45	949,96	1,500		126	1051,585	1,125		198	1157,9	1,125		268	1258,788	1,125
46	951,46	1,500		127	1052,71	0,750		199	1159,025	1,125		269	1259,913	1,500
47	952,96	1,688		128	1053,46	1,500		200	1160,15	2,625		270	1261,413	0,938
48	954,648	1,500		129	1054,96	0,938		201	1162,775	1,688		271	1262,351	0,750
49	956,148	1,125		130	1055,898	1,500		202	1164,463	1,875		272	1263,101	0,750
50	957,273	1,500		131	1057,398	1,125		203	1166,338	2,438		273	1263,851	1,125
51	958,773	1,500		132	1058,523	1,125		204	1168,776	1,500		274	1264,976	0,938
52	960,273	0,750		133	1059,648	1,125		205	1170,276	0,750		275	1265,914	1,125
53	961,023	0,750		134	1060,773	1,875		206	1171,026	1,500		276	1267,039	1,500
54	961,773	1,312		135	1062,648	1,500		207	1172,526	1,688		277	1268,539	1,688
55	963,085	0,750		136	1064,148	1,875		208	1174,214	1,312		278	1270,227	1,500
56	963,835	1,500		137	1066,023	1,875		209	1175,526	1,312		279	1271,727	0,750
57	965,335	0,750		138	1067,898	1,500		210	1176,838	1,500		280	1272,477	1,875
58	966,085	0,750		139	1069,398	1,875		211	1178,338	1,688		281	1274,352	1,125
59	966,835	1,125		140	1071,273	1,688		212	1180,026	0,938		282	1275,477	1,312
60	967,96	1,125		141	1072,961	1,500		213	1180,964	0,750		283	1276,789	0,750
61	969,085	1,125		142	1074,461	1,312		214	1181,714	1,500		284	1277,539	1,500
62	970,21	1,500		143	1075,773	1,500		215	1183,214	1,500		285	1279,039	1,500
63	971,71	1,500		144	1077,273	1,125		216	1184,714	1,875		286	1280,539	1,125
64	973,21	1,500		145	1078,398	2,250		217	1186,589	1,312		287	1281,664	1,500
65	974,71	1,500		146	1080,648	1,500		218	1187,901	1,500		288	1283,164	1,688
66	976,21	1,500		147	1082,148	2,250		219	1189,401	2,250		289	1284,852	1,125
67	977,71	1,312		148	1084,398	1,500		220	1191,651	2,250		290	1285,977	1,125
68	979,022	1,875		149	1085,898	1,688		221	1193,901	0,938		291	1287,102	1,688
69	980,897	1,125		150	1087,586	1,875			1194,839			292	1288,79	1,125
70	982,022	0,750		151	1089,461	1,312						293	1289,915	0,938
71	982,772	1,125			1090,773							294	1290,853	0,750

72	983,897	0,938											295	1291,603	1,125
73	984,835	1,125											296	1292,728	1,125
74	985,96	0,750											297	1293,853	1,312
75	986,71	1,312											298	1295,165	1,688
76	988,022	1,312											299	1296,853	1,312
77	989,334	1,125											300	1298,165	0,750
78	990,459	1,125												1298,915	
79	991,584	1,312													
	992,896														

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