

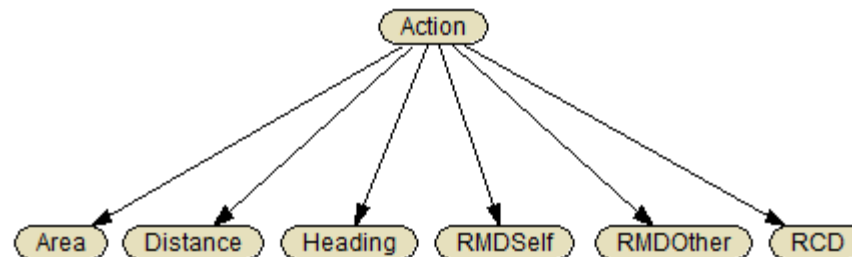
CONDITIONAL PROBABILITY TABLES DOCUMENTATION

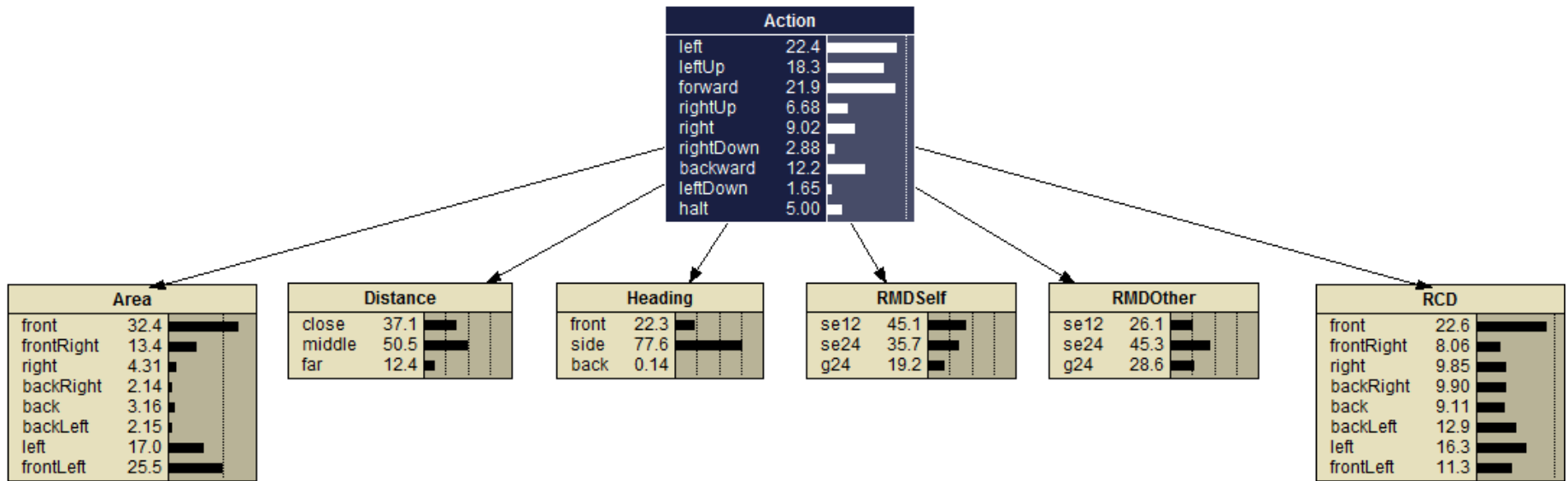
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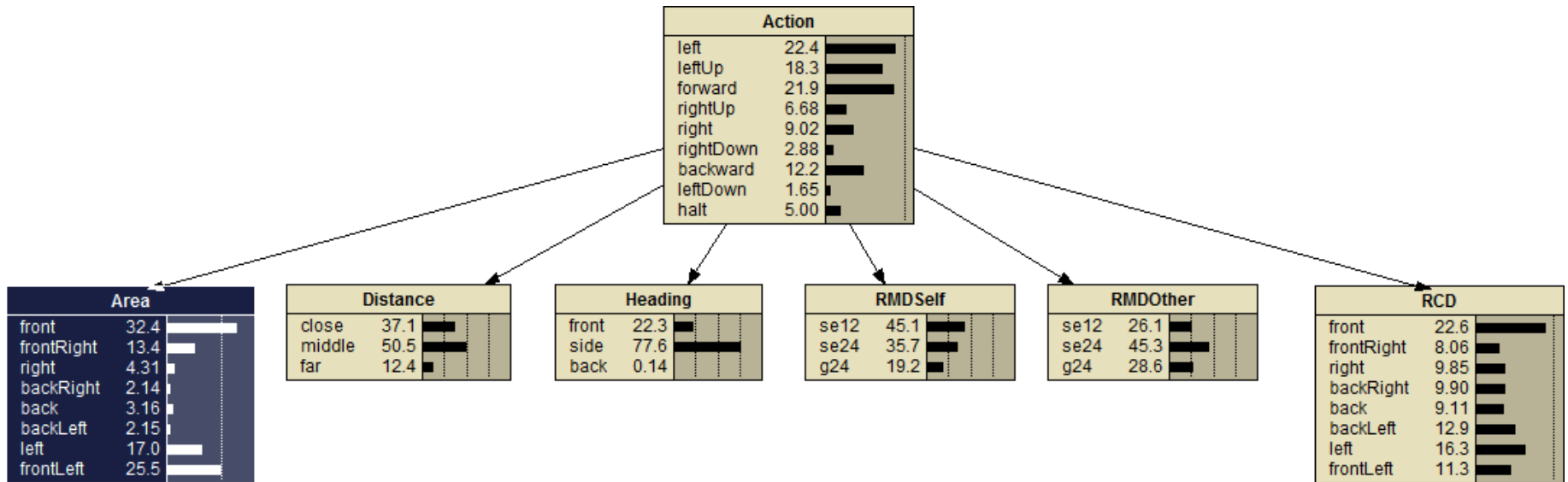
CONDITIONAL PROBABILITY TABLES

Player 1

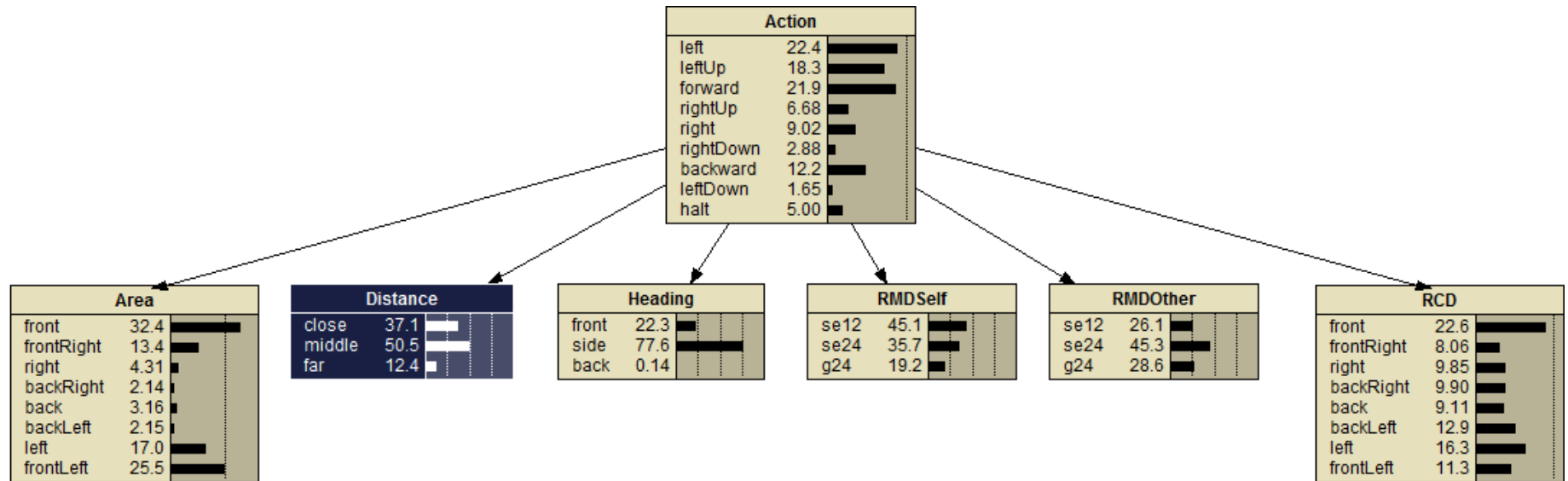




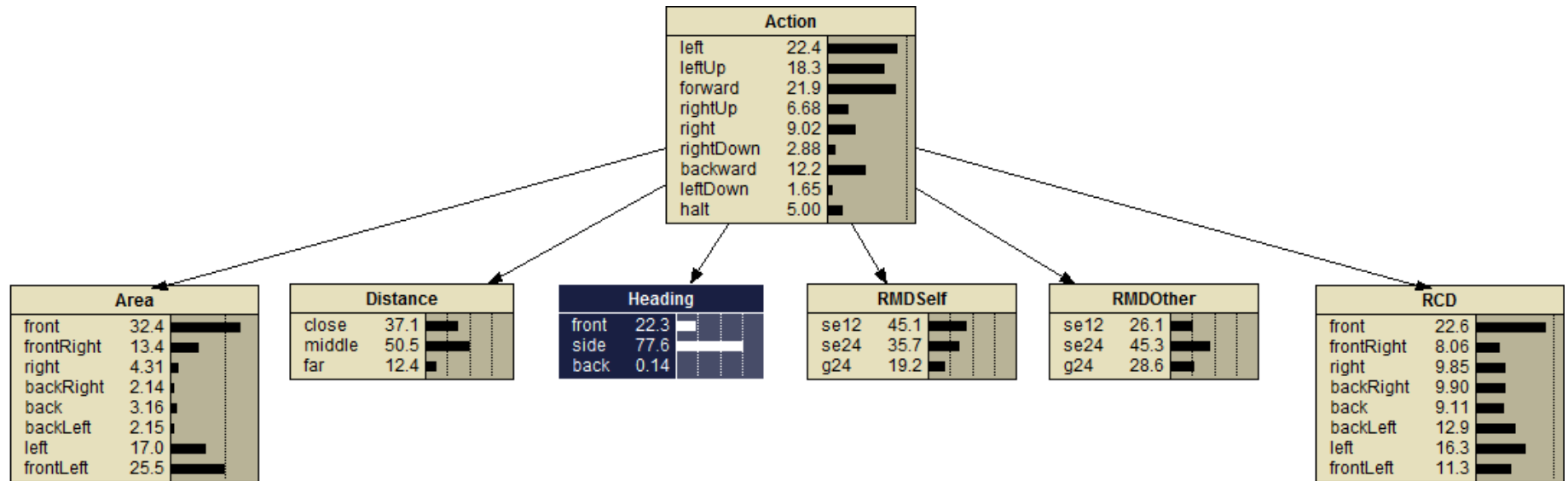
	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt	Sum	Entropy
Probability Distribution P(Action)	0.223676	0.183344	0.219058	0.066810	0.090209	0.028787	0.121613	0.016472	0.050031	1	2.816495



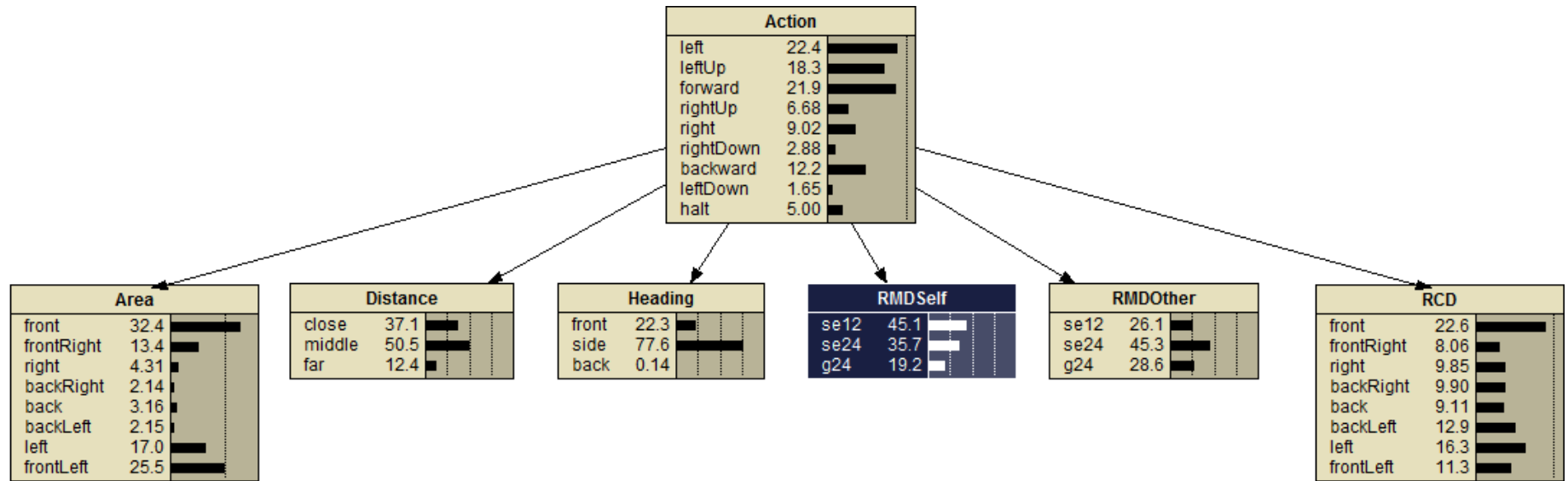
Conditional Probability Distribution $P(\text{Area} \text{Action})$	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.106849	0.192821	0.790909	0.528345	0.197302	0.005155	0.094028	0.008772	0.542169
front right	0.002055	0.012521	0.090210	0.342404	0.622260	0.051546	0.163914	0.008772	0.213855
right	0.011644	0.002504	0.015385	0.104308	0.141653	0.113402	0.097840	0.008772	0.033133
back right	0.014384	0.002504	0.006294	0.002268	0.021922	0.020619	0.078780	0.228070	0.006024
back	0.002055	0.005008	0.000699	0.002268	0.001686	0.221649	0.180432	0.061404	0.009036
back left	0.013014	0.043406	0.000699	0.002268	0.001686	0.067010	0.039390	0.201754	0.003012
left	0.209589	0.373122	0.030769	0.009070	0.010118	0.417526	0.202033	0.385965	0.060241
front left	0.640411	0.368114	0.065035	0.009070	0.003373	0.103093	0.143583	0.096491	0.132530
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.509987	1.876437	1.145010	1.538743	1.533909	2.338427	2.863011	2.234876	1.879173



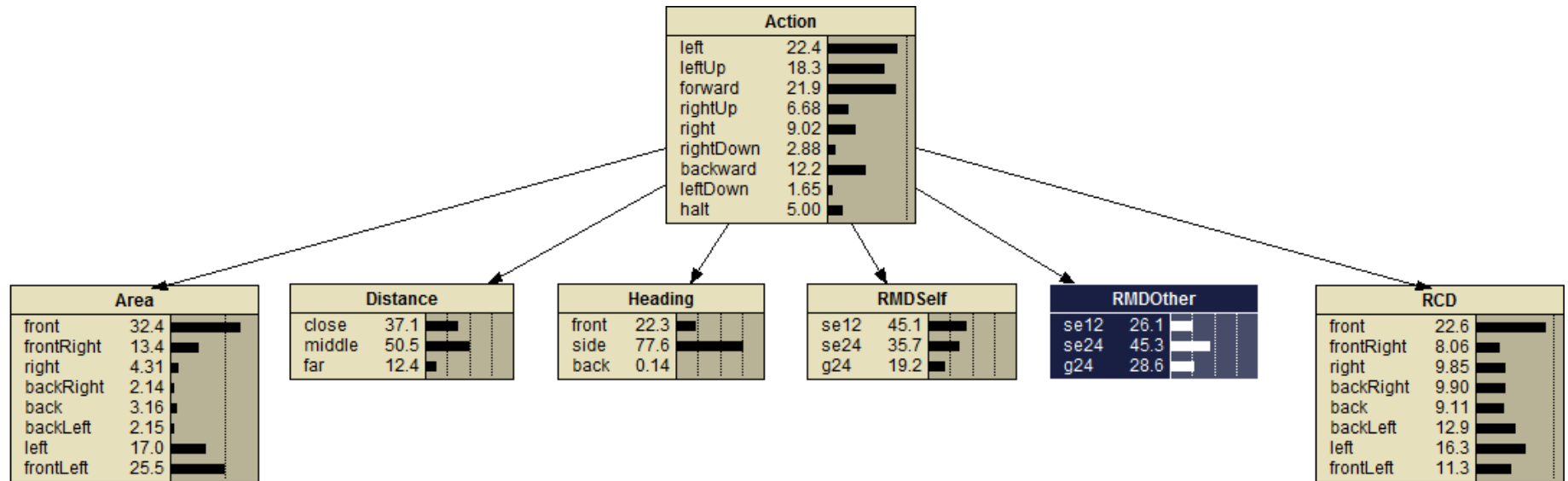
Conditional Probability Distribution P(Distance Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
close	0.441237	0.524728	0.167719	0.694954	0.343537	0.359788	0.317136	0.284404	0.162080
middle	0.527835	0.408215	0.510175	0.252294	0.515306	0.613757	0.648338	0.706422	0.571865
far	0.030928	0.067058	0.322105	0.052752	0.141156	0.026455	0.034527	0.009174	0.266055
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.162506	1.277265	1.453819	1.090035	1.421154	1.101486	1.098436	0.932197	1.394783



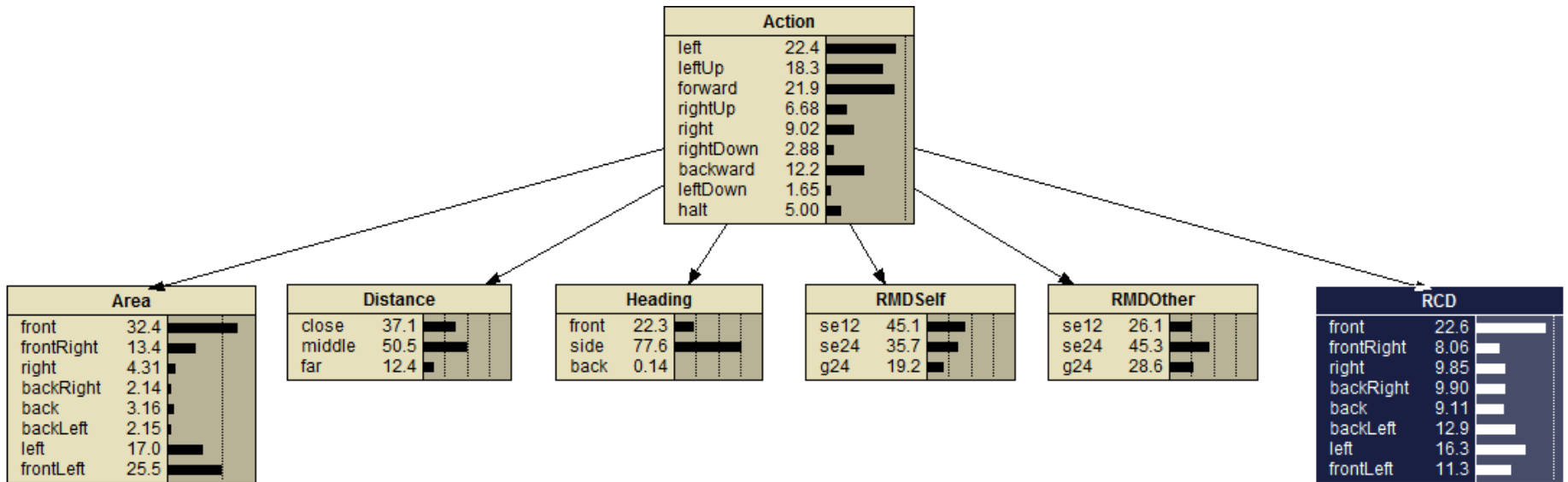
Conditional Probability Distribution P(Heading Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.060481	0.210394	0.480702	0.222477	0.130952	0.126984	0.166240	0.211009	0.232416
side	0.938832	0.788768	0.518596	0.775229	0.867347	0.867725	0.832481	0.779817	0.764526
back	0.000687	0.000838	0.000702	0.002294	0.001701	0.005291	0.001279	0.009174	0.003058
Sum	1	1	1	1	1	1	1	1	1
Entropy	0.337502	0.751725	1.006626	0.787247	0.577797	0.595694	0.662830	0.815522	0.810980



Conditional Probability Distribution P(RMDSelf Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
<=12cm	0.630241	0.333613	0.407018	0.243119	0.598639	0.222222	0.388747	0.376147	0.587156
<=24cm	0.292096	0.414082	0.350877	0.344037	0.331633	0.576720	0.369565	0.467890	0.333333
>24cm	0.077663	0.252305	0.242105	0.412844	0.069728	0.201058	0.241688	0.155963	0.079511
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.224684	1.556347	1.553416	1.552551	1.239113	1.405466	1.555798	1.461394	1.269794



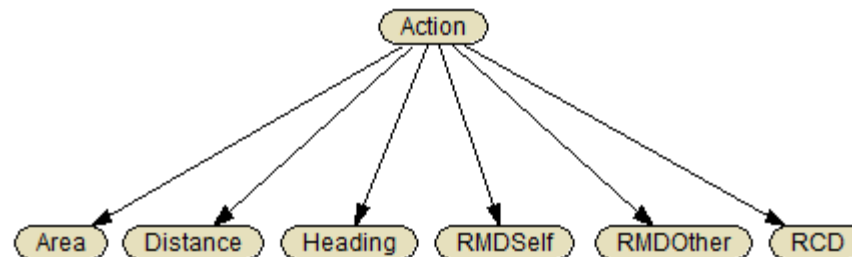
Conditional Probability Distribution P(RMDOther Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
<=12cm	0.389691	0.360436	0.160702	0.201835	0.207483	0.444444	0.150895	0.165138	0.128440
<=24cm	0.442612	0.535624	0.465965	0.346330	0.505102	0.365079	0.410486	0.660550	0.275229
>24cm	0.167698	0.103940	0.373333	0.451835	0.287415	0.190476	0.438619	0.174312	0.596330
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.482284	1.352555	1.467894	1.513658	1.485469	1.506369	1.460508	1.263562	1.337326

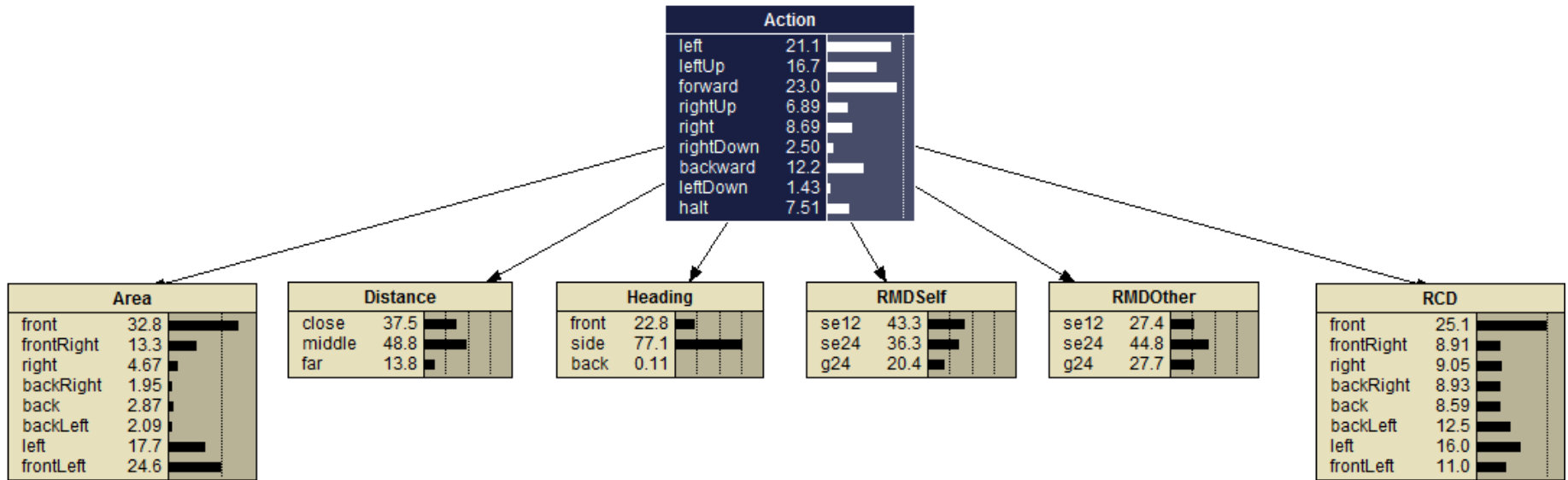


Conditional Probability Distribution P(RCD Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.139041	0.222037	0.493706	0.183673	0.153457	0.005155	0.071156	0.070175	0.189759
front right	0.069863	0.069282	0.090210	0.090703	0.111298	0.005155	0.086404	0.140351	0.069277
right	0.068493	0.048414	0.055245	0.378685	0.156830	0.092784	0.125794	0.070175	0.072289
back right	0.047945	0.028381	0.060839	0.170068	0.178752	0.139175	0.222363	0.122807	0.183735
back	0.102055	0.027546	0.046154	0.047619	0.146712	0.123711	0.203304	0.245614	0.087349
back left	0.179452	0.090985	0.078322	0.043084	0.096121	0.293814	0.193139	0.122807	0.180723
left	0.252740	0.288815	0.094406	0.031746	0.052277	0.304124	0.074968	0.122807	0.129518
front left	0.140411	0.224541	0.081119	0.054422	0.104553	0.036082	0.022872	0.105263	0.087349
Sum	1	1	1	1	1	1	1	1	1
Entropy	2.818991	2.565000	2.400344	2.519473	2.924887	2.379903	2.765384	2.889606	2.887297

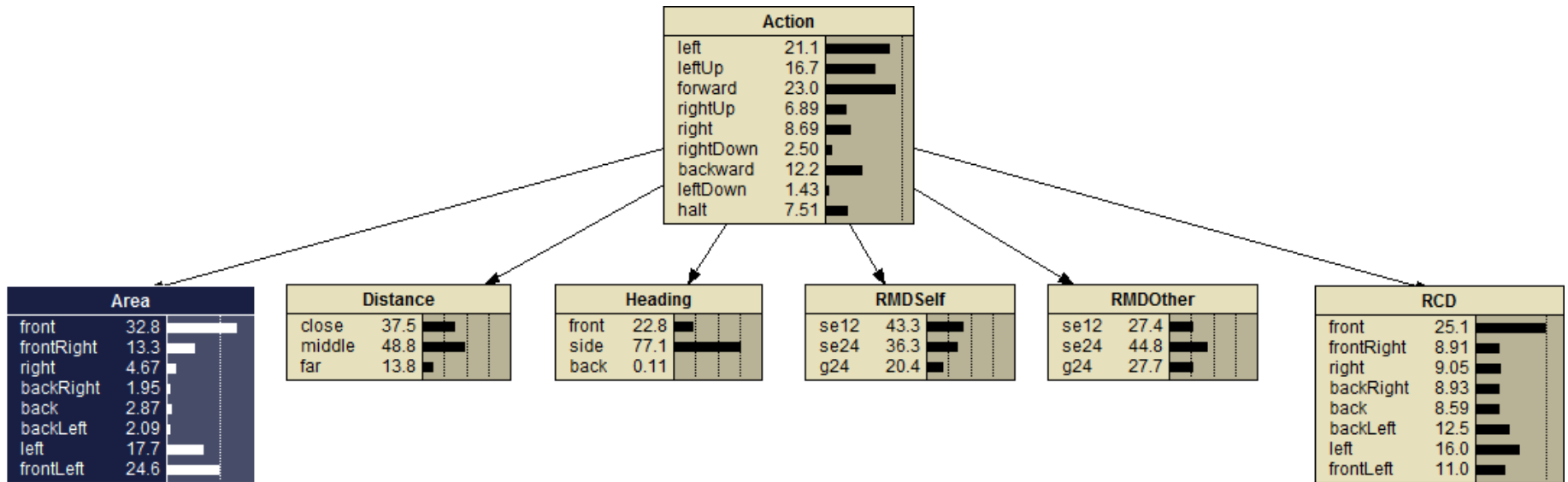
CONDITIONAL PROBABILITY TABLES

Player 2

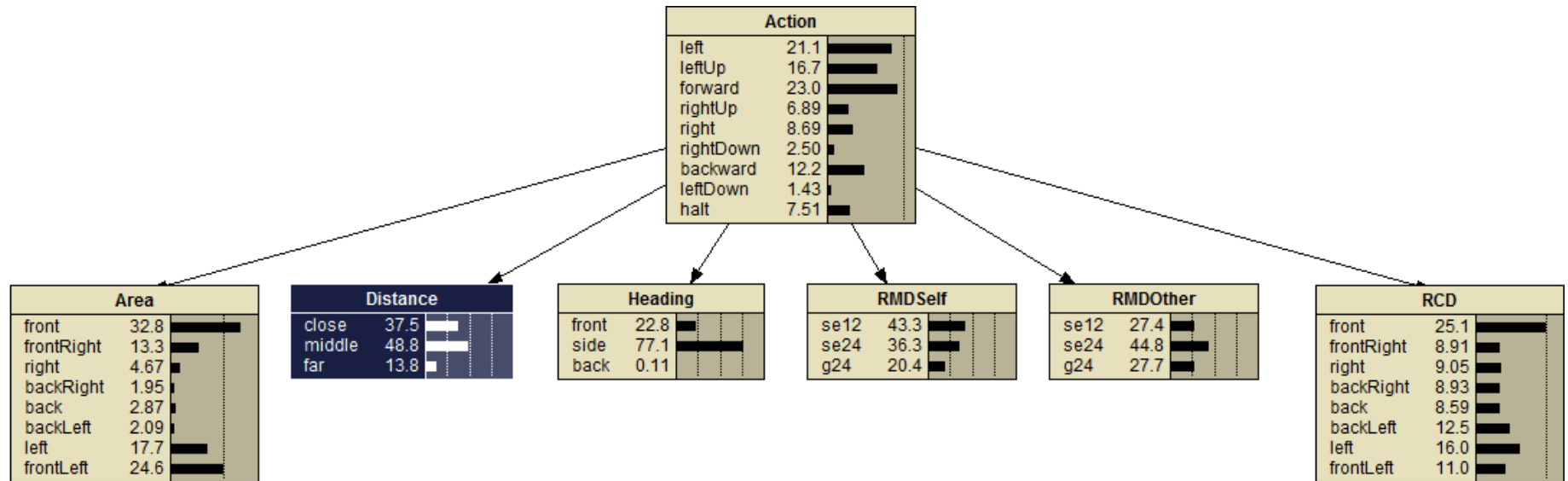




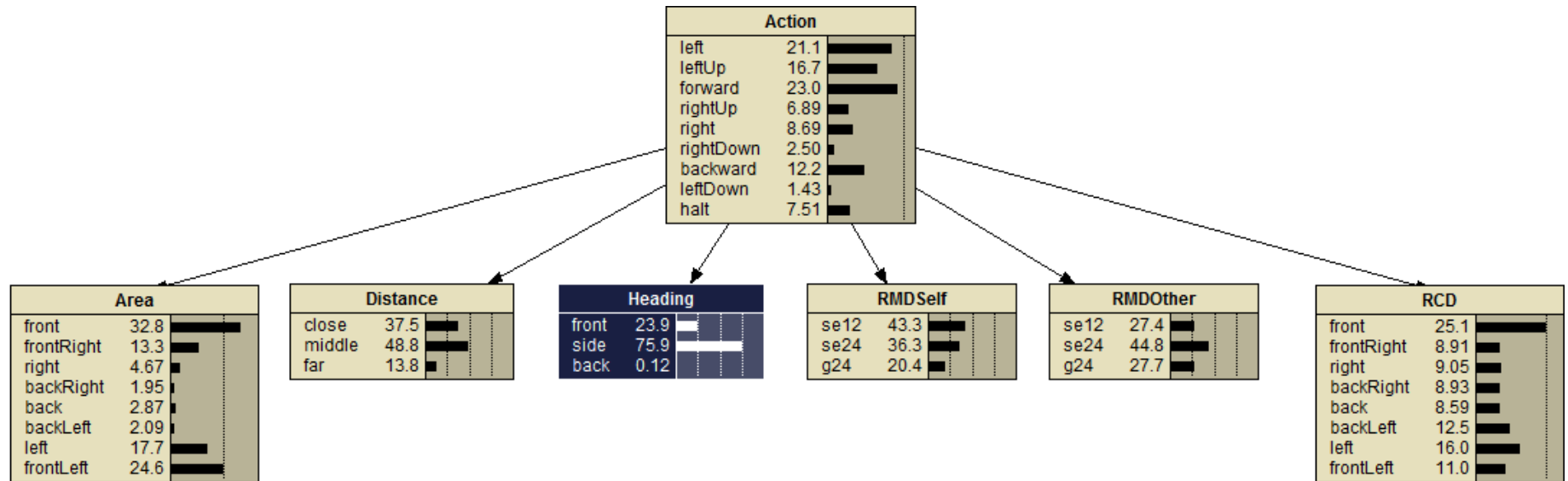
	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt	Sum	Entropy
Probability Distribution P(Action)	0.21149	0.16686	0.22957	0.06891	0.08686	0.02495	0.12198	0.01426	0.07512	1	2.83565



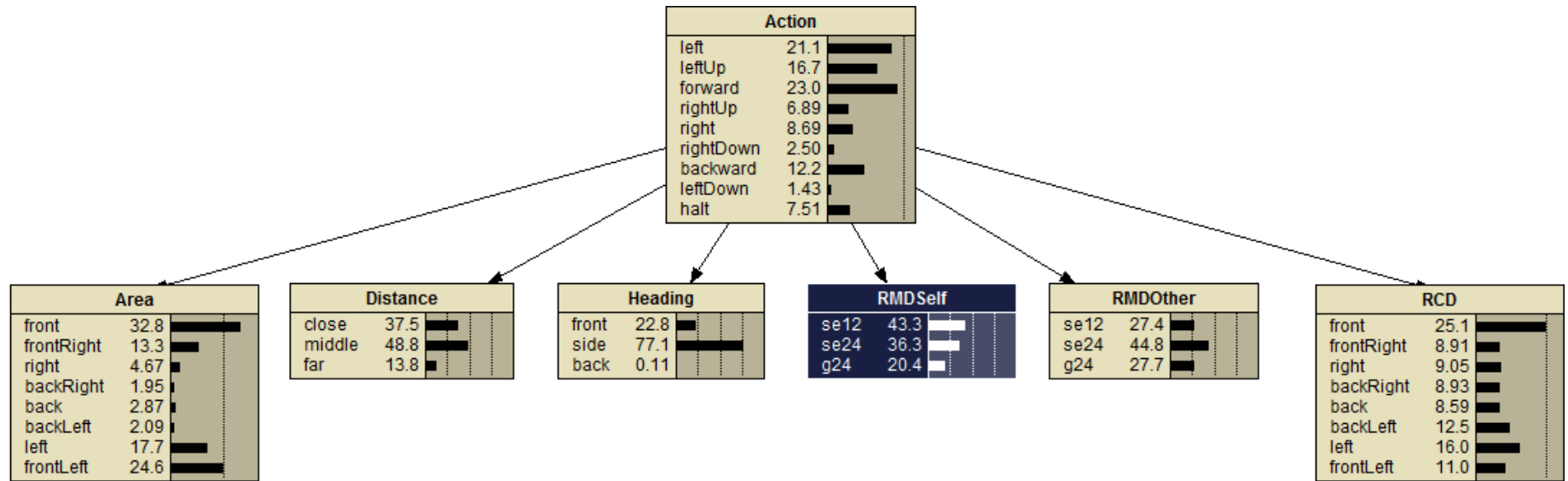
Conditional Probability Distribution P(Area Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.101305	0.184894	0.763459	0.448015	0.184962	0.005155	0.138528	0.008696	0.478261
front right	0.001865	0.011802	0.090493	0.368620	0.615038	0.051546	0.143939	0.008696	0.160000
right	0.010566	0.002360	0.025773	0.105860	0.157895	0.113402	0.095238	0.008696	0.034783
back right	0.013052	0.002360	0.005155	0.001890	0.019549	0.020619	0.067100	0.226087	0.019130
back	0.001865	0.004721	0.000573	0.001890	0.001504	0.221649	0.164502	0.060870	0.008696
back left	0.013673	0.044847	0.000573	0.013233	0.001504	0.067010	0.033550	0.200000	0.010435
left	0.226849	0.396538	0.037801	0.051040	0.015038	0.417526	0.213203	0.391304	0.099130
front left	0.630827	0.352478	0.076174	0.009452	0.004511	0.103093	0.143939	0.095652	0.189565
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.508973	1.863815	1.260046	1.792083	1.567479	2.338427	2.852718	2.227299	2.123261



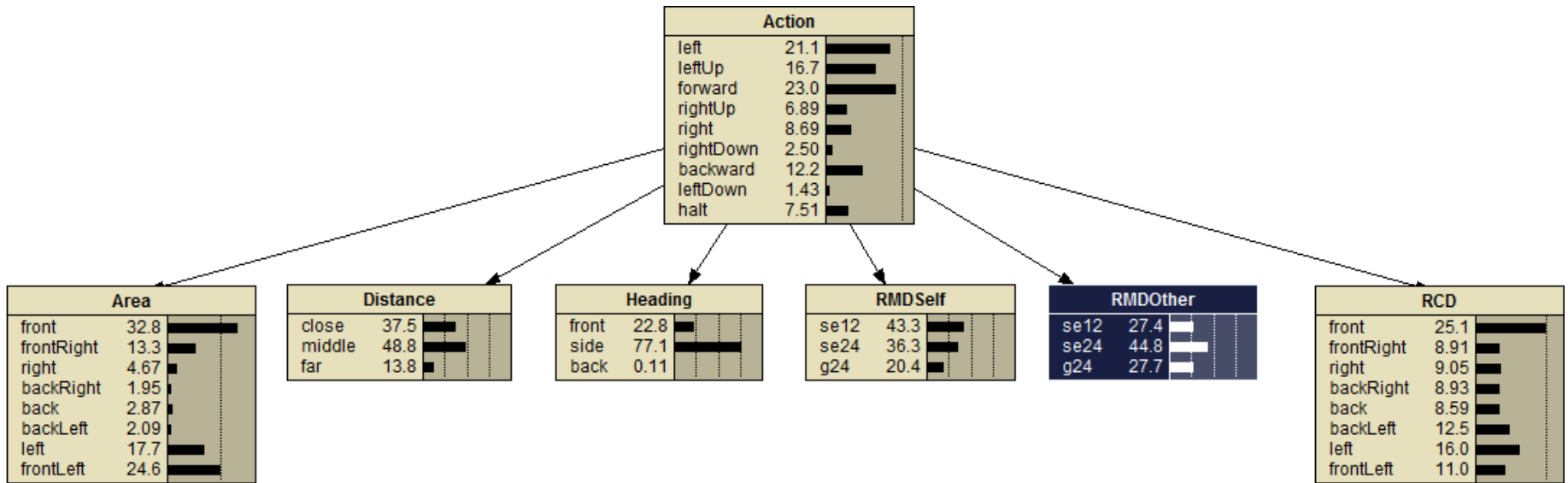
Conditional Probability Distribution P(Distance Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
close	0.442643	0.526066	0.182654	0.713740	0.380303	0.359788	0.313384	0.290909	0.236842
middle	0.524314	0.406003	0.477312	0.242366	0.492424	0.613757	0.630033	0.700000	0.501754
far	0.033042	0.067930	0.340034	0.043893	0.127273	0.026455	0.056583	0.009091	0.261404
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.171403	1.279035	1.486484	1.040783	1.412219	1.101486	1.178973	0.940064	1.497363



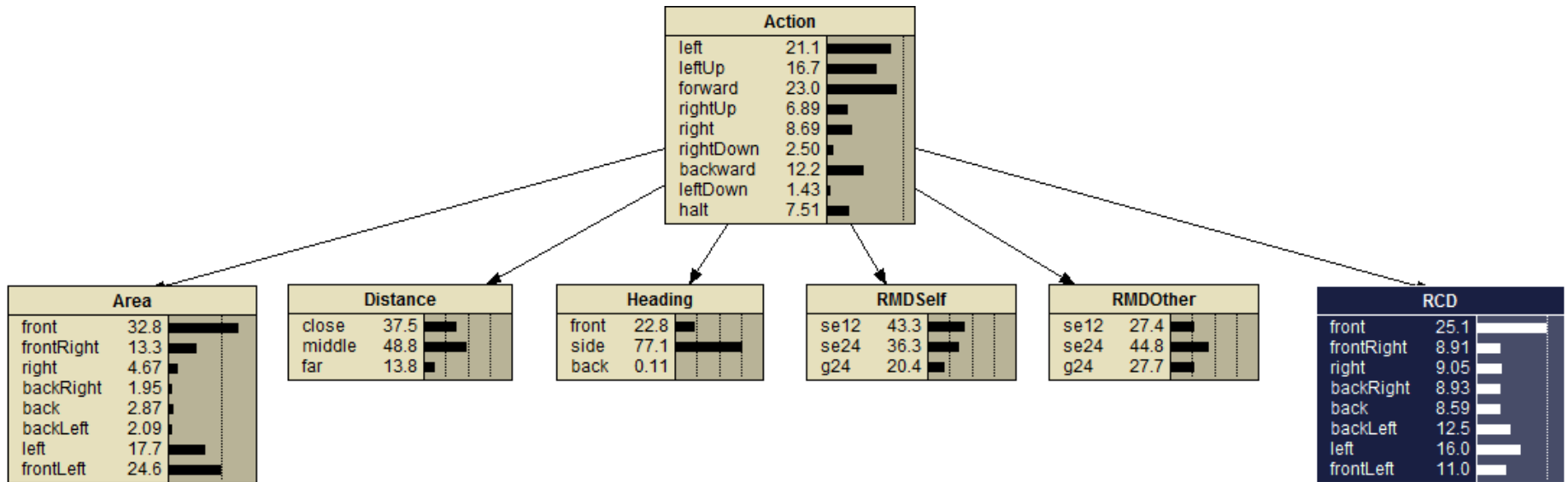
Conditional Probability Distribution P(Heading Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.073566	0.213270	0.475014	0.234733	0.162121	0.126984	0.198041	0.209091	0.247368
side	0.925810	0.785940	0.524411	0.763359	0.836364	0.867725	0.800871	0.781818	0.750877
back	0.000623	0.000790	0.000574	0.001908	0.001515	0.005291	0.001088	0.009091	0.001754
Sum	1	1	1	1	1	1	1	1	1
Entropy	0.386561	0.756693	1.004676	0.805423	0.655349	0.595694	0.729927	0.811353	0.824950



Conditional Probability Distribution P(RMDSelf Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
<=12cm	0.615337	0.327014	0.372200	0.255725	0.574242	0.222222	0.386289	0.372727	0.500000
<=24cm	0.308603	0.421011	0.358989	0.318702	0.343939	0.576720	0.380849	0.472727	0.336842
>24cm	0.076060	0.251975	0.268811	0.425573	0.081818	0.201058	0.232862	0.154545	0.163158
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.237214	1.553875	1.570770	1.553394	1.284618	1.405466	1.550077	1.458002	1.455559



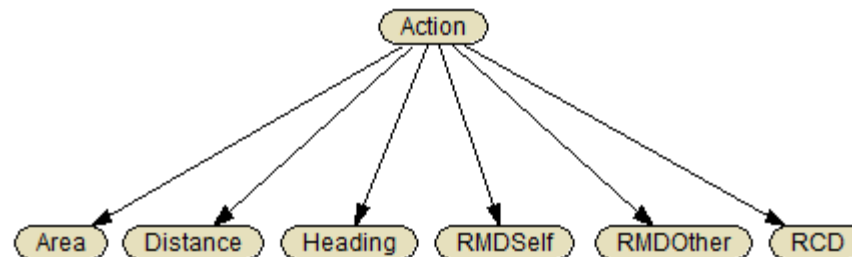
Conditional Probability Distribution	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
P(RMDOther Action)									
<=12cm	0.407107	0.363349	0.180356	0.219466	0.262121	0.444444	0.173014	0.163636	0.184211
<=24cm	0.425810	0.537915	0.443423	0.400763	0.477273	0.365079	0.422198	0.663636	0.368421
>24cm	0.167082	0.098736	0.376221	0.379771	0.260606	0.190476	0.404788	0.172727	0.447368
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.483601	1.341696	1.496520	1.539318	1.521233	1.506369	1.491275	1.257483	1.499472

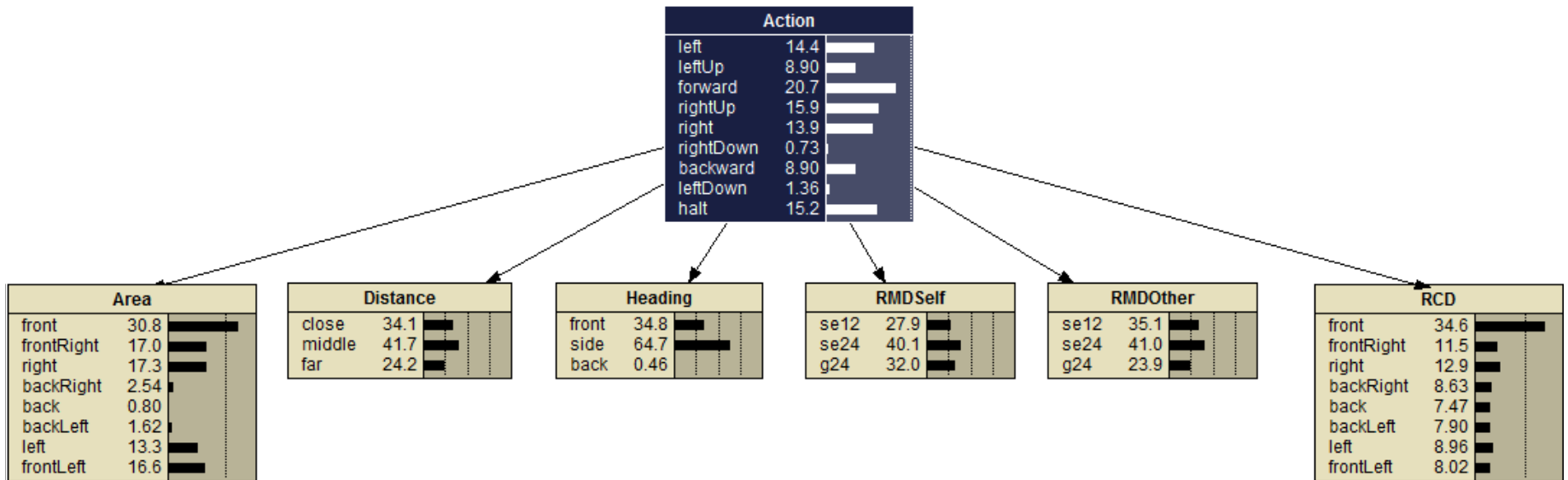


Conditional Probability Distribution P(RCD Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.153511	0.214792	0.510309	0.168242	0.160902	0.005155	0.137446	0.069565	0.293913
front right	0.074580	0.071597	0.091065	0.128544	0.147368	0.005155	0.084416	0.139130	0.085217
right	0.062150	0.048780	0.054983	0.323251	0.154887	0.092784	0.113636	0.069565	0.048696
back right	0.044127	0.029898	0.053265	0.145558	0.160902	0.139175	0.192641	0.121739	0.133913
back	0.098819	0.033045	0.048110	0.041588	0.133835	0.123711	0.181818	0.243478	0.069565
back left	0.172778	0.095201	0.079611	0.037807	0.085714	0.293814	0.175325	0.130435	0.177391
left	0.244873	0.282455	0.085338	0.092628	0.052632	0.304124	0.095238	0.121739	0.121739
front left	0.149161	0.224233	0.077320	0.062382	0.103759	0.036082	0.019481	0.104348	0.069565
Sum	1	1	1	1	1	1	1	1	1
Entropy	2.816245	2.597326	2.355336	2.681500	2.926905	2.379903	2.830153	2.890405	2.770184

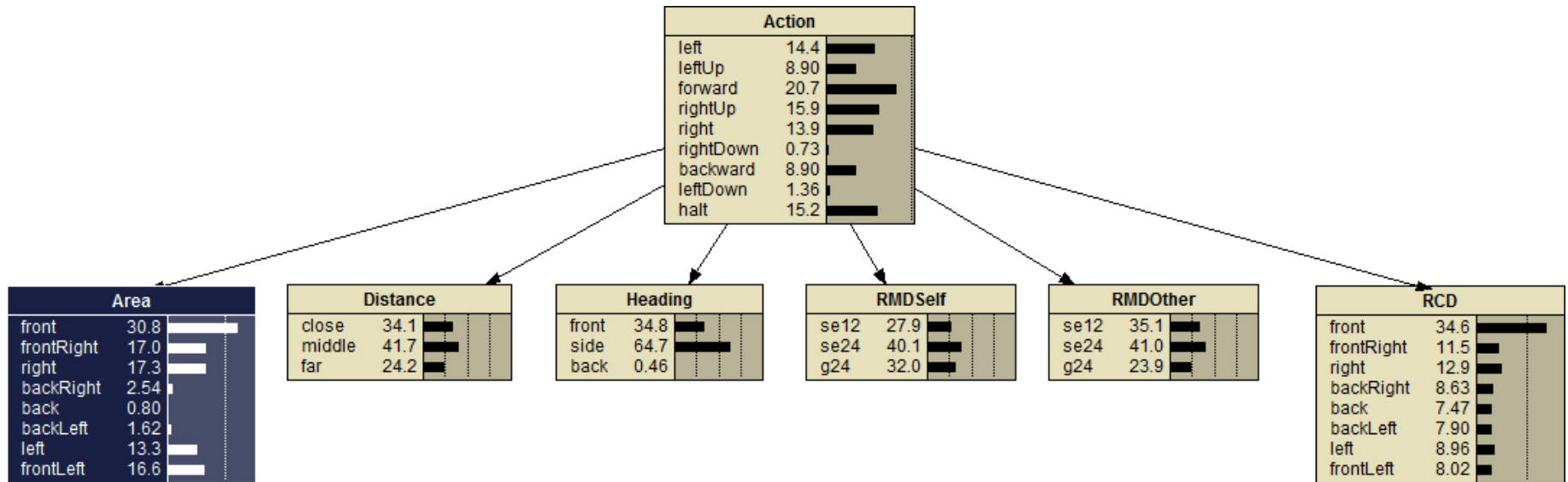
CONDITIONAL PROBABILITY TABLES

Player 3

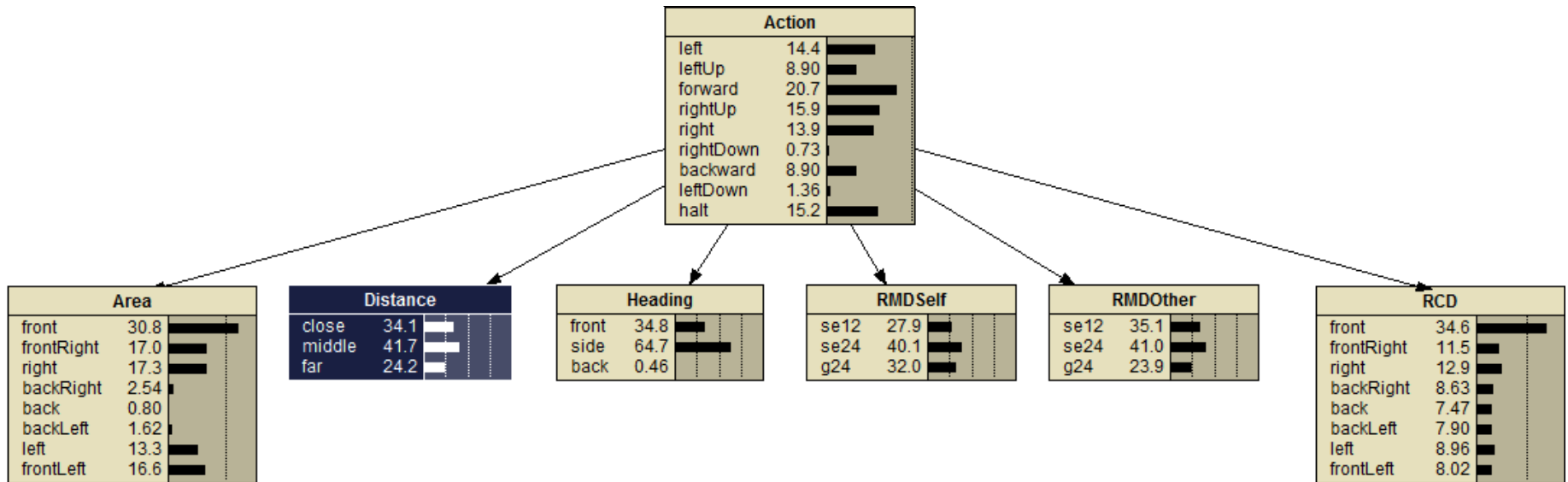




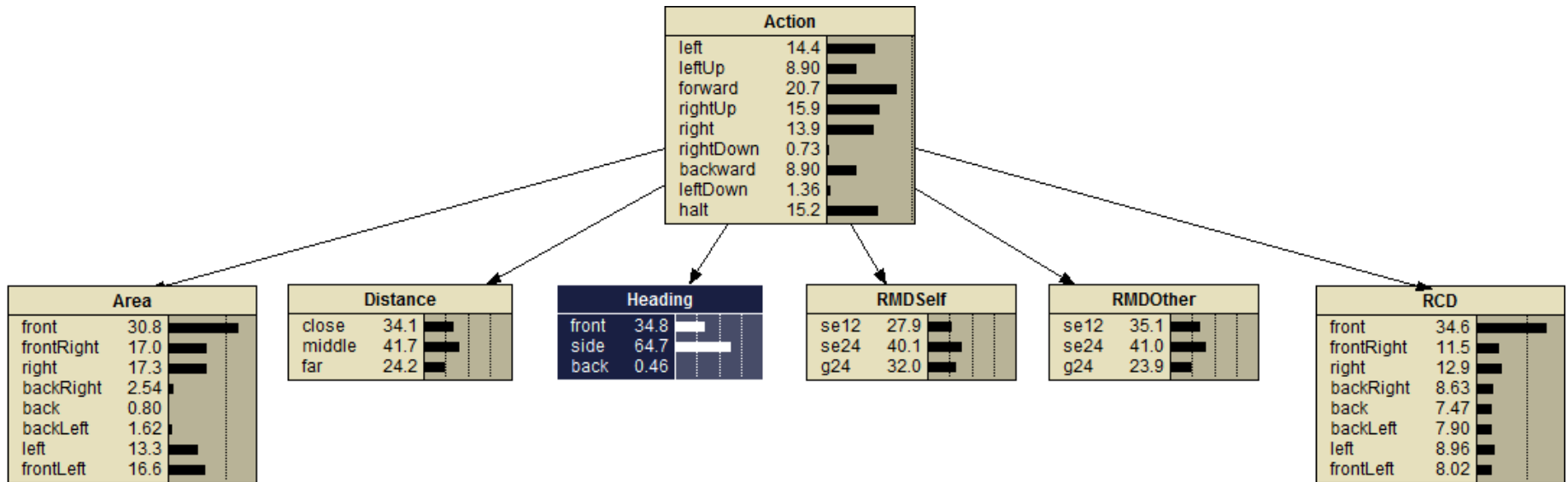
	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt	Sum	Entropy
Probability Distribution P(Action)	0.143904	0.088959	0.207221	0.158556	0.139194	0.007326	0.088959	0.013605	0.152276	1	2.861116



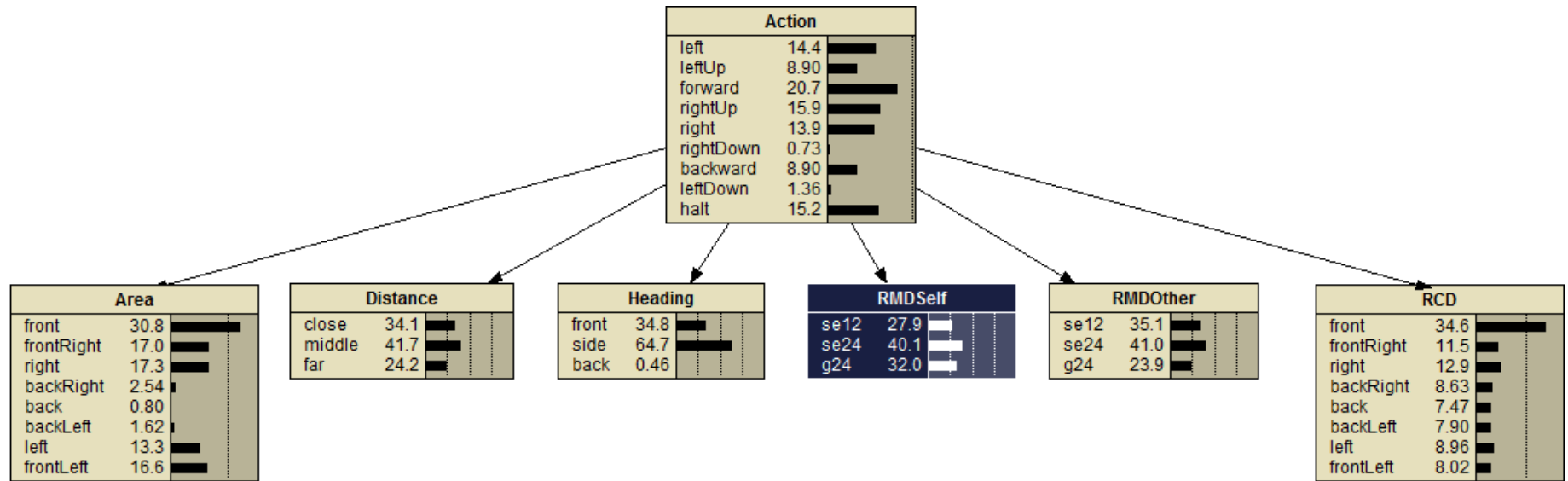
Conditional Probability Distribution $P(\text{Area} \text{Action})$	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.139706	0.220339	0.622829	0.112903	0.058608	0.238095	0.435028	0.121212	0.469799
front right	0.055147	0.056497	0.114144	0.412903	0.347985	0.142857	0.062147	0.060606	0.077181
right	0.066176	0.028249	0.086849	0.332258	0.501832	0.285714	0.107345	0.242424	0.036913
back right	0.033088	0.005650	0.004963	0.029032	0.058608	0.047619	0.005650	0.030303	0.033557
back	0.022059	0.005650	0.002481	0.003226	0.003663	0.047619	0.005650	0.030303	0.010067
back left	0.029412	0.033898	0.002481	0.022581	0.003663	0.047619	0.005650	0.030303	0.020134
left	0.227941	0.333333	0.057072	0.077419	0.018315	0.047619	0.254237	0.060606	0.130872
front left	0.426471	0.316384	0.109181	0.009677	0.007326	0.142857	0.124294	0.424242	0.221477
Sum	1	1	1	1	1	1	1	1	1
Entropy	2.330815	2.163893	1.754579	2.059320	1.725811	2.648070	2.119878	2.338244	2.183128



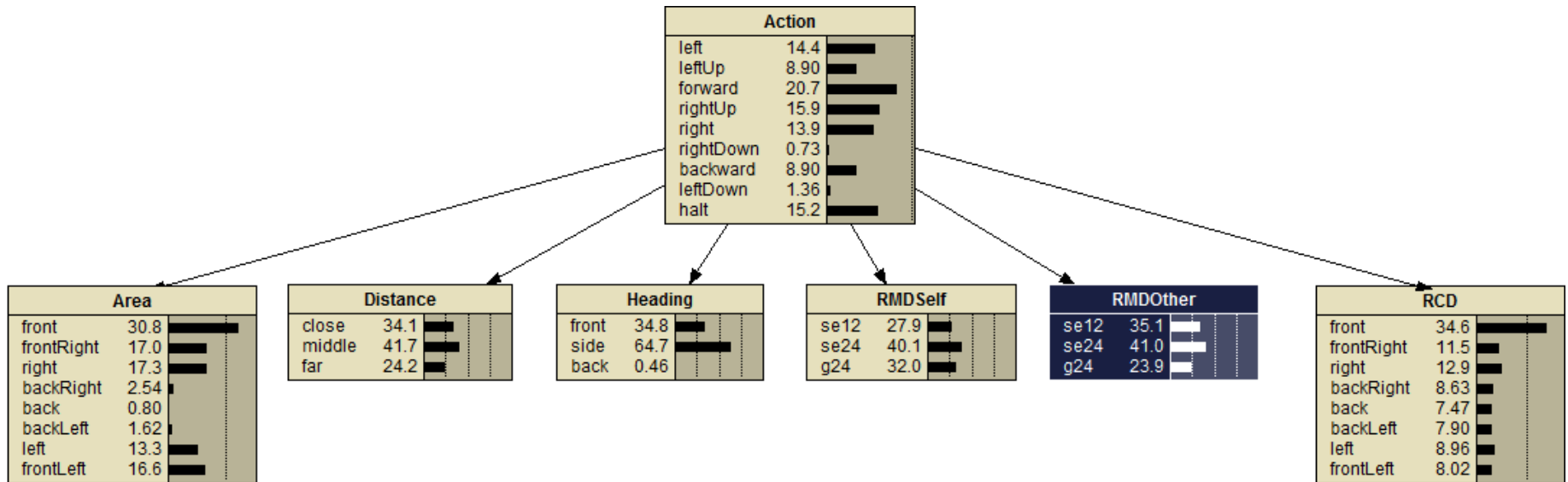
Conditional Probability Distribution P(Distance Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
close	0.322097	0.284884	0.218593	0.540984	0.458955	0.250000	0.308140	0.107143	0.286689
middle	0.539326	0.488372	0.344221	0.324590	0.488806	0.312500	0.465116	0.500000	0.361775
far	0.138577	0.226744	0.437186	0.134426	0.052239	0.437500	0.226744	0.392857	0.351536
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.401978	1.506462	1.531000	1.395586	1.242915	1.546180	1.522400	1.374798	1.577611



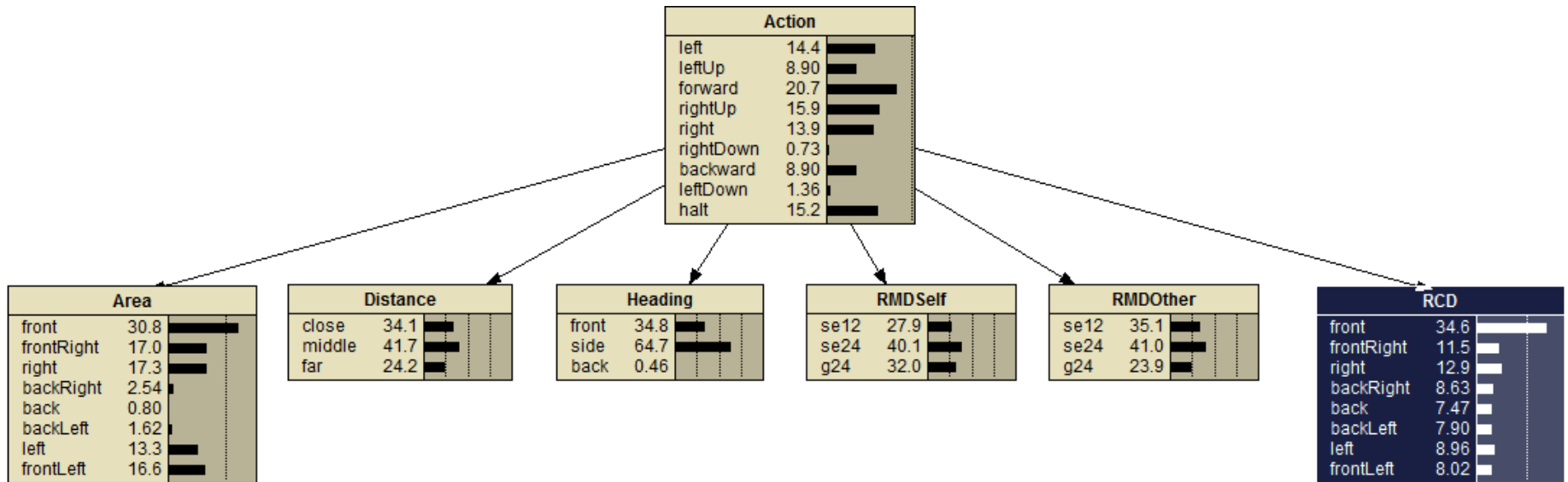
Conditional Probability Distribution P(Heading Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.258427	0.348837	0.447236	0.239344	0.294776	0.437500	0.436047	0.678571	0.375427
side	0.737828	0.645349	0.550251	0.757377	0.701493	0.500000	0.558140	0.285714	0.621160
back	0.003745	0.005814	0.002513	0.003279	0.003731	0.062500	0.005814	0.035714	0.003413
Sum	1	1	1	1	1	1	1	1	1
Entropy	0.858327	0.980953	1.015120	0.824432	0.908397	1.271782	1.034882	1.067690	0.985309



Conditional Probability Distribution P(RMDSelf Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
<=12cm	0.359551	0.273256	0.206030	0.311475	0.242537	0.062500	0.308140	0.035714	0.320819
<=24cm	0.434457	0.348837	0.386935	0.406557	0.444030	0.500000	0.412791	0.714286	0.334471
>24cm	0.205993	0.377907	0.407035	0.281967	0.313433	0.437500	0.279070	0.250000	0.344710
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.522655	1.572003	1.527428	1.567041	1.540373	1.271782	1.564113	1.018425	1.584340



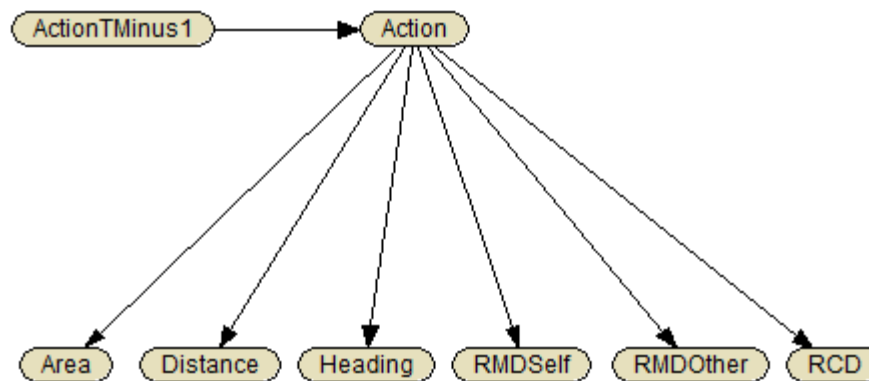
Conditional Probability Distribution P(RMDOther Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
<=12cm	0.441948	0.232558	0.248744	0.498361	0.473881	0.062500	0.296512	0.428571	0.245734
<=24cm	0.284644	0.505814	0.346734	0.396721	0.485075	0.500000	0.505814	0.357143	0.447099
>24cm	0.273408	0.261628	0.404523	0.104918	0.041045	0.437500	0.197674	0.214286	0.307167
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.548143	1.492854	1.557327	1.371133	1.205923	1.271782	1.479733	1.530619	1.539877

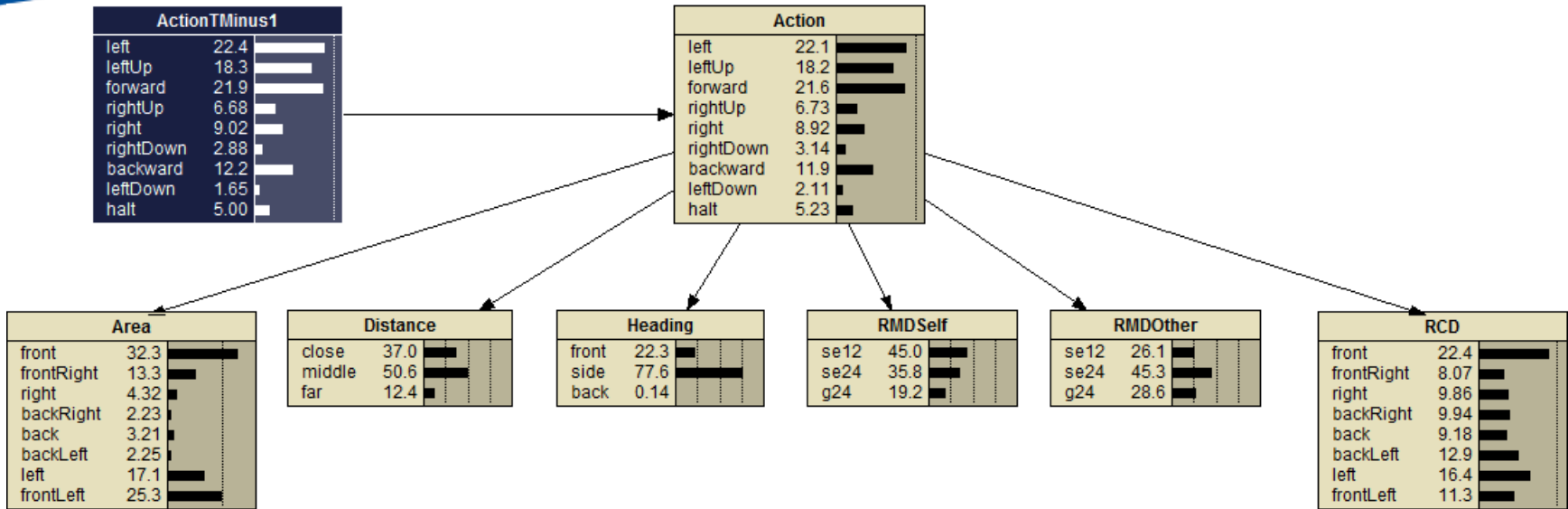


Conditional Probability Distribution P(RCD Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.316176	0.259887	0.578164	0.174194	0.109890	0.190476	0.384181	0.121212	0.510067
front right	0.025735	0.146893	0.052109	0.267742	0.208791	0.190476	0.096045	0.030303	0.036913
right	0.022059	0.039548	0.099256	0.258065	0.344322	0.047619	0.050847	0.242424	0.030201
back right	0.047794	0.045198	0.062035	0.096774	0.190476	0.285714	0.067797	0.060606	0.077181
back	0.099265	0.045198	0.074442	0.022581	0.054945	0.047619	0.067797	0.030303	0.151007
back left	0.128676	0.101695	0.062035	0.035484	0.003663	0.095238	0.186441	0.060606	0.093960
left	0.205882	0.231638	0.029777	0.096774	0.032967	0.095238	0.056497	0.030303	0.046980
front left	0.154412	0.129944	0.042184	0.048387	0.054945	0.047619	0.090395	0.424242	0.053691
Sum	1	1	1	1	1	1	1	1	1
Entropy	2.589221	2.706549	2.130127	2.610420	2.459161	2.701376	2.599317	2.338244	2.275033

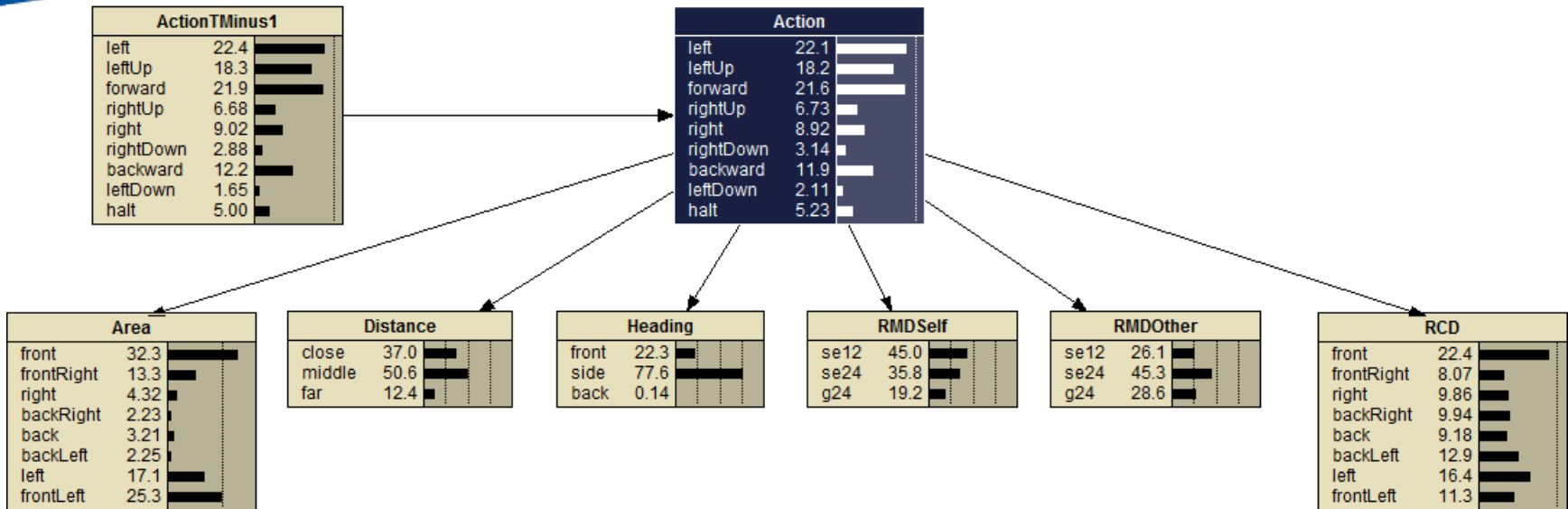
CONDITIONAL PROBABILITY TABLES

Player 1

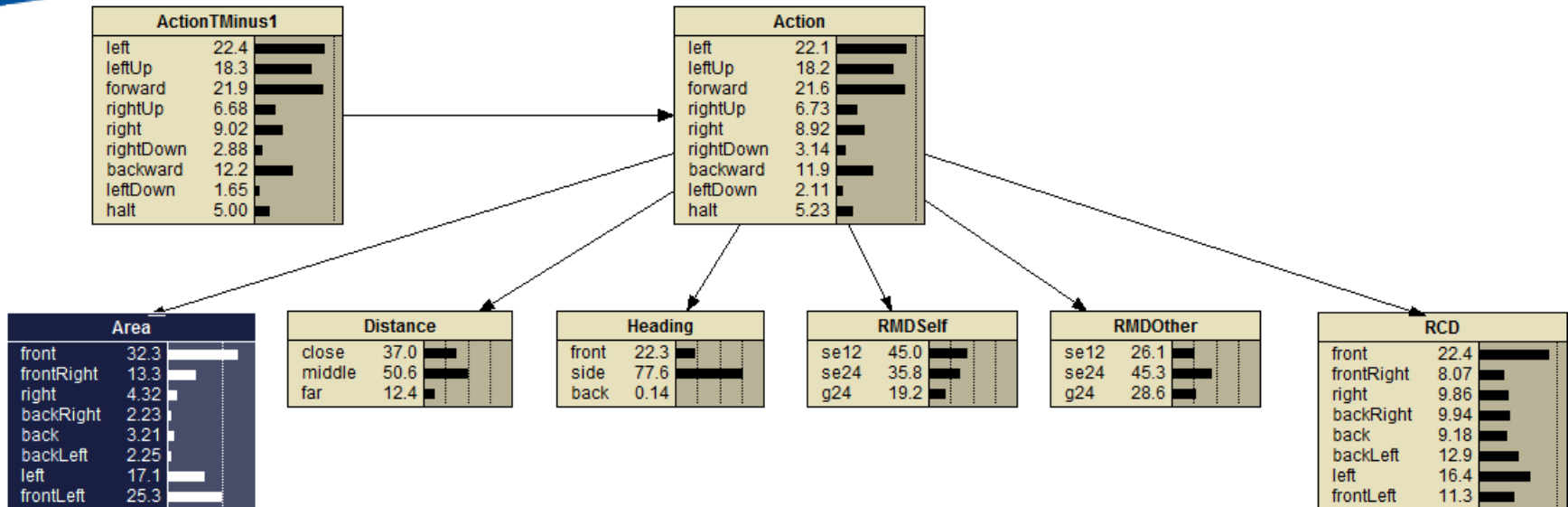




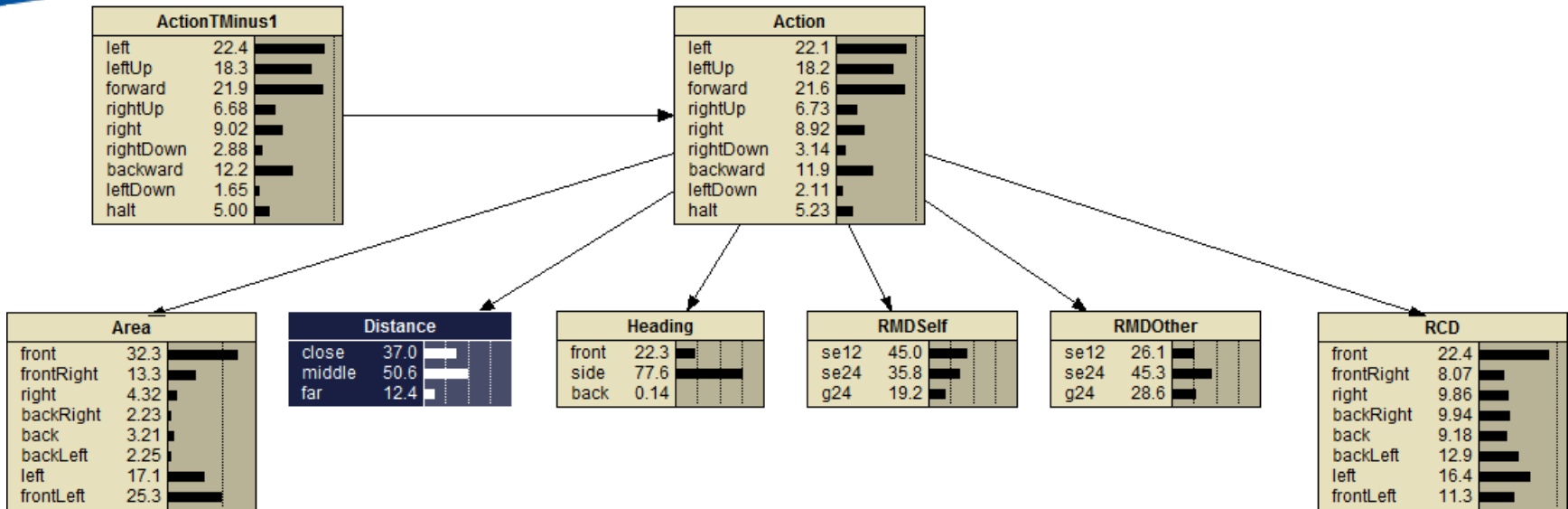
	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt	Sum	Entropy
Probability Distribution P(Action)	0.223676	0.183344	0.219058	0.066810	0.090209	0.028787	0.121613	0.016472	0.050031	1	2.816495



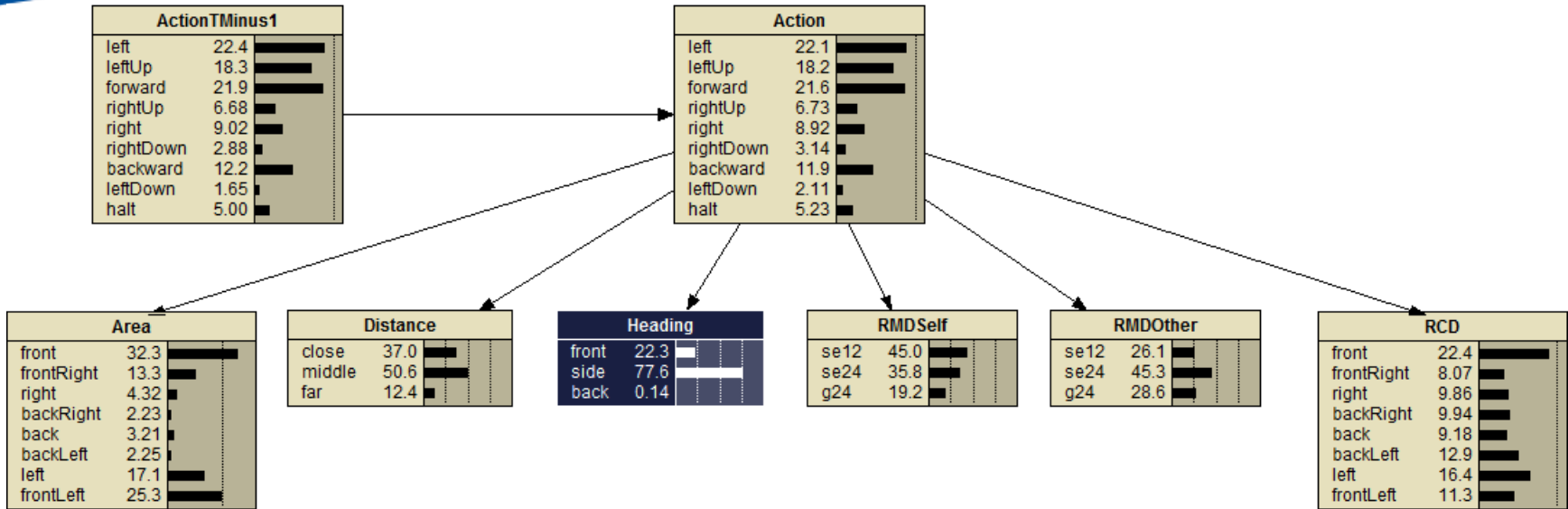
Conditional Probability Distribution P(Action Action t-1)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
left	0.888457	0.042188	0.013228	0.019120	0.016296	0.036232	0.027304	0.076531	0.067633
leftUp	0.044747	0.850781	0.039683	0.021033	0.014815	0.036232	0.011377	0.051020	0.026570
forward	0.009728	0.058594	0.859127	0.065010	0.023704	0.036232	0.012514	0.051020	0.103865
rightUp	0.006485	0.008594	0.023148	0.757170	0.044444	0.036232	0.011377	0.051020	0.026570
right	0.007134	0.007813	0.007937	0.061185	0.807407	0.054348	0.014790	0.051020	0.065217
rightDown	0.007134	0.007813	0.006614	0.019120	0.025185	0.644928	0.020478	0.051020	0.028986
backward	0.013619	0.007813	0.013228	0.019120	0.020741	0.083333	0.843003	0.091837	0.050725
leftDown	0.010376	0.007813	0.006614	0.019120	0.014815	0.036232	0.019340	0.525510	0.024155
halt	0.012322	0.008594	0.030423	0.019120	0.032593	0.036232	0.039818	0.051020	0.606280
Sum	1	1	1	1	1	1	1	1	1
Entropy	0.796999	0.967553	0.968224	1.469770	1.264362	1.975765	1.075618	2.402020	2.070879



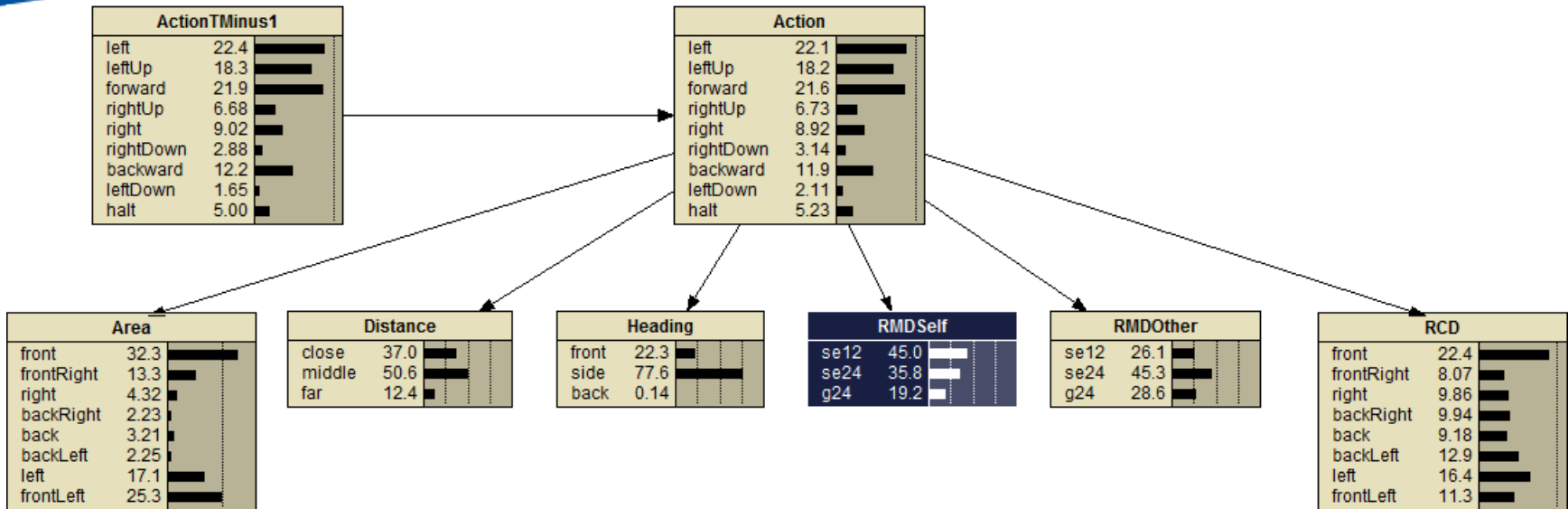
Conditional Probability Distribution $P(\text{Area} \text{Action})$	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.106849	0.192821	0.790909	0.528345	0.197302	0.005155	0.094028	0.008772	0.542169
front right	0.002055	0.012521	0.090210	0.342404	0.622260	0.051546	0.163914	0.008772	0.213855
right	0.011644	0.002504	0.015385	0.104308	0.141653	0.113402	0.097840	0.008772	0.033133
back right	0.014384	0.002504	0.006294	0.002268	0.021922	0.020619	0.078780	0.228070	0.006024
back	0.002055	0.005008	0.000699	0.002268	0.001686	0.221649	0.180432	0.061404	0.009036
back left	0.013014	0.043406	0.000699	0.002268	0.001686	0.067010	0.039390	0.201754	0.003012
left	0.209589	0.373122	0.030769	0.009070	0.010118	0.417526	0.202033	0.385965	0.060241
front left	0.640411	0.368114	0.065035	0.009070	0.003373	0.103093	0.143583	0.096491	0.132530
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.509987	1.876437	1.145010	1.538743	1.533909	2.338427	2.863011	2.234876	1.879173



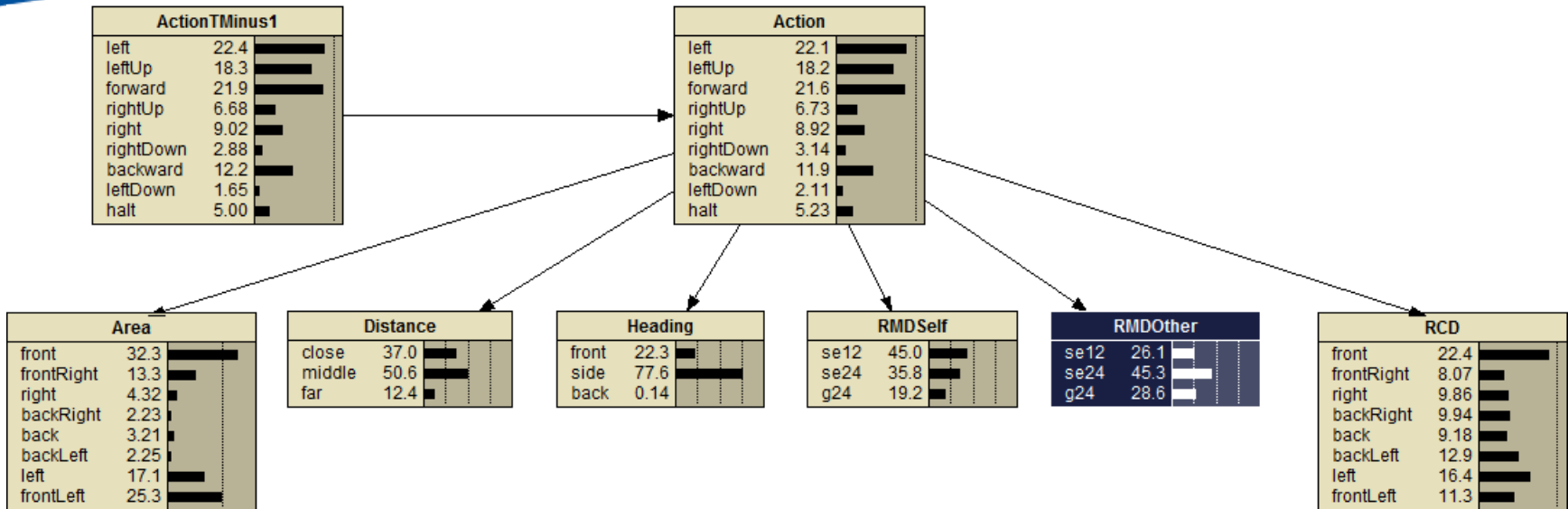
Conditional Probability Distribution P(Distance Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
close	0.441237	0.524728	0.167719	0.694954	0.343537	0.359788	0.317136	0.284404	0.162080
middle	0.527835	0.408215	0.510175	0.252294	0.515306	0.613757	0.648338	0.706422	0.571865
far	0.030928	0.067058	0.322105	0.052752	0.141156	0.026455	0.034527	0.009174	0.266055
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.162506	1.277265	1.453819	1.090035	1.421154	1.101486	1.098436	0.932197	1.394783



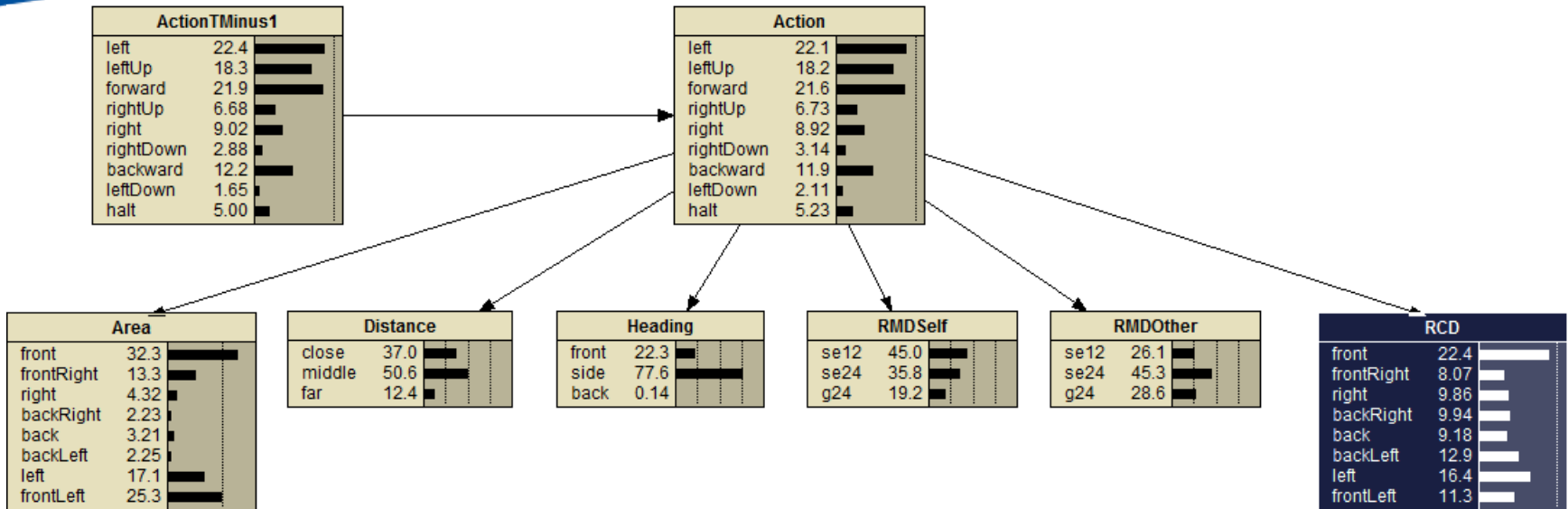
Conditional Probability Distribution P(Heading Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.060481	0.210394	0.480702	0.222477	0.130952	0.126984	0.166240	0.211009	0.232416
side	0.938832	0.788768	0.518596	0.775229	0.867347	0.867725	0.832481	0.779817	0.764526
back	0.000687	0.000838	0.000702	0.002294	0.001701	0.005291	0.001279	0.009174	0.003058
Sum	1	1	1	1	1	1	1	1	1
Entropy	0.337502	0.751725	1.006626	0.787247	0.577797	0.595694	0.662830	0.815522	0.810980



Conditional Probability Distribution P(RMDSelf Action)	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
<=12cm	0.630241	0.333613	0.407018	0.243119	0.598639	0.222222	0.388747	0.376147	0.587156
<=24cm	0.292096	0.414082	0.350877	0.344037	0.331633	0.576720	0.369565	0.467890	0.333333
>24cm	0.077663	0.252305	0.242105	0.412844	0.069728	0.201058	0.241688	0.155963	0.079511
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.224684	1.556347	1.553416	1.552551	1.239113	1.405466	1.555798	1.461394	1.269794



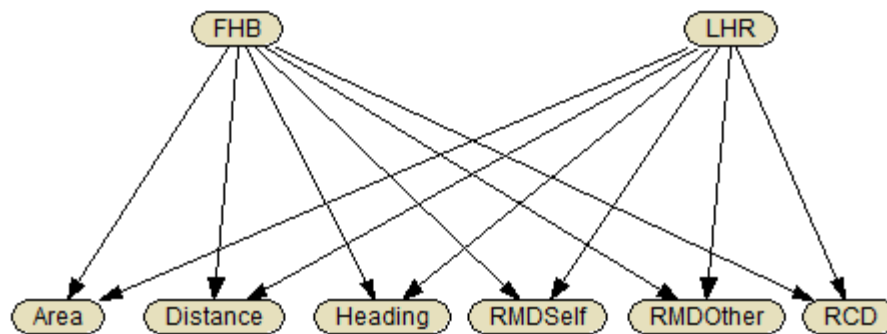
Conditional Probability Distribution	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
P(RMDOther Action)									
<=12cm	0.389691	0.360436	0.160702	0.201835	0.207483	0.444444	0.150895	0.165138	0.128440
<=24cm	0.442612	0.535624	0.465965	0.346330	0.505102	0.365079	0.410486	0.660550	0.275229
>24cm	0.167698	0.103940	0.373333	0.451835	0.287415	0.190476	0.438619	0.174312	0.596330
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.482284	1.352555	1.467894	1.513658	1.485469	1.506369	1.460508	1.263562	1.337326

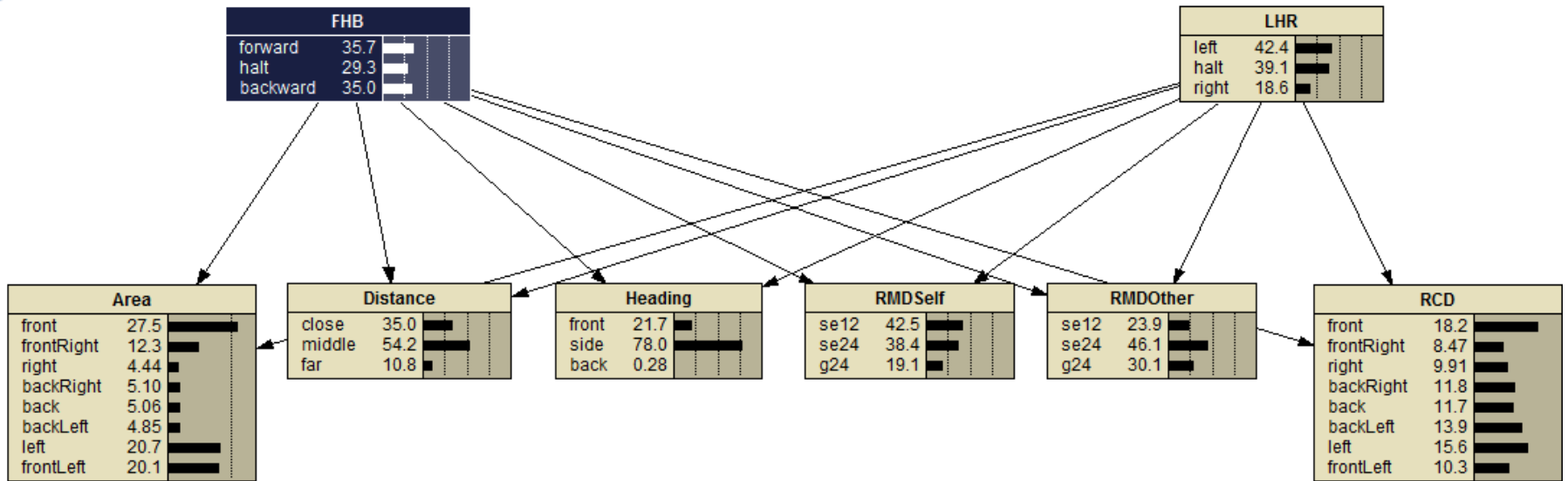


Conditional Probability Distribution $P(\text{RCD} \text{Action})$	left	leftUp	forward	rightUp	right	rightDown	backward	leftDown	halt
front	0.139041	0.222037	0.493706	0.183673	0.153457	0.005155	0.071156	0.070175	0.189759
front right	0.069863	0.069282	0.090210	0.090703	0.111298	0.005155	0.086404	0.140351	0.069277
right	0.068493	0.048414	0.055245	0.378685	0.156830	0.092784	0.125794	0.070175	0.072289
back right	0.047945	0.028381	0.060839	0.170068	0.178752	0.139175	0.222363	0.122807	0.183735
back	0.102055	0.027546	0.046154	0.047619	0.146712	0.123711	0.203304	0.245614	0.087349
back left	0.179452	0.090985	0.078322	0.043084	0.096121	0.293814	0.193139	0.122807	0.180723
left	0.252740	0.288815	0.094406	0.031746	0.052277	0.304124	0.074968	0.122807	0.129518
front left	0.140411	0.224541	0.081119	0.054422	0.104553	0.036082	0.022872	0.105263	0.087349
Sum	1	1	1	1	1	1	1	1	1
Entropy	2.818991	2.565000	2.400344	2.519473	2.924887	2.379903	2.765384	2.889606	2.887297

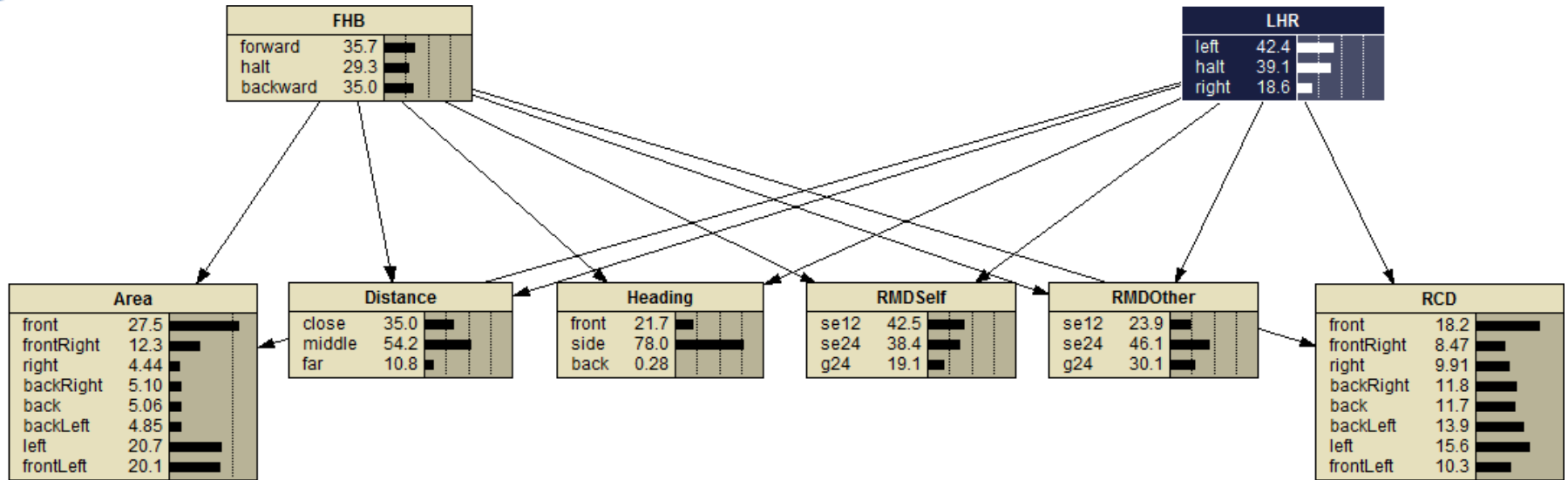
CONDITIONAL PROBABILITY TABLES

Player 1

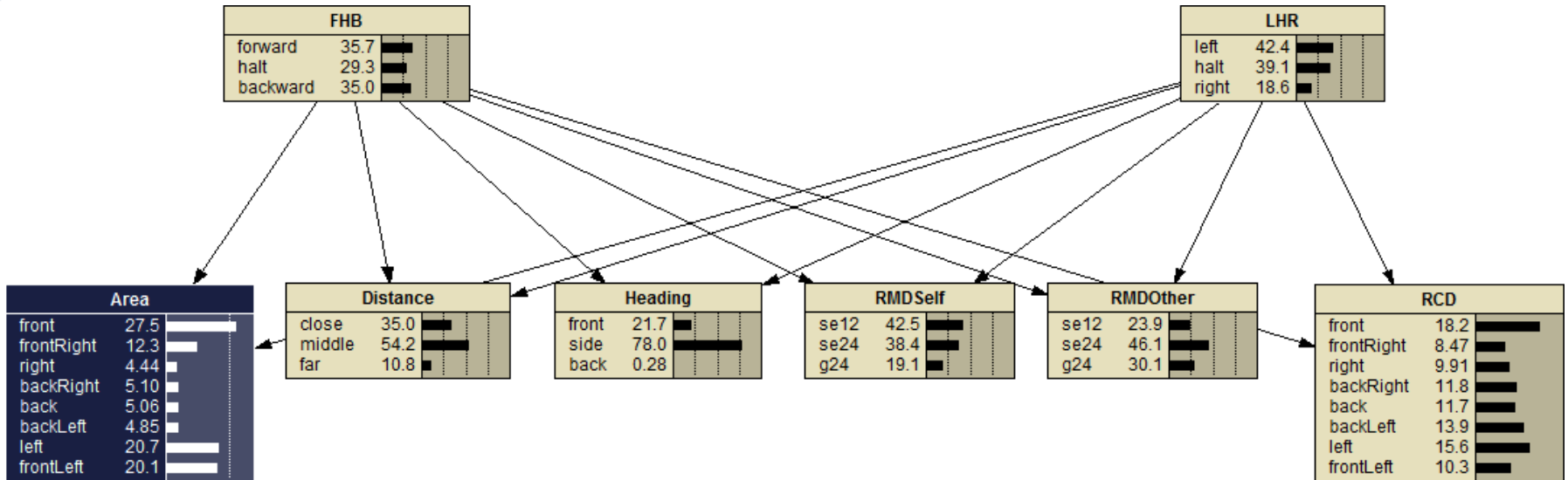




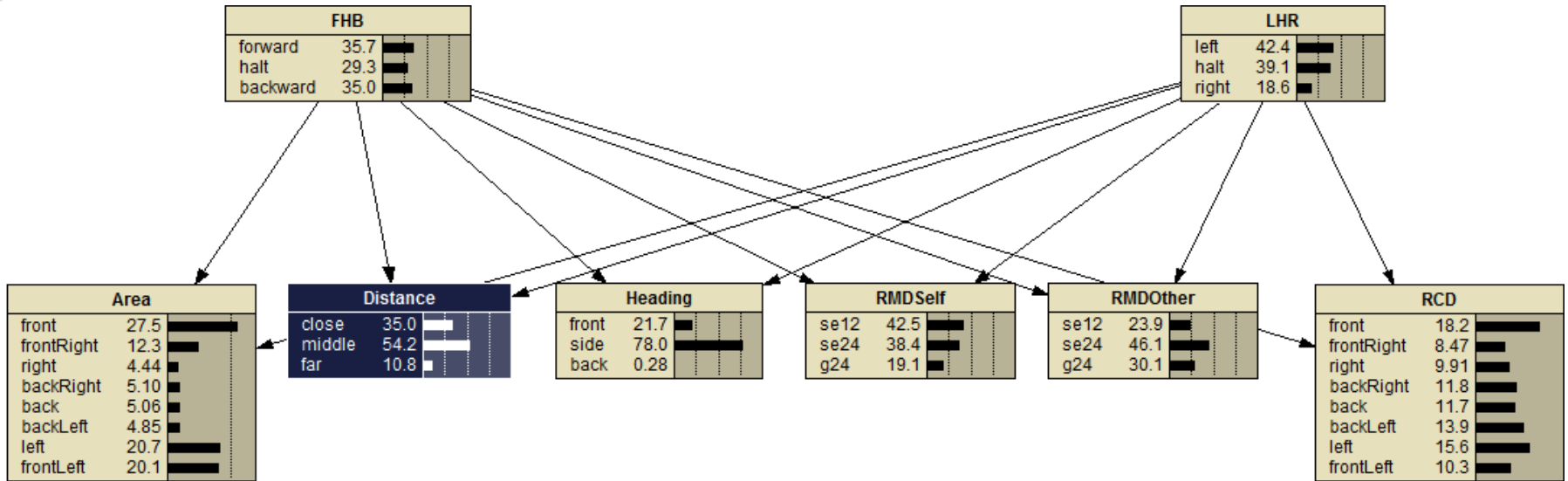
	forward	halt	backward	Sum	Entropy
Probability Distribution P(FHB)	0.469337	0.363945	0.166718	1	1.473782



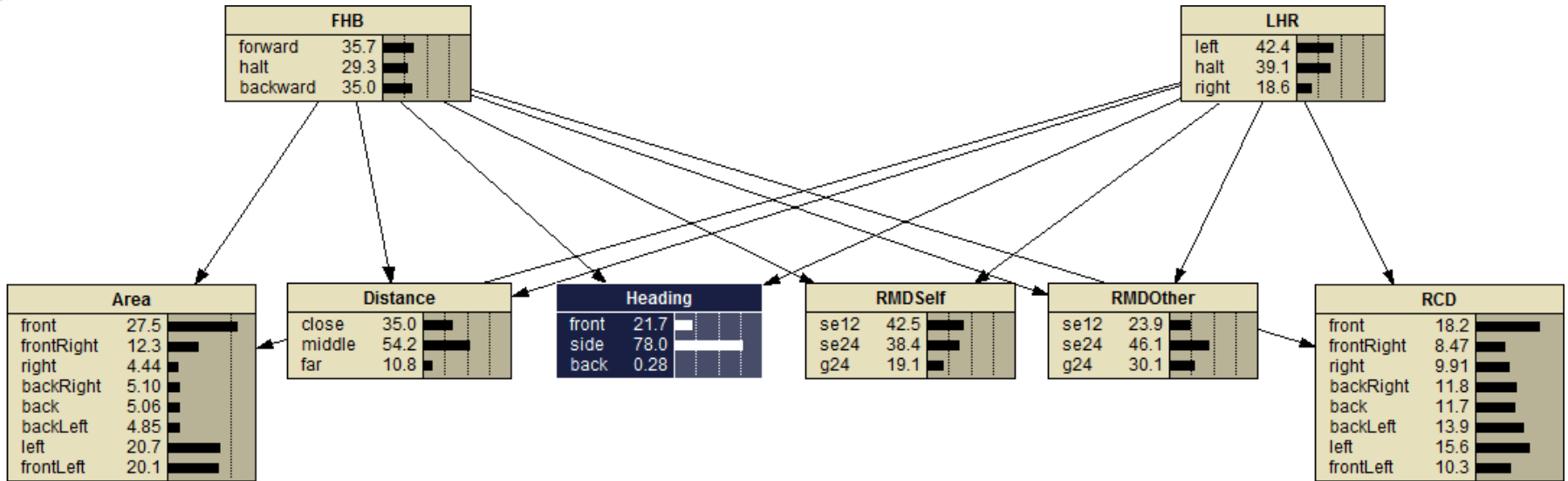
	forward	halt	backward	Sum	Entropy
Probability Distribution P(FHB)	0.423575	0.390755	0.185670	1	1.505701



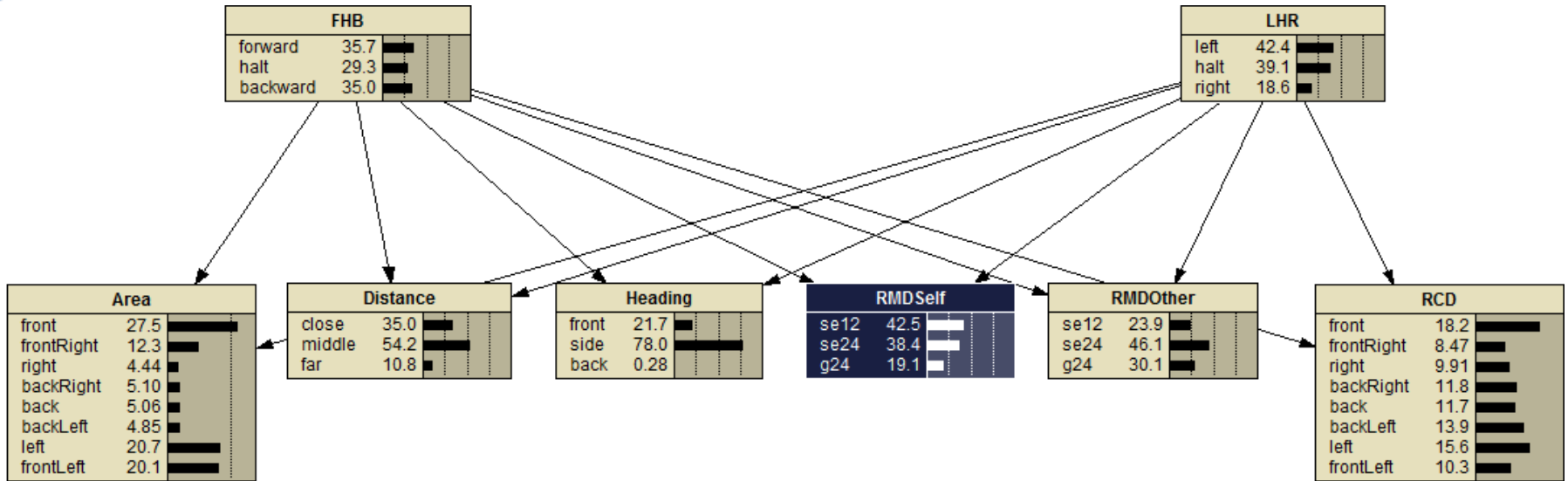
Conditional Probability Distribution $P(\text{Area} \text{FHB}, \text{LHR})$	Longitudinal movement (FHB)								
	forward			halt			backward		
	Rotational movement (LHR)			Rotational movement (LHR)			Rotational movement (LHR)		
	left	halt	right	left	halt	right	left	halt	right
front	0.192821	0.790909	0.528345	0.106849	0.542169	0.197302	0.008772	0.094028	0.005155
front right	0.012521	0.090210	0.342404	0.002055	0.213855	0.622260	0.008772	0.163914	0.051546
right	0.002504	0.015385	0.104308	0.011644	0.033133	0.141653	0.008772	0.097840	0.113402
back right	0.002504	0.006294	0.002268	0.014384	0.006024	0.021922	0.228070	0.078780	0.020619
back	0.005008	0.000699	0.002268	0.002055	0.009036	0.001686	0.061404	0.180432	0.221649
back left	0.043406	0.000699	0.002268	0.013014	0.003012	0.001686	0.201754	0.039390	0.067010
left	0.373122	0.030769	0.009070	0.209589	0.060241	0.010118	0.385965	0.202033	0.417526
front left	0.368114	0.065035	0.009070	0.640411	0.132530	0.003373	0.096491	0.143583	0.103093
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.876437	1.145010	1.538743	1.509987	1.879173	1.533909	2.234876	2.863011	2.338427



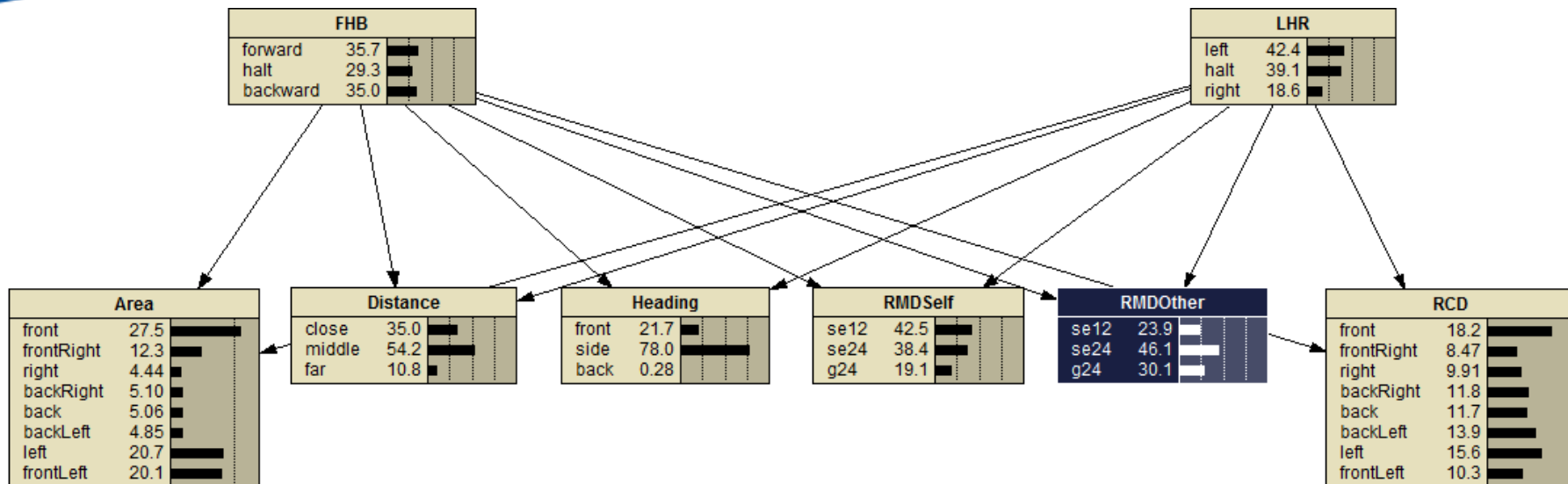
Conditional Probability Distribution $P(\text{Distance} \text{FHB}, \text{LHR})$	Longitudinal movement (FHB)								
	forward			halt			backward		
	Rotational movement (LHR)			Rotational movement (LHR)			Rotational movement (LHR)		
	left	halt	right	left	halt	right	left	halt	right
close	0.524728	0.167719	0.694954	0.441237	0.162080	0.343537	0.284404	0.317136	0.359788
middle	0.408215	0.510175	0.252294	0.527835	0.571865	0.515306	0.706422	0.648338	0.613757
far	0.067058	0.322105	0.052752	0.030928	0.266055	0.141156	0.009174	0.034527	0.026455
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.277265	1.453819	1.090035	1.162506	1.394783	1.421154	0.932197	1.098436	1.101486



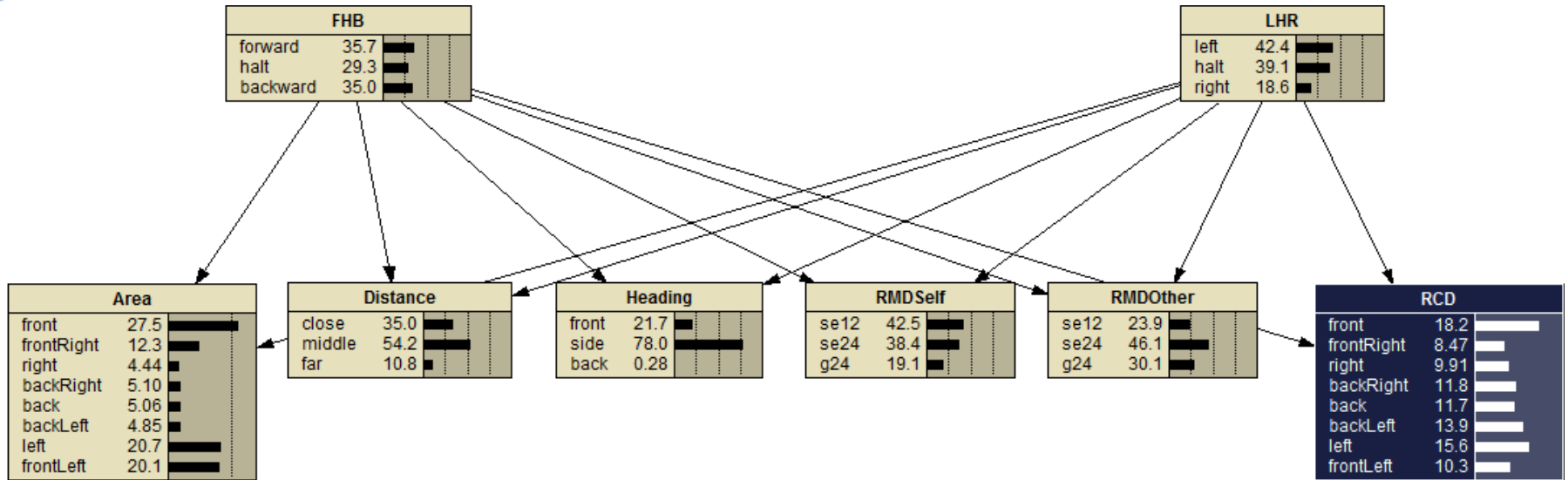
Conditional Probability Distribution $P(\text{Heading} \text{FHB}, \text{LHR})$	Longitudinal movement (FHB)								
	forward			halt			backward		
	Rotational movement (LHR)			Rotational movement (LHR)			Rotational movement (LHR)		
	left	halt	right	left	halt	right	left	halt	right
front	0.210394	0.480702	0.222477	0.060481	0.232416	0.130952	0.211009	0.166240	0.126984
side	0.788768	0.518596	0.775229	0.938832	0.764526	0.867347	0.779817	0.832481	0.867725
back	0.000838	0.000702	0.002294	0.000687	0.003058	0.001701	0.009174	0.001279	0.005291
Sum	1	1	1	1	1	1	1	1	1
Entropy	0.751725	1.006626	0.787247	0.337502	0.810980	0.577797	0.815522	0.662830	0.595694



Conditional Probability Distribution $P(\text{RMDSelf} \text{FHB}, \text{LHR})$	Longitudinal movement (FHB)								
	forward			halt			backward		
	Rotational movement (LHR)			Rotational movement (LHR)			Rotational movement (LHR)		
	left	halt	right	left	halt	right	left	halt	right
≤ 12	0.333613	0.407018	0.243119	0.630241	0.587156	0.598639	0.376147	0.388747	0.222222
≤ 24	0.414082	0.350877	0.344037	0.292096	0.333333	0.331633	0.467890	0.369565	0.576720
> 24	0.252305	0.242105	0.412844	0.077663	0.079511	0.069728	0.155963	0.241688	0.201058
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.556347	1.553416	1.552551	1.224684	1.269794	1.239113	1.461394	1.555798	1.405466



Conditional Probability Distribution $P(\text{RMDOther} \text{FHB}, \text{LHR})$	Longitudinal movement (FHB)								
	forward			halt			backward		
	Rotational movement (LHR)			Rotational movement (LHR)			Rotational movement (LHR)		
	left	halt	right	left	halt	right	left	halt	right
≤ 12	0.360436	0.160702	0.201835	0.389691	0.128440	0.207483	0.165138	0.150895	0.444444
≤ 24	0.535624	0.465965	0.346330	0.442612	0.275229	0.505102	0.660550	0.410486	0.365079
> 24	0.103940	0.373333	0.451835	0.167698	0.596330	0.287415	0.174312	0.438619	0.190476
Sum	1	1	1	1	1	1	1	1	1
Entropy	1.352555	1.467894	1.513658	1.482284	1.337326	1.485469	1.263562	1.460508	1.506369



Conditional Probability Distribution $P(\text{RCD} \text{FHB}, \text{LHR})$	Longitudinal movement (FHB)								
	forward			halt			backward		
	Rotational movement (LHR)			Rotational movement (LHR)			Rotational movement (LHR)		
	left	halt	right	left	halt	right	left	halt	right
front	0.222037	0.493706	0.183673	0.139041	0.189759	0.153457	0.070175	0.071156	0.005155
front right	0.069282	0.090210	0.090703	0.069863	0.069277	0.111298	0.140351	0.086404	0.005155
right	0.048414	0.055245	0.378685	0.068493	0.072289	0.156830	0.070175	0.125794	0.092784
back right	0.028381	0.060839	0.170068	0.047945	0.183735	0.178752	0.122807	0.222363	0.139175
back	0.027546	0.046154	0.047619	0.102055	0.087349	0.146712	0.245614	0.203304	0.123711
back left	0.090985	0.078322	0.043084	0.179452	0.180723	0.096121	0.122807	0.193139	0.293814
left	0.288815	0.094406	0.031746	0.252740	0.129518	0.052277	0.122807	0.074968	0.304124
front left	0.224541	0.081119	0.054422	0.140411	0.087349	0.104553	0.105263	0.022872	0.036082
Sum	1	1	1	1	1	1	1	1	1
Entropy	2.565000	2.400344	2.519473	2.818991	2.887297	2.924887	2.889606	2.765384	2.379903

- Action
 - Values: *left*, *leftUp*, *forward*, *rightUp*, *right*, *rightDown*, *backward*, *leftDown*, *halt*
 - Corresponds to movements of the robot
 - *forward* and *backward* being forward and backward movement
 - *left* and *right* being rotations
 - *leftUp*, *rightUP*, *leftDown* and *rightDown* being left and right curves, forwards and backwards
 - *halt* being no movement

- Area
 - Values: *front*, *frontRight*, *right*, *backRight*, *back*, *backLeft*, *left*, *frontLeft*
 - Corresponds to relative position of the other robot
 - E.g. *left* means that from the robot's perspective, the other robot is left of it

- Distance
 - Values: *close*, *middle*, *far*
 - Corresponds to distance between the two robots
 - *close* being $<15\text{cm}$
 - *middle* being $<30\text{cm}$
 - *far* being $\geq 30\text{cm}$

- Heading
 - Values: *front*, *side*, *back*
 - Corresponds to what side of the other robot is currently facing this robot
 - *front* being that the other robot's front is facing this robot
 - *side* being that the other robot's side is facing this robot
 - *back* being that the other robot's back is facing this robot

- RMDSelf (RingMiddleDistanceSelf)
 - Values: ≤ 12 , ≤ 24 , > 24
 - Corresponds to the robot's own distance to the ring center
 - ≤ 12 being smaller or equal to 12 cm
 - ≤ 24 being smaller or equal to 24 cm
 - > 24 being greater than 24cm

- RMDOther (RingMiddleDistanceOther)
 - Values: ≤ 12 , ≤ 24 , > 24
 - Corresponds to the other robot's distance to the ring center
 - ≤ 12 being smaller or equal to 12 cm
 - ≤ 24 being smaller or equal to 24 cm
 - > 24 being greater than 24cm

- RCD (RingCenterDirection)
 - Values: *front*, *frontRight*, *right*, *backRight*, *back*, *backLeft*, *left*, *frontLeft*
 - Corresponds to the direction of the ring center from the robot's position and orientation
 - E.g. *back* meaning that the ring center is behind the robot

- Action $t-1$
 - Values: *left*, *leftUp*, *forward*, *rightUp*, *right*, *rightDown*, *backward*, *leftDown*, *halt*
 - Corresponds to movements of the robot
 - *forward* and *backward* being forward and backward movement
 - *left* and *right* being rotations
 - *leftUp*, *rightUP*, *leftDown* and *rightDown* being left and right curves, forwards and backwards
 - *halt* being no movement

- FHB (Front Halt Back)
 - Values: *forward*, *halt*, *backward*
 - Corresponds to longitudinal movements of the robot
 - *forward* being forward movement
 - *halt* being no movement in longitudinal direction
 - *backward* being backward movement

- LHR (Left Halt Right)
 - Values: *left*, *halt*, *right*
 - Corresponds to rotational movements of the robot
 - *left* being a rotation to the left
 - *halt* being no rotational movement
 - *backward* being a rotation to the right

- RMD RingMiddleDistance/RingCenterDistance
- RCD RingCenterDirection
- FHB ForwardHaltBackward
- LHR LeftHaltRight
- se smaller or equal
- g greater