

Emergence and exit of large entities in the political economy
From description to formalism

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Abstract

As the title of our paper suggests we discuss and develop a topic in political economics which is to a great extent not yet scientifically investigated. This neglect in contemporary research is caused by the traditional research ontology in economics which is not able to handle dynamics in the economic theory of politics, namely the rise and fall of large entities in capitalist societies.

We want to approach this topic in a descriptive way of analysis, introducing an evolutionary ontology which provides the appropriate language for further research. This leads us to concepts of socioeconomic thinking, like social capital, network theory and the theory of novelty. By these means we outline *emergence* and *fading-away* of large entities in political economy.

These abstract matters have to be combined with historical examples in the political economy to ensure and validate the logical flow of our arguments. Actually our examples of large political entities are the *working class*, the *European Union* and *finance capital*.

Furthermore we characterize large political entities by three means in general: a general unifying principle, a physical carrier system (with different carrier types) and an evolving organisational structure. These characteristics are giving a special focus on emergence of such entities in a modern way of analysis. In case of ever arising pluralism in modern democracies we are confronted with nation states as open and ever-changing systems which make them even more complex. So we are presenting some work in progress which should lead us to the foundations of emergence and fading-away in political economics.

Introduction

Theories of the evolution of political economy are crowded with subjects all playing their respective, more or less malicious roles – physical individuals, firms, unions, social institutions, nation states, international organizations, and so on – but only rarely emergence and fading away of these entities has been systematically investigated. Usually their existence is simply assumed, at best some non-formal descriptions of empirical observations concerning emergence can be found. In this paper we outline a more general approach to describe emergence, growth, decline, and exit of social entities by formal means, in particular by the use of simulations with heterogeneous agent based systems. In other words we want to present a fresh framework which is able to handle these prototype processes in political economy.

A new topic, in particular the topic of novelty¹, produces new language; as well as new language stimulates new topics. The price to be paid for such exciting vistas is the rather exploratory and daring style that has to be used. Of course, starting point is always the observation of historical examples on which the *force of abstraction* of economic theory is applied. In each chapter the structure of the argument follows this line: from description to formalisation.

The eclectically selected, empirical entities used are (i) the *working class*, (ii) the *European Union*, and (iii) *finance capital*. These entities are just a random sample out of a rather broad range of types of social entities, and only the eating can prove the pudding.

The first chapter attempts to clarify the question ‘What is a large political entity in political economy?’. Starting with the above mentioned examples the abstracted core is crystallizing as the existence and application of a rule set supporting the metabolism of the entity, e.g. reproduction (growth or decline) of its structure, despite centrifugal forces. The two major sub-procedures used for this purpose are expansive imitation and repair, for both extensive algorithmic oriented work has recently been done – though usually in other disciplines than economics.

The second chapter concentrates on emergence. For all three empirical examples outstanding scholarly work is available (e.g. E.P. Thompson (1963), G. Carchedi (2001), R. Hilferding (1968 [1910])), which seems to indicate that emergence has to be understood as a response to an increasingly contradictory situation. More formally spoken, the ranges of parameters of an old system guaranteeing the working of the existing rule set are becoming too small - due to the very performance of this system. Out of these increasing strains on the

¹ The arising field of modelling *novelty* in economics produces new scientific language, e.g. Dopfer, Foster and Potts explain in *Micro-meso-macro* (2004).

old system emerges a sudden singular moment of instability which is the starting point of a movement towards a new attractor, a new rule set built of new combinations using also remains of the old system. Analysis of network evolution is just one fashionable strand to picture such a reshuffling of structures.

The third chapter deals with the fading away of social entities – but clearly in the sense of Hegel’s idea of ‘*Aufhebung*’ as the historical examples vividly suggest. Important social entities never ever really die, they rather enter a stage of asymptotically approach towards neglect. They suddenly start to lead a secondary life subordinated to an opposing, dominating structure. As such they are latent basics for the next evolutionary turn, formalisms trying to pin down the core of evolutionary dynamics are the place to look at new languages. Indeed in a century where the pace of innovation has accelerated tremendously it should not be surprising that scientific language, nouns and verbs, is forced to speed up its evolution too. Memories nowadays hold enormous masses of dead concepts waiting to be eventually be revived by a theoretical innovation, a new combination. Methods to do just that are spreading fast and the discourse within scientific communities explodes. For many disciplines well selected ignorance becomes more important than wide-spreading attention. But for political economy an educated journey through the wilderness of evolutionary formalisms in other disciplines seems to be a most important ingredient for scientific advance.

In a conclusion some of these loose lines of thought will be drawn together to speculate about the next ten years of capitalism.

1 - Large political entities in political economy

We want to sketch a ‘meso-trajectory’² for large entities in political economy in this paper. Especially we have to carry out micro-carriers and macro structures in our framework, to understand the population of rules and structures in political economy. Further we can derive the meso elements which have melting abilities between micro and macro.

“However, it is our view that Hayek’s attack of mainstream economics was something more than a variant of Poppers’s historicist critique of social science.

For want of a better word, we shall call it algebracism. ...

Algebracism is purported to provide clarity but, in practice, gets in the way of clear thinking about the nature of coordination and change in open systems and thereby seriously limits the powers and scope of economic analysis.”

Dopfer, Foster Potts (2004)

The political economy is an opened and ever changing system, therefore it’s necessary to integrate the different focuses in that area, by the means of micro-meso-macro. Increasing complexity in the system of political economy is accelerated by pluralism in modern democracies which leads to bigger problems in analysing them with traditional methods.

The rule sets and structures for emergence and fading-away of such large entities are exactly these meso elements, which can be compared with evolutionary rules and algorithms, as mentioned in the introduction: the main procedure is reproduction and the sub-procedures are imitation and repair. These rules will be more specifically explained in later parts of the paper.

Now we will stick to the specific micro-meso-macro framework for our objects of investigation and their tragedies.

Large entities become vulnerable in a globalised world, where chances for ‘attacks’ increase over time. Further we have to do some new exploration dependent on the structure and the dynamics on entities which play a major role in the environment of a growing political economy. Therefore we have to get a look on new rule-settings either in a micro, meso or macro framework, which on the one hand give chance for emergent socio-economic entities and on the other hand declare the decline of such entities.

Large entities in the political economy are entities that can directly interfere with the political economy, by the means of being big players in the fiscal playgrounds. These entities are actually the state, the central bank, the market institutions, the monopolist³, the working

² In terms of Dopfer, Foster, Potts (2004).

³ We assume that only the monopolist, in the entrepreneur landscape, has he power to directly interfere with the political economy sphere, therefore all other suppliers are not ‘Large Entities’.

force, the international organization and the NGO. They are building the macro-side of our framework and their unofficial allies and foes (e.g. the households) are making up the micro-side. We can consider various principal-agent relationships between them, which lead to different incentive schemes of promoting specific entities. The political forces are built by these incentives; the macro-side tries to get support to establish their power or to enforce their power, so the political landscape is structured by virtual fields of power⁴. These are superficial macro/micro rule-settings and structures in the evolutionary battle of economic and therefore political power.

Nevertheless, because of the complexity of the game these rules are hidden in every particular moment. If you master the virtual fields of power you might get fiscal power, therefore we have to learn more about the mechanisms of the driving forces in that game, which lead us to social capital⁵, or community governance⁶.

We assume that the initial drives of meso-elements⁷ are constituting themselves by accumulation of social capital, which is the precondition for becoming a large entity in the game, or in other words getting votes, or satisfy the agent on the micro-side, or just getting popular for career concerns, in case of bureaucrats, or for re-election, in case of stateswomen and men⁸.

The centrifugal forces of political markets evolve over time, as mentioned above, and disturb the status of large entities. Entities with a stable status over time are able to use social capital for their major aims. It's obvious that economists care about social capital in the last two decades, even though the political economy is still constituted by capital. Social capitalism, as the two words already reveal, is the simplest explanation for the actual popularity of the concept *social capital* (compare Ben Fine⁹)!

Let's describe briefly the counterparts of states and markets in society, namely the international organization, the NGO and the working force, by means of community governance.

They established a more or less stable status as large entities through imperfections on side of the market economy and the national state. Bowles and Gintis (2000) consider community governance as 'social corrections' of imperfections. In addition to the hypotheses

⁴ Bourdieu (1998)

⁵ Bourdieu (1987)

⁶ Bowles, Gintis (2000)

⁷ Emergence and fading-away in the first instance.

⁸ Alesina, Tabellini (2006)

⁹ Ben Fine (2001)

of these two prominent scholars, we also assume large entities as communities in an international context, whereas Bowles, Gintis handle small communities within their model only in an intra-national context.

The contradiction between markets and nation states opens space for new entities in the political economy, therefore there will emerge need for counterparts, satisfying needs on the agent side, which are not manageable either by nation states or markets. These needs occur, in the sense of Bourdieu (1982), from a common habitus, constituting a specific virtual/cultural field, which can lead, through political mobilization, towards such large entities with strict organization rules.

This mechanism is a typical example for changing a rule-set of meso-elements in that framework. Therefore we conclude again that social capital is an important component of the evolution of rule-sets in political economy. It imitates, repairs, mutates rules, because of a newly generated habitus, through cultural changes¹⁰.

In addition these entities also face the burden to monitor both markets and states, they have balancing tasks.

Let us return to our examples for a moment.

The working class has been considered a large political entity ever since in the mid of the 19th century anti-feudal forces split into two camps, capital and surplus value producing labour. It is an entity not only due to the position that certain households have in common with respect to the production process, in the course of its development this entity also has developed its culture, i.e. its representative institutions, behavioural rules, self-esteem as carrier of social progress etc. While in the early days this large entity defined itself mostly as a player within the nation state – despite the attempts of its theoretical leaders to propagate internationalism – now, after two world wars, and due to the globalization of the capitalist process the emergence of one global working class is latent, though not manifest yet.

The European Union is a manifest institution; its constituting process is well documented. But whereas the working class is well-rooted in micro-structures, the EU institutions are still desperately looking for support from below. On the other hand the EU is well established as a player in global politics; external and internal rule sets for this entity exist, even a formal constitution is on the agenda.

¹⁰ i.e. new media, new forms of communication, which are mostly not implemented in economic models.

The third example, finance capital, resembles more the working class. But contrary to this entity finance capital as a global entity came fully into power only after World War 2. Though there is no central physical representation its omnipresence as a principle that determines the fate of most humans cannot be doubted.

As these eclectically chosen examples show, the core of a large entity resides in a ***general unifying principle*** that it incorporates. This unifying principle usually is a certain position that it occupies in societies primary metabolism: be it the provision of surplus value, a certain geo-political unity or an algorithm for resource allocation. Complementary to this core principle is an ***appropriate physical carrier system***; again a whole range of carrier types is possible. While workers and worker households are starting points in one case, the EU administration in Brussels typically is a type relevant for the second case, while the physical footprints of firms acting as financial intermediaries are the particular nucleus for the third case. Finally - and this refers in particular the property of being ***large*** entities – the organisation of the links connecting the carriers with each other, and with the general principle is to be considered as an independent, essential feature of the entity. This evolving ***organisational structure*** of large entities in the political economy is it what earns them the status of being ‘living’ entities, of building up structure, i.e. neg-entropy, of being more than just a name used to designate a set of observed phenomena.

2 - Emergence in political economy

Recapitulate the three elements just developed. Large entities are characterised by

- i. a general unifying principle,
- ii. a physical carrier system (with different carrier types),
- iii. an evolving organisational structure.

The question of why and how large entities in the political economy emerge can now be reframed:

The core principle of an entity has to appear as a solution to a problem, a way out of a contradiction, for a critical mass of units of latent carrier types. What happens at certain point in time if this critical mass has been exceeded is that organisational links are emerging that connect previously isolated - latent - carrier units. The need to connect, of course, is positively correlated to the pressure that is exerted by the unresolved contradiction. Thus in the early stages of emergence the first two elements interact.

The question of how the core principle comes into being in the first place typically asks for an 'evolutionary' answer: a variety of new trial principles - made up as new combinations of older answer elements - is put to evolutionary tests. But even in this early stage the propagation of a trial principle needs physical carriers, let's call them *social innovators*. It is interesting to see how their importance, after having initiated the organisational network evolution, starts to fade away in the course of the complex necessities that the large organisational task involves – as the large entity starts to live a life of its own.

With a brief look at the examples the role of catalysts, i.e. social innovators, can be seen in its wide historical range of occurrences. Communist leaders and early tycoons in the world of finance are obvious examples; the role of the European Roundtable of Industrialists (ERTI founded in 1983, see Carchedi (2001), i.e. the bosses of Europe's transnational companies, is less known but clearly can be interpreted as pivotal for the emergence of the European Union in its contemporary form as a global player. In all of these cases the initiators visions have been most important, but in the meantime the enormously increased interdependencies in the emerged social structure have alienated their strength. Compared to contemporary problems they appear as somewhat strange dreams.

A closer look at the take-off process of a large entity reveals two important sub-processes: *imitation* and *repair*. If an idea is to be put to a test, this means that it is communicated convincing enough to induce potential carriers, which are – remember - under

external pressure, to imitate the senders behaviour. Imitation thus plays a central role. On the other hand it has to be realised that any new entity aspiring to enter the stage of global political economy is a threat to all existing players in this scene. There will be sample attempts to undermine its emergence, cut communication and imitation possibilities and tear away possible carriers from the emerging network. A most desirable feature for the newcomer therefore would be some ability to repair the damages done by its adversaries. Indeed the more sophisticated repair algorithms usually include an element of *learning*: the reason for the damage is analysed and some immunisation against similar attacks is implemented. Repair in these cases entails a *slow but continuous change of the entity*. In some cases compromising is learned, in other cases immediate and rigid counterattack is learned as best answer. And again, all of this learning can and will be communicated and imitated throughout the entities internal structure. In a sense, this intrinsic interplay of imitation and learning repair mechanisms is the content of the concept of organisational evolution, i.e. element (iii) of the characteristics of large entities.

When it comes to formalisation of the just described processes the hardest part evidently is the very first step, the provision of a testable variety out of seemingly disparate older elements to be found in cognitively separated areas. Currently there simply does not seem to exist a satisfying attempt to model this. When it comes to further network evolution - imitation and repair - a whole wealth of network analysis tools has been developed in recent years, it rather seems to be the ignorance of (mainstream) economists that hinders its application in political economy. The ideologically motivated focus on general equilibrium modelling has used up an incredible amount of intellectual capacity, which has been, and still is missing to come to grips with modern techniques in the simulation supported network analysis areas, i.e. evolutionary economics.

3 - Exit of actors in political economy

As it has been stated earlier, even in evolutionary economics not much has been said about the emergence and the exit of the actors under investigation. If one considers standard economic theory, the picture looks even worse. In most modelling approaches the number and the kind of participating entities is determined by definition beforehand. The validity of these ‘snapshot’ approaches is clearly limited to examinations of the short run and it may be doubted whether they bear any explanation value for medium or long run investigations at all. The economy – as well as the political system – is a living system, which is subject to permanent change. Basic actors enter and leave the stage and over the course of time new compound actors are formed while the existing ones lose importance.

A short look at history delivers a number of examples for our argument. In the past century the rise of the nation state led to an all-time high in the number of sovereign states. According to the World Factbook¹¹ more than 140 of the currently existing 193 nation states (counting 192 United Nation member states and the State of the Vatican City) have emerged by gaining sovereignty since 1900.

At the same time, another kind of actor – the regional bloc – has gained importance as well. Originally, the trade bloc served as a promoter of trade flows between the increasing number of nation states. Later on, political motives have been put on the agenda of many regional blocs – the European Union serving as the number one exemplar, but several others like ASEAN or MERCOSUR are to follow this example in the near future. Finally, the rise of regional blocs has led to lengthy debates about the changing role and the possible demise of the nation state.¹²

By now, it should be clear that a theory failing to incorporate the emergence and decline of actors in the global political and economic game misses some important points. Long run (and even medium run) policy implications are bound to prove wrong in the end when they are based on models which leave aside the changing participating players.

We are now concentrating our discussion of the exit of entities on the nation state, since it is one of the very actors subject to permanent changes in the past century.

¹¹ [World Factbook]. Central Intelligence Agency. 2006. “The World Factbook”. <https://www.cia.gov/cia/publications/factbook/index.html> (18.07.2006).

¹² See Tanzi (1997); and Tanzi (1998).

In political science, three main forces are recognized as sources of the demise of states.¹³ Globalisation has led to a tremendous imbalance between the market and the state. The emergence of the global economy (especially during the second wave of globalisation) has put a severe limit on a state's possibilities in managing and regulating economic activities. Economic policy-making can hardly be employed by the state alone but has to be applied by means of concerted action of a set of actors because of the interdependence of economies. Surely, this is also one of the reasons for increasing political engagement of regional blocs and without a doubt a shift of responsibilities from the national to the supranational level has occurred.

The second source is privatisation. In contrast to globalisation, the shift of responsibilities has taken place within the state itself. One of the roles of the state being the provision of public goods, privatisation has led to a shift of services previously provided by the public sector to the private sector.

Last but not least, *localism* has been identified as one of the major forces challenging the role of the state. An increasing tendency to transfer responsibilities from national entities to the community or region level has emerged. These centrifugal forces of decentralisation are the source of discussions about a 'Europe of the regions' and are reflected by regional efforts for autonomy especially throughout Europe (for example in Spain and Northern Italy).

Additionally, we would like to add technology to these factors as well. Advances in the technology of warfare have always been the reason for upheaval in the political and economic order. Large entities like the League of Nations and the United Nations have emerged because of advances in weapon technology and the resulting need for policing world peace on a supranational level.

This last factor brings into play arguments in the style of North (1981, 1990), but while he sticks to the rule of institutions, we dare to extend his work to the political economic actor as well. Not only are new actors able to create new technology, but vice versa new technology leads to the emergence of new actors. Clearly, the story of globalisation and its related actors is rooted in the advance in communication technology. This is valid not only for the second wave but also for the first wave of globalisation as the following quote made by John Maynard Keynes himself in 1919 vividly shows:

"What an extraordinary episode in the economic progress of man that age was which came to an end in August 1914! ... The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth,

¹³ See Heywood (1997), p. 96-98.

in such quantities as he might see fit, and reasonably expect their early delivery upon his doorstep.”

Krugman and Obstfeld (2006)

When looking at the scientific landscape of economic theories, the regions that deal with the demise of entities, are sparsely populated at best. Of course, there are splendid descriptive accounts by the likes of Olson (1982) and North (1981, 1990). Nevertheless, Olson's approach focuses on the relative loss of importance of actors and so fails to provide an explanation of the ultimate exit of an entity. North, however, puts all his attention on the role of institutions, which per se has been an invaluable contribution to the understanding of the political economic system, but tells us nothing about the actors playing the game according to the institutions' rules.

To our knowledge, there exists no formal account on the topic, either. Yet, a branch of political economics highlights the endogenous formation of jurisdictional borders and, therefore, it can be considered as dealing with the formation of nation states as actors. At the forefront of this branch, the seminal work of Alesina and Spolaore (1997) probably received the most attention. Nevertheless, this formal approach suffers from its rigorous assumptions and its neoclassical methodology. By means of comparative statics, the optimum number of nations is calculated under different political regimes. Because of its omission of dynamics and its strict focus on maximizing behaviour of perfectly informed agents, the model tells us only a few aspects about the subject of investigation and a great number of desirable features are missing. In the end, these approaches also don't satisfy our needs for a theory on the emergence and exit of entities in the political economy.

Conclusion

This paper presents some intermediary insights from work in progress. It addresses some blind spots in mainstream economic theory concerning emergence, maintenance and exit of the large entities in political economy. We start with examples, try to get some insight into more general features and finally move towards some more formal representations.

A wealth of possible insight waits to be unearthed by the already developing wealth of evolutionary tools. Of course we currently have not even half-way advanced on this track. The task indeed is enormous and needs work on economic history, on advanced simulation methods, on analysis proper, on cognitive science, and so on so forth. In short, it needs a rather heterodox scientific community, which closely interacts and communicates.

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