



## UvA-DARE (Digital Academic Repository)

### Essays on nonlinear evolutionary game dynamics

Ochea, M.I.

**Publication date**  
2010

[Link to publication](#)

#### **Citation for published version (APA):**

Ochea, M. I. (2010). *Essays on nonlinear evolutionary game dynamics*. [Thesis, fully internal, Universiteit van Amsterdam]. Thela Thesis.

#### **General rights**

It is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), other than for strictly personal, individual use, unless the work is under an open content license (like Creative Commons).

#### **Disclaimer/Complaints regulations**

If you believe that digital publication of certain material infringes any of your rights or (privacy) interests, please let the Library know, stating your reasons. In case of a legitimate complaint, the Library will make the material inaccessible and/or remove it from the website. Please Ask the Library: <https://uba.uva.nl/en/contact>, or a letter to: Library of the University of Amsterdam, Secretariat, Singel 425, 1012 WP Amsterdam, The Netherlands. You will be contacted as soon as possible.

# Acknowledgements

It may not come as great surprise to say that, some 5 years ago, when I was joining the Tinbergen Institute with the purpose of pursuing doctoral research, I had only limited insight into what the actual topic of my dissertation would eventually look like. I would have probably found some words in the current title of this thesis very strange and exotic. Beyond a broad interest in the scientific adventure, the concrete pathmarks were yet to be determined. TI M.Phil first year programme proved flexible enough to allow me roam around the institute academic diversity and make a first contact with CeNDEF researchers during lectures on nonlinear dynamics, bounded rationality or evolutionary game theory. From the outset, I want to express my entire gratitude to Cars, Jan and Roald for awakening my interest towards these research paths. Later on, I was glad to apply to a PhD position at CeNDEF and start working on a project that combines exactly these three lines of investigation. My dissertation emerged out of this process.

It is perhaps difficult to strike the right tone when looking back in time at people that marked my experience as a doctoral student. First, it was a great privilege to have Prof. Cars Hommes as my supervisor: not only for the role his advice played on structuring and disciplining my pretty chaotic way of doing research but also his constant support and encouragements throughout the thesis-writing process. His friendly attitude, dedication, extensive feedback and minutely reading of my earlier drafts were decisive for the timely and successful completion of the thesis.

I am also thankful to the members of my thesis committee. I had stimulating

conversations with Prof. Josef Hofbauer on earlier versions of Chapter 2 and some extensions in that chapter originate from his suggestions. Jan Tuinstra commented at length on Chapter 3 whereas Chapter 4 was initiated out of our discussions. Roald Ramer introduced me to the field of evolutionary game dynamics and we had innumerable exchanges of ideas on various applications of the evolutionary theory ranging from language to preferences evolution. Aart de Zeeuw gave me the opportunity to continue work on repeated Prisoner's Dilemma done in Chapter 5 and engage in post-doctoral work on the emergence and evolution of institutions sustaining cooperation at the international level.

At various stages of my research I have also benefited a lot from interaction and very kind advise from a scientifically heterogenous group of researchers as CeNDEF is: Dave, Cees, Florian, Pim, Maurice, Misha, Stelios. For the lively and friendly environment I enjoyed in the group, my gratitude goes also to former or current CeNDEF doctoral students: Pietro, Valentyn, Peter, Saeed, Tatiana, Domenico, Paolo, Te. Officemates are a sort of a peculiar species in research and I would like to thank Pim, not only for our almost daily debates on almost any subject one could think of, but also for his virtually unlimited availability for exploring the local (experimental) music scene at, among others, STEIM or DNK Amsterdam. Outside CeNDEF, I would also want to mention former colleagues and friends from Tinbergen Institute: Antonio, Sumendhu, Alex, Aufa, Robert, Ana, Sumedha, Sebi, Razvan, Vali, Marcel, Mario, Jonneke, Tse-Chun. They all turned my early transition and stay in Amsterdam into smooth and pleasant experiences.

I could not complete this short review without thanking my parents for their patience and understanding towards my always too rare and too short trips home since my departure abroad. This thesis is heartly dedicated to them.

**Amsterdam, November 2009**