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MEETING AT GRAND CENTRAL: A COORDINATED TOUR THROUGH THE VARIOUS ROUTES TO COOPERATION

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"A full understanding of human cooperation requires an appreciation of both sides of the coin… Although it is true that humans cooperate with each other much more than do members of most other species, it is also true that humans do a wide range of things much more than any other species…" – Meeting at Grand Central, preface.

As the above quote hopefully demonstrates, this is an eminently sensible work on human cooperation. Meeting at Grand Central's title alludes to the Nobel Prize winning American economist THOMAS SCHELLING's work on coordination (*The Strategy of Conflict*, 1960)[1]. The authors, LEE CRONK and BETH L. LEECH use this title for two reasons; 1) they think studies of 'co-operation' should focus more on 'co-ordination' problems rather than just social dilemmas arising from conflicting interests; and 2) they hope this book will serve as a useful meeting point to improve coordination among the diverse array of scholars studying human cooperation. Their central theme is that human cooperation is an eclectic mix of behaviours and problems, and thus requires an eclectic mix of causal explanations and solutions. They illuminate this with various vignettes of human behaviours, superficially disparate, ranging from slavery to air-traffic control, but all with underlying commonalities and accompanying real-life solutions and failures.

Cronk and Leech are well placed to appreciate the array of theoretical approaches and the multitude of methods used to explain and study cooperation, for one is an evolutionary anthropologist (Cronk) and the other is a political scientist (Leech), both at Rutgers University in New Jersey. They do an excellent job of surveying the current literature on cooperation, in a refreshingly balanced and impartial manner that incorporates the wealth of knowledge from both the biological and social sciences. They resist the temptation to make grand sweeping claims, and instead, they insist that much of human behaviour needs to be examined on a case-by-

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[1]Schelling asked residents of New Haven, Connecticut, how they would attempt to meet someone in New York if they only knew which day and could not communicate in advance. The most popular answer was 'Grand Central [train station] at noon'. Schelling argues that this was chosen as the most salient focal point and that people should and do follow such logic in coordination games.

case basis ("*an eclectic topic needs an eclectic approach*"). My favourite parts of the book are the informative case studies from both political science and anthropology, whereby naturally occurring forms of cooperation (as opposed to cooperation within the laboratory) are dissected. These results from the field appear a fruitful avenue for truly understanding what sustains human cooperation.

Furthermore, they provide a useful bridge between the biological and social sciences, and therefore this book is an excellent gift for anyone embarking on graduate studies in either discipline. Currently, it is a good bet that graduate students of evolutionary biology will at some point read GEORGE C. WILLIAMS' (1966) *Adaptation and Natural Selection*, and likewise that students in the social sciences will read MANCUR OLSON's (1965) *The Logic of Collective Action*. Both of these seminal works correctly outline how group-level and individual-level interests will interact, and the authors use these two texts to interleave an historical narrative between the biological and social sciences and their respective approaches towards cooperation.

In the 1960s, G. C. Williams, perhaps partly motivated by a frustration with the prevalence of group-level explanations for animal behaviour, wrote *Adaptation and Natural Selection* (1966) in order to clarify that adaptations are most likely to be the result of individual selection. In the parlance of economics, individual level interests trump group level interests. This is because selection acts quicker at the individual level. Therefore groups, or species, although they may have group-level interests, will end up following their individual-level interests, and thus accurate predictions of behavior will typically require an individual level benefit. Individuals only act to benefit the group or other individuals when their interests are aligned. As an aside, the beauty of inclusive-fitness theory is to delineate how and when these interests are aligned (WEST and GARDNER 2013).

Meanwhile, in the social sciences, a graduate student of economics, Mancur Olson, was articulating his frustration with sociological explanations that assume groups act in their group interests. Such groups were assumed to rationally follow their own interests, and thus were analysed using rational choice theory, justified by the implicit assumption that groups are composed of rational individuals. However, Olson demonstrated the logical inconsistency in this approach, in *The Logic of Collective Action* (1965). He showed that if the implicit assumption that groups are comprised of rational individuals is true, then groups will typically fail to act in accord with the their own interests precisely because rational individuals will choose to favour their own interests over those of the group. Olson's achievement was to formally delineate how individual and group level interests will interact, and thus when and how group interests are ever likely to be achieved, albeit rarely and typically sub-optimally.

Cronk and Leech use this striking parallel development to show the common unity between the disciplines, both having solid foundations built upon a mostly successful maximization principle (inclusive fitness and rational self-interest). They also use these works to set the foundations for their conceptual approach, and to

provide a familiar entry point for readers coming from different backgrounds. Along the way they provide semantic clarification and translation between disciplines, de-mine the path ahead of any potential misconceptions such as proximate versus ultimate explanations (my entire mental check-list was satisfactorily ticked), and finish with a demonstration of why the study of coordination is so important. They conclude with a slightly less convincing appeal to study 'emergent properties' and the importance of power law distributions ("*When you start looking for them, power law curves have a way of showing up almost everywhere*…"), but worth a second reading, and a rallying cry for more cooperation among all scholars of cooperation.

Such a request for greater cross-disciplinary cooperation seems desirable because both the biological and social sciences have a lot to offer and there are several examples of parallel developments in biology and economics. We have already seen how Olson and Williams converged in the 1960s, and after them there is also the example of ZAHAVI and SPENCE. In 1975, Amotz Zahavi introduced the well-known handicap principle to evolutionary biology, whereby high-quality individuals may deliberately make things difficult for themselves in order to show that they can still cope. What is less well known among biologists is that Michael Spence formulated an analogous concept in economics two years earlier in 1973, in a proposed explanation for why some individuals choose to engage in costly education. Following on from these developments of signaling theory, GILBERT ROBERTS in 1998 and HERB GINTIS et al. in 2001 subsequently converged upon the idea that cooperation could sometimes be used as a reliable signal of quality.

However, none of these examples of convergence are attributed to cooperation between the disciplines or between the relevant scholars, and the similarity in each case suggests that each theory was not only a product of individual insight, but also an emergent product of the accompanying zeitgeist. Essentially, despite starting from different places, each pair ended up arriving at Grand Central, and in each case, both at the same time. However, perhaps one should ask, would each pair have arrived sooner or later if they had travelled together?

Well, the above examples at least partially suggest we may be better off splitting up and some of us meeting in Central Park, some in Grand Central, and only exchanging the ideas we are most confident of? After all, Richard Dawkins argues that if the dozen members of a jury were split into two groups of six, entirely separate but presented with the same information during the trial, that this would produce more reliable verdicts, because the members of a group are non-independent. Likewise, perhaps the study of human cooperation is best served by retaining disciplinary divides, allowing us to have increased confidence in those theories that are independently formulated? A disquieting thought.

In their defence, the coordinated cooperation of Cronk and Leech in producing this impressive work is a testament to their cause, and a powerful example of successful cross-disciplinary teamwork. Researchers from all disciplines can learn a lot from this book. Even if it is decided that consilience is best achieved through the

maintenance of separate disciplines, rather than unification, then there will still be a pressing need for the use of specialist messengers. They will need to be skilled in both tongues and sensitive to local traditions, much like medieval diplomats ferrying important news to and fro, and capable of reviewing the relevant fields and identifying the convergent findings, as Cronk and Leech have done so excellently in *Meeting at Grand Central*.

REFERENCES

GINTIS, H., SMITH, E. A. and BOWLES, S. (2001): Costly signaling and cooperation. *Journal of Theoretical Biology*, 213: 103–119.

OLSON, M. (1965): *The Logic of Collective Action: Public Goods and the Theory of Groups*. Harvard University Press.

ROBERTS, G. (1998): Competitive altruism: From reciprocity to the handicap principle. *Proceedings of the Royal Society Series B: Biological Sciences* 265, 427–431.

RICHARD DAWKINS on juries: http://www.darwinproject.ac.uk/letter/entry-2285

SCHELLING, T. C. (1960): *The Strategy of Conflict*. Cambridge: Harvard University Press, Cambridge, Massachusetts.

SPENCE, M. (1973): Job market signaling. *The Quarterly Journal of Economics*, 87, 355–374.

WILLIAMS, G. C. (1966): *Adaptation and Natural Selection*. Princeton University Press, Princeton, New Jersey.

WEST, S. A. and GARDNER, A. (2013): Adaptation and inclusive fitness. *Current Biology*, 23, R577–R584.

ZAHAVI, A. (1975): Mate selection – a selection for a handicap. *Journal of Theoretical Biology*. 53: 205–214.