Week 7 Reflection

**What have I learnt this week?** This week I learnt about three different types of emergent behaviours. These types of emergent behaviours include peer effects and social contagion, coordination and culture as well as social learning. I also learnt about six different models which are Schelling’s Segregation Model, Granovetter’s Riot Model, Standing Ovation Model, Pure Coordination Games, Axelrod’s culture model as well as replicator dynamics models.

**What do I 'now know' that I did not before?** Now I know how all models that have been discussed in class portray information about cultures. I also now know the functions of all models and what the main information that the model is trying to explain. For example what I have learnt know is that the function of the pure coordination games model is to delineate the why people of different races, genders, regions etc. are dissimilar. I also now know that Axelrod’s culture model demonstrates the relationship between socialism and culture, such that culture progresses through the behaviour of individuals.

**What insights have I gained?** One of the main insights that I have gained is all these models that have been discussed within this workshop elucidate the vast differences between cultures of the world etc.

**What are (my/the) perceived strengths and weaknesses that I have observed?** One of the strengths that I observed was I observed Fisher’s Theorem and the Replicator Equation. This is a strength because I have a strong interest in Mathematics so the mathematical theory behind Fisher’s Theorem and the Replicator Equation made sense to me. Another strength that I observed was in terms of the modelling assignment, our group assigned roles and each one of them obliged to the specified role well. This was mainly due to great understanding and communication skills within our group. One of the weaknesses that I observed in my learning was fully understanding Schelling’s Segregation Model and its link to how things spread.

**What were the challenges I have encountered/observed and how well (did I/my team) handle them?** As mentioned above one of the main challenges that I have observed is understanding the Schelling’s Segregation Model. This was potentially the case because this agent model was completely new to the other agent models that I have studied during the course already.

**What would I do better next time and with what anticipated results?** One of the things that I could have done better next time to understand Schelling’s Segregation Model fully is to do research before the Workshop started. This would not only allow myself to understand Schelling’s Segregation Model but also make myself learn Random Walk Models is a quicker time.

**What theory proved to be useful and why? What have I learnt from this?** One bit of theory that proved to be the most useful is Axelrod’s Culture Model. This is because Axelrod’s Culture Model was the most real world applicant model in terms of the other models that were learnt. One of the most important things that was learnt from this model is the ideology that culture will be repeated through the help of different individual’s behaviour.

Another theory that proved to be useful is understanding replicator dynamics. This theory was useful because it delineated that it is not beneficial for social purposes but can be used for psychological, economics and ecological purposes, hence showing the multi benefits of the system. I learnt that you have to analyse probabilities in order to make a decision on what option to choose. This was helped by the Replicator Equation.