# The Crisis of the European Union as a Complex Adaptive System*

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## Abstract

The present article argues that the current crisis of the European Union (EU) is much deeper and more profound than many EU officials and analysts care to admit. Taking the so-called sovereign debt crisis and the refugee crisis as illustrative case studies it is argued that the crisis needs to be reframed as a Complex Adaptive System which is self-organizing in a deeply incoherent manner and which current EU policies are not only not addressing but exacerbating. As an alternative, the article suggests using Adaptive Action as a framework to identify the conditions which sustain the current dysfunctionality of the European Union and makes concrete suggestions on how these conditions can be altered. Areas of further research are also identified.

## Introduction

That the European Union (EU) is in crisis is beyond dispute: the sovereign debt crisis, the refugee crisis, or growing hostility to the EU from within some of its own Member States – culminating in the 'Brexit' vote – are clear signs that the European integration process is in trouble, something which years of emergency summits and often dramatic political action have not resolved.

The argument in this article is that this is the logical consequence of a misconception of the nature of the crisis faced. Whilst the EU sees these various problems as complicated, they are, in fact, part of a Complex Adaptive System (CAS) whose conditions interact and self-organize into incoherent patterns. The sovereign debt crisis, the refugee crisis and others are expressions of such incoherent patterns. In order to address these crises the European Union has to identify and change these conditions. To do so, Adaptive Action is necessary, as developed by Eoyang and Holladay (2013).

After a brief literature review, the article will introduce Complex Adaptive Systems and Adaptive Action. These will then be applied to the European Union and used to reinterpret its contemporary crisis through two case studies: the sovereign debt crisis and the refugee crisis. In these case studies the difference between conceiving of problems as complicated or complex will be explored. The implications of such reinterpretations for action will then be discussed and areas for further research outlined.

## I. The Multiple Crises of the European Union

That the EU is in crisis is beyond doubt. A mountain of literature has emerged attesting to this fact (Copsey and Houghton, 2012; Giddens, 2014, amongst others). A lot of this literature discusses what Lane (2012) termed the 'European sovereign debt crisis'. Within this context, many authors have focused specifically on Greece (Mihalakas, 2012). Others, such as Böll *et al*. (2012) have analyzed the history of the European Single Currency. Still others, such as Peet and La Guardia (2014), have undertaken detailed studies on 'how the euro crisis […] can be fixed', as the sub-title of their book terms it.

Yet, there has been a realization that the sovereign debt crisis does not stand alone. Rather, it is linked to, and even a product of, a political crisis within the EU. Within this debate, some have made a link between the debt crisis and the way the European Union conducts its business. For instance, Böll *et al*. (2012) showed that politics frequently trumped policy during the creation of the single currency, leading to what they call 'birth defects' of the euro for which Greece is paying today. Others, such as Giddens (2014) or Majone (2014) have argued that the eurozone crisis will have long-lasting consequences for the process of European integration which we can only guess at today. As Majone (2014) puts it, at the heart of the debate about the European Union in the context of its current crisis is really the question of whether integration 'has gone too far'.

Others concur that the crisis has the potential to weaken, and perhaps destroy, the European Union for two reasons. On the one hand, Schmitter (2012) has lamented the breakdown of solidarity between EU Member States as one of the core principles upon which European integration has historically been based. Instead, one can see the emergence of new cleavages, such as the divisions between the north and the south of Europe, between 'core' Europe and the new Member States of Central- and Eastern Europe, between debtors and creditors or between Europe enthusiasts and eurosceptics (Beck, 2013; Offe, 2015; Peet and La Guardia, 2014).

Still others, such as Bittner (2010), have argued that the EU is incapable of taking strategic decisions. Muddled in its thinking and hampered by the complex decision-making processes and declining public trust in its institutions (European Commission, 2013), the organization does what it can rather than what it has to in order to address the strategic problems it faces. Börzel (2016) attests the EU a 'crisis of governance' which was particularly exposed in relation to the sovereign debt crisis and the refugee crisis.

This being the case, it is perhaps no surprise that the EU is being pressured not just by the emergence of Europe-sceptic parties, such as the Front Nacional (FN) in France, but by EU-hostile governments working to weaken the organization from within. Hungary's Prime Minister, Viktor Orbán, for instance, talks openly about creating an 'authoritarian state' modelled on Russia whilst both his and the current Polish government are actively working to dismantle elements of their country's democratic political and judicial system (Kelemen, 2015; Marton, 2014). The very foundation of the European Union, which has always seen itself as a community of values is being eroded (Börzel and Risse, 2009; Manners, 2002).

There is *some* recognition within the EU that the organization is passing through a significant crisis. In the words of one senior EU diplomat there is 'a deep crisis' (Interview EU Diplomat in South America, 2013). Another argued that the EU was suffering a 'crisis of leadership' (Interview Senior EU Diplomat in South America, 2014). Equally, over

recent years, the EU has lived through a seemingly never-ending series of meetings of the European Council – the meeting of the Heads of Government of the European Union – a clear symptom of times of political crisis (Lehmann, 2011; Puetter, 2012).

Yet, the political activism that has followed such recognition has not solved the crises it is intended to address: Both the sovereign debt crisis and the refugee crisis, for instance, are evolving rather than ending (Alderman, 2016; Münchau, 2015). I argue that the EU is unable to effectively respond to these crises because it fundamentally misunderstands the nature of the problems it is confronting. In simple terms the EU's actions do not match the complexity of the problems encountered. What is needed is a different approach to problem definition which allows for innovative solutions.

## II. From Linear to Complex: Seeing the EU Crisis as a Complex Adaptive System

There is clearly recognition that the crisis through which the organization is passing is the result of multiple factors and impacts the EU in various ways and spheres (Featherstone, 2016; Kreuder-Sonnen, 2016). Equally, the crisis has been interpreted from a variety of theoretical perspectives (Niemann and Ioannou, 2015; Schimmelfennig, 2015; Verdun, 2015). All make valid arguments and raise pertinent, and often troubling, questions for the European Union. The key question then becomes how the EU defines and approaches these problems. It is here that this article will go further than the approaches just mentioned. Whilst taking account of the points made, it will incorporate them into a new and innovative conceptual framework for interpreting and analyzing the EU crisis which, in turn, will lead to different approaches towards addressing the problems identified.

For the EU, its current problems are 'complicated'. As Edwards (2002, p. 17) points out, with complicated problems 'it is possible to work out solutions and implement them'. There is a belief that, having identified an unsatisfactory situation $a$, the application of the 'right' policy $b$ would, with enough effort and sufficient resources, lead to a satisfactory situation $c$ which would then need to be maintained into the future for as long as possible. Geyer (2003), identifying this type of approach to problem-solving as common in the EU, terms it 'Newtonian' or 'linear', the idea being that political leaders can control both policies and outcomes. One can demonstrate this approach visually through a simple x-y graph Fig 1:

Figure 1: X-Y graph of linear or Newtonian approach to policy-making.
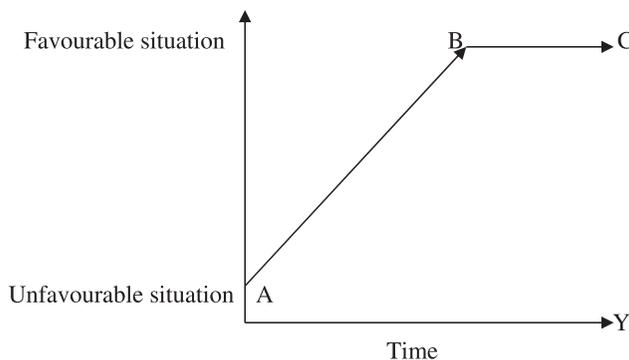
Yet, neither the European Union, nor the problems that it faces, is complicated. Rather, they are complex, characterized by:

- The presence within the system of a large number of elements;
- These elements interact in a rich manner, that is, any element in the system is influenced by, and influences, a large number of other elements;
- These interactions are often non-linear;
- There are feedback loops in the interaction;
- The openness of the system and its elements to their environment;
- These systems operate in a state far from equilibrium;
- These systems have a history; and
- The elements of the system are ignorant of the behaviour of the system as a whole (adapted from Geyer and Rihani, 2010).

Dooley (1997) defines this as a Complex Adaptive System, 'a collection of semi-autonomous agents with the freedom to act in unpredictable ways and whose interactions over time and space generate system-wide patterns'. As Edwards (2002, p. 17) has observed, such systems 'have remarkable resilience in the face of efforts to change them'. This is partly due to the fact that the system's agents 'are constantly changing, as are the relationships between and amongst them' (Eoyang and Holladay, 2013, pp. 16–17). As a consequence, 'uncertainty becomes the rule' (Eoyang and Holladay, 2013, p. 17).

Yet, uncertainty does not mean permanent instability. In fact, in most cases, changes in the relationship between agents take place within a framework of fundamental systemic stability. As Eoyang and Holladay (2013, p. 17) put it, interactions 'simply change the conditions and relationships among the parts and the whole; they do not change the system in any fundamental way'. The interaction between parts and the whole often sustains existing patterns as 'parts interact to generate emergent patterns while the patterns influence parts and their interactions. The result is a self-generating, self-organizing reality of human systems dynamics' (Eoyang and Holladay, 2013, p. 18), based on the interdependence between the parts and the whole of the system. Self-organization here is defined as a process by which the internal interactions between agents and conditions of a system generate system-wide patterns (Eoyang, 2001).

In such a situation change is dynamical, the result of multiple forces acting in unpredictable ways and generating surprising outcomes which even the most powerful actors cannot entirely control. Change, then, is only partially predictable and characterized by what Malcolm Gladwell (2000) calls 'tipping points' at which the dynamics of the system change profoundly to settle into a new pattern. In such a situation, even if an action could be executed as planned, it would not guarantee the 'right' result. As elements of a CAS are multiple and interdependent, 'one can never do only one thing' since one action will have multiple impacts and unintended consequences (Jervis, 1997). That means that the self-organization of a CAS does not stop at a particular, less so at an externally predetermined, point. Instead 'the best you can hope to do is to build adaptive capacity to coevolve with the system as it changes over time' (Eoyang and Holladay 2013, p. 25).

Consequently, actions have to be constantly evaluated and adjusted depending on particular local circumstances. Decision-making processes have to be flexible and decentralized. They have to be able to respond and adapt to unforeseen circumstances

as agents of the system respond and adapt to any given policy. How this can be done is what we turn to now.

## III. Adaptive Action

In order to be able to act effectively in a system of high unpredictability and uncertain outcomes, Eoyang and Holladay (2013, p. 30) propose 'Adaptive Action', defined as a 'method for engaging in dynamical change in an ever-emerging, always self-organizing world'. They argue that it is necessary to approach any given problem with the aim of identifying the current state of self-organization to allow for targeted intervention that can change the pattern of self-organization which has given rise to, and sustains, the problem to be tackled. This process is based on three simple questions:

### What?

The 'what' question tries to identify the current state of the process of self-organization, which, according to Eoyang (2001), is dependent on three conditions: elements which hold the system together (such as shared objectives, geographical locations, social class and so on), differences between the agents of the system which generate tensions that allow for change (such as different interpretations of a particular issue, class, resources, location and so on) and channels through which these differences can be expressed (media, assemblies, meetings). Eoyang (2001) calls these conditions 'Containers', 'Differences' and 'Exchanges' (CDE). She also shows that these conditions are interdependent and influence each other across time and space and can serve different functions within different contexts. A particular condition can serve as a container in one context but a significant difference or an exchange in a different context. This is particularly important in relation to the EU crisis since, as will be shown, the organization often has a very different understanding and perception of its own actions than other actors at different levels of the system who are the recipients of those actions. Equally, these perceptions can change over time and with it the function a particular condition assumes.

Questions that might be asked to reveal the current state of self-organization include: What do we see? What containers are the most relevant? What differences exist and what impact do they have? What exchanges are strongest and what are the weakest?

### So What (Does it Mean)?

The 'so what' question tries to make sense of what has been observed. What do the patterns we observe mean for any possibility of action? Such a question is critical in that it generates options for action but also allows for the adaptation of action to different circumstances across time and space. Questions might include: So what does the current state mean to you, to me and to others? So what does that mean for our ability to act? So what does that mean for the future development of the system?

### Now What (Do we Do)?

The 'now what' question, finally, allows for the taking of action having considered the current state of self-organization and its implications across time and space. Questions

may include: Now what will I/you/we/they do? Now what will be communicated to others? Now what will the results and the consequences be?

These three questions allow exercising '[c]onscious influence over self-organizing patterns [as it permits] seeing, understanding, and influencing the conditions that shape change in complex adaptive systems' (Eoyang and Holladay, 2013, p. 30). They allow for the identification of the conditions and patterns that give rise to, and sustain, the crisis of the European Union, as well as actions to address this problem. As such, it will be useful to define more precisely what we mean by conditions and patterns.

### Conditions

Conditions are the elements of the social system which determine the speed, direction and path of a social system as it evolves (self-organizes) into the future.

### Patterns

Patterns are the expression of the interaction between the three different conditions outlined above and are understood as 'the similarities, differences and connections that have meaning across time and space' (Eoyang and Holladay, 2013).

Yet, conditions and patterns do not emerge in a vacuum. They emerge within the framework of principles, which are 'systemic agreements which shape conditions and influence pattern formation during [a social system's evolution and development]'. They 'guide behaviours and interactions of members of a [Complex Adaptive System]' (adapted from HSD Institute, 2015). In other words, principles *influence* how conditions impact within a system across time and space. They shape the macro-level of a social system and serve as a link between individual behaviour and systemic patterns. Social systems typically function according to a small number of principles that are accepted by the system as a whole and which, therefore, explain why social systems are often marked by a remarkable degree of stability, particularly at macro-level, even though, at mesa- and micro level, lots of things are happening. Yet, how these principles shape the behaviour of particular groups and individuals within a social system depends on the specific conditions to which individuals and groups are subjected, which can differ significantly.

These terms have critical implications for action. They suggest that problems of the type currently faced by the European Union are, in fact, the expression of a pattern of interdependent conditions across time and space. Therefore, what needs to change are the conditions which form these patterns or the principles through which these conditions and patterns are being interpreted.

Having defined this framework, it is now possible to apply it to the crisis of the European Union.

## IV. The EU Crisis as a Complex Adaptive System

The EU has already been defined as a Complex Adaptive System with all the elements outlined above (Geyer, 2003). As such, the EU has always been a 'messy' system where crises are common and the art of the possible often trumps the desirable (Nugent, 2010). Therefore, some have commented that the current crisis is not that different from others that the EU has passed through, be it the 'empty-chair' crisis of the latter 1960s, the

'Euro-sclerosis' decade of the 1970s or the various treaty ratification crises during the 1990s and 2000s (Cini and Borragán, 2016). In fact Monnet (1978) or Lindberg (1963) argued that the EU's evolution has been dialectical. In other words, the organization's history has been marked by periods of progress followed by periods of crisis. The problems faced may simply be one of its periodic phases of 'adjustment'.

Whilst acknowledging the EU's history as one of many different periods of progress and regression, I argue that the current one is qualitatively different because it occurs within the context of a much less favourable pattern of conditions than in the past. In arguing this, the article concurs with Kramer (2012) who classified the current crisis as the most dangerous faced by the EU without, however, using the framework of Complex Adaptive Systems to justify such argument.

In order to do so it will be useful to briefly look at the historical conditions of the EU integration process (Table 1).

As briefly touched upon earlier, the European Union has clearly had, for most of its history, a model according to which it moved forward. It was based on peace, reconciliation, democracy, capitalism, openness (for instance, to new Member States) and solidarity. So successful was the EU in pursuing, and implementing, this model that it received the Nobel Peace Prize in 2012. The EU, according to Manners (2002), was a normative power. These, then, were the key containers upon which the EU was based.

Yet, despite this, there have always been debates within and outside the organization about what this model means specifically. There have always been different interpretations of how far the European integration process should go, differences that, at times, have led to full-blown crises. There have also been debates about what is meant by 'open markets' (Nugent, 2010). However, the EU's container – the consensus around its overriding purpose – was strong enough to accommodate these differences and use the tensions they generated to move the organization forward. The fact that this was possible had a lot to do with the exchanges that were in place, as demonstrated by the interaction between the different EU institutions, as well as the fact that, at least in some countries, European integration was a policy of state, regardless of government or disagreements about specifics (Dinan, 2004).

Table 1: The Historical CDE of the European Union

| Conditions for self-organization | Conditions present |
| --- | --- |
| Container | Reconciliation and peace |
| | Democracy and the rule of law |
| | Capitalism |
| | Openness |
| | = Model Europe |
| Difference | Historical differences |
| | Speed and depth of integration process |
| | Meaning of 'Capitalism', 'openness' etc. |
| Exchange | Political elites |
| | National political discourse |
| | Institutional interdependence at EU level |
| | Elections |
| Pattern | Coherent |

The argument is that the contemporary conditions under which the EU works are such that these inevitable tensions can no longer be contained and are leading to increasing incoherence which will only worsen the current crisis. This incoherence is spread across all levels of the EU system and destroys its ability both to develop strategic objectives as well as respond effectively to specific problems.

To illustrate this point, we will now look at the sovereign debt crisis and the refugee crisis as case studies.

*The European Sovereign Debt Crisis*

Perhaps more than any other, the sovereign debt crisis exemplifies the linear approach of the EU to its problems. Be it in Spain, Portugal or Greece, the problems of debt in these countries have been reduced to one of overspending requiring austerity. Cutting spending, coupled with 'structural reforms' will bring debt under control (European Commission 2010).

For the EU, therefore, the critical container is the objective of debt-reduction and the critical difference to the problem is the level of expenditure of the state. The spending-cuts and bailouts that this policy entails have mainly been negotiated through a series of meetings of the European Council, as well as the Troika of the European Commission, the European Central Bank and the International Monetary Fund (IMF). These meetings represent the exchange. Yet, at the same time, they are also a critical political and geo-graphic container which concentrates policy-making in relatively closed spaces and around few people, reducing the chances of wildly different political and ideological views. From this process have come policies which Featherstone (2016, p. 51) has argued are marked by 'over-determinacy'. For instance, the target of Greece shedding 150,000 public servant posts between 2011 and 15 'was not a figure developed on the basis of an assessment of staffing or skills needed; it was purely a calculation derived from the budget savings required of Greece'. In other words, it was an action based on what one might call 'data logic', without any thought given to the 'unintended consequences' of such actions.

This apparently clear and coherent policy became anything but on closer inspection. The policy soon came up against profound differences at strategic level between those who argue that the crisis is a sign that integration has gone too far and those who argue that it has not gone far enough (Johnson, 2015; Scarpetta, 2015). The particular policy, then, has revealed tensions about the strategic container within which it should be developed and implemented. It also revealed a breakdown of European solidarity (Schmitter, 2012). Far from being a community of values, the sovereign debt crisis exposed the EU as a community of increasingly divergent interests. In fact, and bearing Schmitter's argument in mind, it could be argued that, currently, there *are* no strategic containers that are shared by all actors across time and space. The focus is on resolving the crisis, apparently unconnected to the strategic outlook of the EU. As one EU diplomat put it to the author in 2012: 'First, we have to solve the [debt] crisis, then we can think about our strategic [objectives]' (Interview EU diplomat in South America, 2012).

Yet, even at policy-level, there have been disagreements about how far austerity in return for a bailout should go. Whilst some economists have questioned the effectiveness of the bailout programs and the austerity on which they are based (Blyth, 2013; Krugman,

2015) there have been intense divisions within the EU between debtor and creditor countries about the correct way forward. Critically, this division has also been reflected in *national* debates, and therefore national elections, as clearly seen by the surge of anti-EU and anti-austerity parties in countries such as Greece and Spain, but also France, Italy and the UK (Stavrakakis, 2014). This, in turn, has led to intense debates about what the austerity programs mean for democracy and the relationship between the EU and its Member States, seeing that such parties have stood (and sometimes won elections) on programs that other actors within the EU have specifically labelled as unacceptable and unworkable within the framework of EU rules (Grim and Marans, 2015; Münchau, 2012).

The fact that such debates have emerged is a clear demonstration that, first, it is impossible to separate the national and European level, just as it is impossible to separate the principles upon which the EU is based from the policies it pursues. The different levels clearly influence each other. Second, the sovereign debt crisis represents a very different reality at local and national level than in Brussels. The rise of parties such as *Syriza* in Greece or *Podemos* in Spain is a response to the fact that austerity is perceived differently at local level than at the macro- European level. These parties have offered themselves as readily-available exchanges to express the frustration felt by many that they are being punished for political decisions they do not feel responsible for. At this level, the deterioration of quality of life becomes a defining feature which guides individual behaviour. The tensions that build up at local level through this deterioration lead to movement which can be expressed by voters in national elections or protesting. In other words, people act and react in response to their own circumstances at micro-level, *not* the pressure applied by outside bodies at the macro-level. Yet, these local tensions and the movement they provide have an impact on the macro-level, in the case of Greece through the emergence of new political parties and governments, which in turn will interact with other macro-level actors.

It is worth illustrating this point graphically (Table 2).

The above is obviously a radical simplification of the Complex Adaptive System that is the sovereign debt crisis. Yet, it makes a couple of crucial points about the nature of self-organizing processes in relation to this crisis. It shows a weakening of the container which has traditionally held the EU together. Here, economic growth and rising living standards were always crucial to, for instance, guarantee solidarity. Second, with EU policies developed without the guide of clear strategic containers at EU level and leading to widely different personal experiences for people at the local level, which feed back into the national and European political debate, these policies cannot be scaled across the system as a whole. As austerity is rolled out, differences about what austerity means, what its consequences are, how far it should go, what alternatives could be tried or even what problem austerity is trying to address abound. The system, however, is not strong enough to hold these differences to allow for a coherent and sustainable process of self-organization which addresses the conditions of the crisis precisely because the containers have been so weakened. The Troika or meetings of the European Council simply serve to increase the mistrust parts of the population feel towards decision-makers. Yet, the populations' engagement in the process is crucial in order to allow any desired changes to be scaled and coherence to be restored. Crucially, incoherence is not restricted to the specific question of the sovereign debt crisis but a *reflection* of strategic incoherence about

Table 2: The CDE of the Sovereign Debt Crisis

| Conditions for self-organization | Conditions present |
| --- | --- |
| Container | EU level: |
| | Objective: Saving the single currency |
| | Agreement on instrument: Austerity |
| | Geographical and political: European Council- and Troika meetings, mostly in Brussels |
| | Local level: |
| | Experience of declining living standards |
| | Who to blame: Anger |
| Difference | More or less integration: The future of the EU integration process |
| | More or less austerity |
| | 'Debtor' or 'creditor' |
| | Northern vs. Southern Member States |
| | Impact of austerity: Different experiences of impact across time and space. |
| Exchange | Troika |
| | European Council Meetings |
| | Elections |
| | Protests |
| Pattern | Incoherent |

what, in this case, the existence of a single currency *means* for a European integration process. The sovereign debt crisis is not the *cause* of this incoherence but an *expression* of it.

A similar pattern can be seen when looking at the refugee crisis.

### The Refugee Crisis

The inflow of huge numbers of refugees mainly from the Middle East over the last few years represents the biggest movement of people into – and within – Europe since the end of the World War II (European Commission, 2016a). Bearing in mind the scale of the challenge, it should come as no surprise that there have been significant disagreements within the European Union about how to handle this issue. For some, such as the governments in Poland and Hungary, the main aim has been to *stop* refugees from arriving altogether, with Hungary's Prime Minister describing refugees as 'poison' (*The Guardian*, 2016). To do so, border fences have been erected and some countries have reintroduced inner-EU border controls, creating physical containers. Yet, these fences also serve as key differences and create enormous local tensions by making being on the 'right side' of those fences an all-or-nothing proposition for refugees.

Such actions exposed far deeper fault-lines at the EU level. For the Commission, for instance, the fact that current EU rules for third-country nationals seeking to come to the EU as a refugee place a disproportionate burden on poorer southern states such as Italy, Greece or Eastern European states such as Hungary, meant that there should be a revision of these rules in order to share this burden more equitably (European Commission, 2015, 2016b). In proposing such changes the key container has been to maintain *stability* within the EU by managing the flow of refugees more equitably, reducing internal tensions in the process.

For others, however, the crisis meant the need for a fundamental rethink about the very principles that govern the European integration process, for instance in relation to the free movement of people or the idea of the EU as a community of values. This is particularly true in relation to the deal it has made with Turkey to keep refugees on Turkish territory in exchange for benefits such as visa-free travel to the EU for Turkish citizens, a problematic deal in light of recent developments in that country (Collett, 2016; Greene and Kelemen, 2016). In other words, fundamental disagreements about the principles governing European integration contribute to, and sustain, fundamental policy differences in relation to this particular problem.

These divisions, however, do reflect differing attitudes of national domestic audiences. In many EU countries preventing refugees from reaching national territory is popular (Nardelli, 2015). At national level, then, this becomes a key container for governments whilst, at EU level, such attitudes serve as major differences, creating considerable tensions. This, in turn, makes managing the crisis at EU level more difficult. In fact, just as in the case of the sovereign debt crisis, they reflect broader disagreements about the direction of the EU and its integration process. For some, it confirms the urgent need to rethink long-standing EU principles such as freedom of movement. For others, they illustrate the need for a stronger EU and more integration, since these are pan-European problems that need a European solution (Vincenti, 2013). Yet, such fundamental disagreements have a direct impact at micro-level, making the practical work of helping refugees that arrive on the EU's shores far more difficult (Amnesty International, 2016). For instance, the construction of border fences, as mentioned above, has direct influence at micro-level, forcing thousands of refugees to take decisions on which routes to risk to come into Europe. This, in turn, will influence the debate at macro-level. There are, hence, intense feedback loops that work in circular and interdependent ways: incoherence at EU level feeds into poor policy implementation at ground level, whilst dissatisfaction and resentment at ground level – which is fuelled by but not entirely dependent on the refugee crisis – contributes to incoherent policy-making at EU level.

As a consequence, what one has once again, is a process of self-organization where the containers are not strong enough to hold the differences – and therefore tensions – which exist between the agents of the system. At the same time, the exchanges do not serve to channel these differences. Rather, they reinforce them. As a consequence there is an extremely incoherent process of self-organization. It becomes impossible to scale any policy decisions across the system and maintain coherence. Whilst it is possible, in such a scenario, to reduce the number of refugees arriving in, say, Hungary through individual actions (and thereby responding to the container of local public opinion which is clearly turned against accepting refugees), the overall problem has not been addressed (Table 3).

Taking these two brief case studies, what do they tell us about the current crisis of the European Union?

## V. What Does it Mean? The Conditions and Patterns of the EU Crisis

Even though the two case studies above are necessarily brief, they do give a clear indication of the nature of the EU crisis. Both are expressions of an incoherent pattern of conditions which is marked not only by a weakening container at EU level but also incompatible containers at national level, an increasing number of differences across all

Table 3: The CDE of the Refugee Crisis

| Conditions for self-organization | | Conditions present |
|---|---|---|
| Container | EU level: | Maintain internal stability |
| | | Stop refugees dying |
| | | Public opinion |
| | National level: | Protection of borders |
| | | Desire to stop immigrants from entering the country |
| | Local level: | Help the arriving refugees |
| | | Protect oneself from impact of arriving refugees |
| | Refugees: | Get to Europe the quickest and safest way possible |
| Difference | EU level: | Disagreements about fundamental EU principles |
| | | Disagreements about the future of the EU integration process |
| | National level: | Take more or fewer refugees: Who takes how many refugees |
| | Impact of refugees: | 'My' reality vs. 'their' reality; macro- vs. micro level |
| Exchange | European Council Meetings | |
| | Elections | |
| | Position of national governments | |
| | Behaviour of local population and refugees | |
| Pattern | Incoherent | |

levels and exchanges which are inadequate as channels through which differences can be expressed in such a way as to allow the tensions they generate to make a meaningful, desirable and sustainable difference within the EU.

As hinted earlier, this incoherence is reflected at the highest levels of the European Union, where there is strategic drift and seemingly *ad hoc* policy-making through a never-ending series of high-level meetings. It can be seen in the fact that some EU Member State governments are openly challenging the normative foundations upon which the EU has historically been built (Marton, 2014).

Yet, the fact that his should be so hints at a still deeper problem the EU is facing: its lack of adaptive capacity. Many of the issues the organization is now confronting were predictable and have their origin in the very success of the EU in achieving its original goals.

The expansion of the EU from its original 6 Member States to today's 28, as well as the passage of time, has, inevitably, led to the introduction of significant differences into the EU system. For instance, the interests that are being pursued within and through the European Union differ enormously, political and personal styles vary greatly and objectives are not easily reconciled (Geyer and Rihani, 2010; O'Brennan, 2006). Sedelmeier (2014) has also demonstrated that enlargement has led to new dynamics within the EU which explain, and reinforce, shifting attitudes within the organization in relation to critical aspects of its traditional model. In other words, the EU has evolved but, as a system, it has not adapted to this evolution. It has not been able to have a productive debate about the organization's strategic objectives within the context of its evolving circumstances. Yet, without such a debate, *particular* problems, such as the sovereign debt – or refugee – crisis, cannot be addressed. Hence it is impossible to solve these particular crises without thinking about longer-term, strategic issues. One is interdependent with the other.

The above factors have a significant impact on the way the organization works. Essentially, today, it does whatever generates the least resistance, rather than what is necessary.

It constantly reacts to events rather than proactively trying to shape the system. For instance, an influx of refugees from a neighbouring region torn apart by conflict was predictable, even if its scale and precise moment were not. It was predictable that constant and unpunished rule-breaking in respect of the European single currency would eventually lead to a crisis for one country or another and threaten the very same currency, especially since the EU is not able to control other economic events. What was not clear was when, where and to what extent this crisis would hit. Yet, the yawning chasm which exists between having a monetary union, on the one hand, and the lack of an economic/political union, on the other, has been consistently ignored. Equally, the gap between having a single European space where people can move freely and the lack of a strong and enforceable policy on asylum and refugees has been left to fester for years. It is therefore clear that the EU cannot think ahead. The question therefore becomes: What can be done?

## VI. Now What?

The above has critical implications for action. Seeing the current crisis of the EU as a Complex Adaptive System which self-organizes in an incoherent way means the organization is not able to scale any particular action across the system since it constantly encounters resistance from agents within it. Therefore, actions do not achieve the desired outcome and contribute to the system drifting apart. The principle aim of any action should, hence, be to increase the coherence of the self-organizing process, here defined as 'the degree to which parts of a system "fit" each other or the external environment', and it is a necessary factor in sustainability. In practice that means that:

- Meaning is shared among agents;
- Internal tension is reduced;
- Actions of agents and sub-systems are aligned with the system-wide intentionality;
- Patterns are repeated across scales and in different parts of the system;
- A minimum amount of energy of the system is dissipated through internal interactions; and
- Parts of the system function in complementary ways (Eoyang, 2001, p. 30).

How such coherence can be achieved in precise terms is beyond the scope of this particular article and will require significant further research. As Lehmann (2012) has acknowledged, advocates of Complexity as an approach to problem-solving in questions of international politics need to do more work to show how it can be practical and sustainable when applied to highly complex so-called super-systems such as the European Union. So, what will be presented now are very broad-brush proposals that will need to be fleshed out in the future.

The key problem the EU is confronting is that the tensions created by the increasing number of differences within the organization cannot be held together by the weakening containers of the European integration process and inadequate channels through which these increasing tensions are expressed. As such, the key options for the EU are to strengthen the containers which hold it together, reduce the tensions within the system or adapt the channels through which these tensions are expressed.

Several ideas have been floated in respect of these issues. For instance, it has been argued that the European Union should 'go back to its roots' and focus on its original core activity of trade (Mounk, 2014) and perfect the single market. This, in turn, will benefit the EU population as a whole and, therefore, increase the legitimacy of the organization, something which Cameron (2013) also stressed. Yet, whilst such a plan has its merits, it is based on an assumption that one can undo the 'spillovers' of the single market: What about the single currency? What about issues related to freedom of movement? In other words, how 'single' would a 'core activity' single market really be?

Bearing this in mind, another option is to adapt the exchanges through which these differences are expressed to allow for sustainable change. Options to do so are to open up greater space for civil society participation – which would appear to be absolutely vital in relation to the specific case of the refugee crisis – or to move away from the centralized policy process through which the EU is currently often perceived to be acting. This can also begin to address the accusation of the EU being an elite-driven organization where small cliques make decisions about the lives of ordinary people.

What such proposals amount to is a plea to decentralize the workings of the EU. What, for instance, can be done to overcome the severe mistrust that exists within the Greek population about the reforms and austerity when these programs are being implemented almost exclusively with and by the Greek state which is so mistrusted by the population? Would it not be possible, for instance, to channel EU money directly to small enterprises in order to stimulate economic activity at local level, showing direct benefits of EU actions?

A further avenue to bring about reform is to change the way the EU currently works and the principles it employs to guide this work. As shown, one key aspect of the EU crisis is the fact that the organization is conditioned to think short term and that some of its historic principles, such as 'show solidarity' have, at best, lost traction. Key to achieving such changes is to show that it is clearly not working. Yet, in order to be able to address this, the EU would have to instigate a process of identifying the similarities and differences amongst the agents of the system in their interpretation of the crisis through which the EU is passing. What are the elements that those agents consider to be critical? Out of this, can common ground be identified around which new strategic objectives and, therefore, new principles can emerge? Furthermore, amongst the differences which are the ones that could still be influenced and which ones are so implacable that any time spent on them is wasted? Such an exercise would send a critical signal indicating a willingness to engage, adapt and change. Again, *how* precisely such a change can be incentivized and scaled is a matter which will need significantly more research.

## Conclusions

The central argument put forward in this article is that the crisis through which the EU is currently passing is brought about *not* by refugees or sovereign debt. Rather, the inability of the EU to respond effectively to these events is the *result of* political dysfunction brought about by an incoherent process of self-organization. Instead, the EU is adopting an ineffective approach which deals with the problems it is facing in a linear, Newtonian

fashion which seeks to address the symptoms of this dysfunction rather than its causes. The article has shown that the causes are the interdependent conditions in which the containers are being weakened, differences are increasing and exchanges are inadequate for allowing the tensions these differences generate to be expressed in a meaningful, productive and sustainable way. This leads to incoherent patterns of self-organization. The EU therefore should adopt an Adaptive Action approach, as outlined here, which allows identification of the conditions that lock in the current incoherent patterns. It is these conditions that have to be changed.

How such a change in approach can be brought about will need to be subject of substantial further research. How, for instance, can successful actions be scaled across a system as complex as the European Union? Yet, the most compelling argument for adopting such an approach is the current state of the EU. The organization is sliding towards an undesirable future and all its attempts at 'reversing course' have failed. It is high time to try something different.

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