

# **Permaculture in the Autonomous Administration of North and East Syria: Ecology as a pillar in the construction of an alternative political society in Rojava**

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## **Introduction**

My research will aim to address the following research question: what role does permaculture play in Rojava and what implications does it have for Kurdish nation-building in northern Syria?

The Autonomous Administration of North and East Syria, also known as Rojava, is a majority Kurdish region located in Northern Syria. The Syrian uprising in 2011 and the subsequent political unrest that ensued, eventually turning into a civil war, offered the Kurds in Northern Syria with a political opportunity for self-rule. The Kurds in Northern Syria exploited Syria's fragility, and the Syrian government's preoccupation with rebel forces and later on Islamic State fighters, to carve out a part of Syria for themselves. The distracted Syrian government, having to 'divert its attention elsewhere in the country, especially to Damascus' (Van Wilgenburg, 2016) and the relative geographical isolation provided the Kurds with fertile ground to bring about autonomous rule for the Kurds in Northern Syria. The Syrian opposition represented by the Syrian National coalition and the Islamic state represented a far greater threat to the Syrian government and its leader Bashar al Assad than did the burgeoning Kurdish region that was located far from Syria's capital and centre of political power – Damascus. The Kurds wanted autonomy. A loose coalition of the opposition coalesced and formed the Free Syrian Army in order to overthrow Bashar al Assad (Holliday, 2012).

At the beginning of the unrest erupting in Syria, the two main political voices in Rojava were the Democratic Union Party (PYD) and the Kurdish National Council (KNC). The two parties formed a governing body, the Kurdish Supreme Committee, following the political vacuum created by the Syrian army's retreat of the Kurdish inhabited regions in 2012. The PYD is a progressive Kurdish political party established in 2003 which draws its ideological foundation of democratic confederalism from the imprisoned leader of the Kurdistan Worker's Party in neighbouring Turkey, Abdullah Öcalan. The Kurdish National Council is a Kurdish nationalist party that diverged with the PYD in its method of achieving autonomy. The KNC sought to work with domestic allies such as the Syrian National Council and international allies

such as the Kurdish Democratic Party in Iraqi Kurdistan. The Syrian opposition, in its meeting in Cairo in July of 2012, refused to include a reference to ‘the Kurdish people in Syria’ (Sary, 2016). The PYD opted to eschew the support of Syrian opposition or International help in favour of a third way centred around self-defence and non-violent solutions and the achievement of self-administration via the formation of cultural, political, economic and political institutions (Sary, 2016).

The KNC’s failure to have the Kurdish identity recognised by its national and international backers undermined its political legitimacy among the various constituencies that make up the Kurdish inhabited regions of northern Syria. This coupled with the PYD’s growing popularity among the inhabitants of Rojava and the PYD’s domination within the de-facto army of Rojava, known as the People’s protection units (YPG) and the Women’s protection units (YPJ), sealed the PYD’s fate as the uncontested ruler of Rojava. The final hurdle towards the PYD’s hold on power was overcome when the KNC left the governing coalition (Kurdish Supreme Committee). The KNC accused the PYD of monopolizing decision-making and harassing its activists (Human Rights Watch, 2014). The PYD retorted, as recounted by PYD advisor Sihanok Dibo in an interview with Ghadi Sary, by ‘accusing the KNC of dividing Rojava into competing zones of influence, risking Kurdish infighting’ (Sary, 2016).

With the predominance of the PYD within Rojavan politics and within the coalition of progressive Kurdish parties that it leads, known as the TEV-DEM (movement for a democratic society), a decentralised and radically democratic form of politics has taken hold. This democratic experiment that the PYD champions is a form of governance inspired by American academic Murray Bookchin and his theory of ‘social ecology’. The principles of social ecology were outlined in Bookchin’s work ‘The Ecology of Freedom’. Social ecology is a theory that argues that freedom and democracy need to replace hierarchy and domination in order to bring about an ethical political society (Bookchin, 1982). The theory of social ecology is rooted in Bookchin’s utopian philosophy that ‘a reharmonisation of nature and humanity through a reharmonisation of human with human’ (Bookchin, 1982). The reharmonisation of nature and humanity and humanity with itself can be understood as ‘dialectical naturalism’ from which a second human nature based on freedom and democracy can arise by forming a renewed relationship with nature and itself. This ‘dialectical naturalism’ forms the basis of Bookchin’s philosophy of social ecology (Scott, 2013).

The PYD, however, did not interpret Murray Bookchin's teachings on social ecology directly. They turned to Abdullah Öcalan for 'guidance'<sup>1</sup>. Abdullah Öcalan is arguably the most important figure in Kurdish politics, particularly in Turkey and in Syria. He has been fighting the Turkish state, in a guerrilla warfare with PKK fighters, from 1984 until today. These wars between the PKK and the Turkish army have caused upwards of 40,000 casualties, mostly civilians and mostly Kurds (Eder, 2016). The first insurgency lasted until the first of September 1999. Öcalan was captured earlier that same year on the 15<sup>th</sup> of February (Weiner, 1999). Since his capture, the fighting has known several ceasefires. In 2013, increasingly disillusioned with the war, Öcalan called for the 'end of armed struggle'<sup>2</sup>. In spite of this, the ceasefire was broken again on the 25<sup>th</sup> of July 2015 in response to the Turkish army bombing PKK positions in Iraq. During Öcalan's confinement, he discovered the works of Murray Bookchin among authors and this planted a seed that would change his political outlook. His transition from a Marxist-Leninist, State-centred Kurdish nationalism to a communalist, libertarian, non-state centred democracy. This transition has been termed as the 'paradigm shift'.

In 2005, Abdullah Öcalan will give this 'paradigm shift' the name 'democratic confederalism'. In his declaration *'Declaration of Democratic Confederalism in Kurdistan'* he lays out the foundation for his vision of Kurdish political society inspired by Murray Bookchin's theory of 'social ecology.' Abdullah Öcalan's utopia of a society based on 'democratic confederalism' bases itself on Bookchin's 'libertarian municipalism' which Bookchin later renamed 'communalism'. It takes the form of 'system of popularly elected administrative councils, allowing local communities to exercise autonomous control over their assets, while linking to other communities via a network of confederal councils.' This means that political decisions governing everyday life are taken at the local municipal level.

Bookchin's theory of 'social ecology' and the political project of 'communalism' had a goal to bring about an ecological society. To do so, Bookchin argued that viable 'forms of freedom' needed to be put in place. By 'forms of freedom' he means viable institutions. These institutions would take the form of democratic assemblies where the power is devolved from the Nation state level to the people in citizen assemblies (Biehl, 2012). Since these democratic

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<sup>1</sup> Öcalan attempted to meet Bookchin, organised through his lawyers and intermediaries, but to no avail. Bookchin however replied in May of 2004: "My hope is that the Kurdish people will one day be able to establish a free, rational society that will allow their brilliance once again to flourish. They are fortunate indeed to have a leader of Mr. Öcalan's talents to guide them". Available on <<https://theanarchistlibrary.org/library/various-authors-bookchin-ocalan-correspondence>>, accessed on June 2nd, 2020.

<sup>2</sup> A Turkish Member of Parliament for the People's Democratic Party (HDP), read out Öcalan's letter to a crowd in Diyarbakir, Turkey. This occurred on March 21st, 2013, in the middle of Nowruz.

assemblies worked best at the local level, the best way for them to challenge the state if for them to confederation. This is called dual power. Dual power is the mechanism whereby popular power, through a bottoms' up approach, coalesce to form 'forms and spheres of governance to transcend the limits of neoliberalism and capitalism' (Feldman, 2019).

The question that arises is whether Öcalan's 'democratic confederalism' and its application in Northern Syria successfully transcends the state and its neoliberal and capitalistic logic. Pinar Dinc (2020) probes this question by stipulating that the 'shift from a nationalist movement towards a project that offers a stateless solution seems to be incomplete and needs to be further questioned.' She also explores how 'narratives of the representatives of the Kurdish political movement in Rojava display nationalist elements by prioritizing the Kurds' and questions Öcalan's cult of personality and its place in a society that aims to be based on 'democratic confederalism.'

Rojava aspires to be a laboratory for direct democracy with a horizontal structure that values women and minorities as active members of the political community. Rojava is also a laboratory for how ecological principles can take a centre place in the way we relate to the world and to other human beings. Merriam-Webster's dictionary uses the following definition for ecology: "a branch of science concerned with the interrelationship of organisms and their environments or alternatively the totality or pattern of relations between organisms and their environment". When applied to humans, Ecology is called Human Ecology<sup>3</sup>.

In this research, Rojava Revolution's peculiarity will be analysed through the three pillars of Democratic confederalism, an ideology developed by Abdullah Öcalan in 2005: the place of women in society (feminism); the way political decisions are taken (direct democracy) and how environmental projects are undertaken (ecology).

The uniqueness of the 'Rojava revolution's' founding pillars (in particular ecology, in this research) is striking when compared to the prevailing ecological situation in Syria and in the neighbouring regions, where minority rights are not respected such as in Turkey with its Kurdish population; with the lack of women in the political, judicial and military branches of Syria, Turkey and Iraq; or the controversial dam infrastructure projects in Turkey that limit the flow of the Euphrates and Tigris rivers into Syria<sup>4</sup>.

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<sup>3</sup> A branch of sociology dealing especially with the spatial and temporal interrelationships between humans and their economic, social, and political organization. The ecology of human communities and populations especially as concerned with preservation of environmental quality (as of air or water) through proper application of conservation and civil engineering practices.

<sup>4</sup> An example of the Autonomous region in Northern Syria or Rojava's commitment to ecology is the tree nursery in Derik. The tree nursery has as its mission to restore fertility and stability to the land (Broomfield, 2018). The tree nursery is a joint project of the local Kurdish population and the 'Make Rojava Green Again' campaign (to

The study of Murray Bookchin's 'Social ecology' (1982) and Öcalan's 'Democratic confederalism' (2005) and its application in Rojava can provide the necessary background when it comes to understanding the Rojava revolution. By concluding that, we can also draw lessons that can be applied to developed Western societies – and this motivates me and allows my understanding and assessment of the importance of this topic.

The Rojava revolution, nevertheless, shows us how we can reappropriate democracy and solve some of problems in present societies, wherever we may be, by placing value in municipal politics.

Permaculture is a way to frame the ecological pillar by looking at its ideological and practical uses in the Kurdish controlled areas of Northern Syria. This will allow me to understand why an ecological practice such as Permaculture can have effects on the society and the environment that can be somewhat instrumentalized to further certain political agendas – such as Kurdish autonomy in Northern Syria.

I will use Permaculture as the main element to connect the notion of 'social ecology' (Bookchin, 1982) with the Rojava revolution. Permaculture will enrich my analysis of primary and secondary sources (which will be the interviews with the International Commune of Rojava). It will also serve to analyse the ideology of 'social ecology' (Bookchin, 1982) and 'democratic confederalism' (Öcalan, 2005) and to understand how Permaculture permeates the essential pillars of Democratic confederalism.

I will choose to focus on the Ecological pillar as it reflects not only ecological practices itself but also the political and economic structures of Rojava. To understand the importance of Permaculture in Rojava (as an agricultural practice and as way to understand the politics and economics of Rojava), I need to analyse the secondary sources that study the ecological component of Rojava's revolution. By drawing on the secondary sources pertaining to Ecology I can survey the general state of the literature on the subject. Necessarily, I will have to delve deeper as I wish to understand the Rojava revolution through the prism of permaculture. To do so, I will be in touch with the writings arising from the 'Internationalist Commune of Rojava', a group of interest and a source for studying the development of the Rojava Revolution in Northern Eastern Syria. They will be a group from which I will draw sources from, as they are on the ground, in North Eastern Syria (Jazira canton, to be specific) and they also play a role in integrating international volunteers and partisans to advance the cause of the Revolution.

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be explored further in this work) initiated by the internationalist commune and the Ecological commune of Jazira. Additionally, "the planting of trees symbolises our will to contribute to the construction of an ecological society, going beyond the life of the individual to contribute to future generations" (Broomfield 2018).

The Internationalist Commune are prolific in their writings on the situation in Rojava and play a role in upholding the pillars of the revolution and educating international volunteers and local residents alike about direct democracy, feminism, and ecology.

In this research I wish to study the link between the Internationalist Commune, its projects, and the ecological pillar of the Rojava revolution – as established in the ideological commitments of ‘Social Ecology’ and ‘Democratic Confederalism’. Building on the ecological commitment of the Internationalist Commune of Rojava, I want to see if Permaculture informs their commitment to Ecology. I want to see if Permaculture is a tool in the pursuit of an alternative political society in which the Kurds can exercise autonomy. This is where the originality of my research comes in: I can make links that have not already been established in the ecological drive that permeates the revolution. Permaculture will allow me to study the use of ecology in an original way.

## **Methodology**

As part of my methodology, I will study primary sources such as ecological programs ‘Make Rojava Green Again’, that I can use as it shows that there is already a general ecological engagement within the Internationalist Commune.

ROAR Magazine’s (Reflect On A Revolution) articles (that are also published on the Internationalist Commune website) forms a large part of the primary literature, of radically engaged political activism, that I have reviewed on the Rojava revolution as well as the ecological pillar of the revolution. The Internationalist Commune posts a lot of content and also reposts the content of other media outlets such as ROAR or GreenLeft, that aim to disseminate the ideological foundations of the Rojava revolution by tracing its origins in the writings of Bookchin and Öcalan.

I will also engage in textual analysis of Öcalan’s writings and in particular his book called ‘*Democratic confederalism*’ (2005). I will deepen my analysis by interviewing Nazarena Lanza of the Slow Foods International that was engaged in ecological agricultural project known as ‘Gardens in Rojava’.

By combining an analysis of a more theoretical nature such as Öcalan’s political writings and an analysis of a more practical and politically engaged nature such as the Internationalist Commune of Rojava and Slow Food gardens, I will have a wider overview of the centrality of ecology to the political developments in Rojava.

## Social Ecology in Theoretical Context

There is space and a need to study the question of Ecology and how this ties to Rojava. I propose to study the ecological pillar of the revolution and to focus on its application in agriculture and as a philosophical and political project. To do so, I am looking at Permaculture as a form of agriculture and as a system that mirrors the social ecology and democratic ideals of the confederal system of Rojava.

Surveying the state of academia on the subject of Rojava, its society, and its political project have led me to the conclusion that media and academia have investigated certain tenants, more than others, that make up the ideological basis for the Rojava revolution. There is limited interest in the cooperative economies that have flourished in Rojava in all three of its cantons (Afrin, Kobane and Jazira). Little has been written that explore these topics in a holistic manner that ties several of these tenants together.

My research interest and the lack of investigation into the ecological principle converge. There is a potential for research into the ecological society of Rojava as this principle, although important, has been relegated to a secondary position due to the ongoing war struggle. The subsequent lack of resources to properly engage in the construction of an ecological society have not allowed the ecological society to flourish and to fulfil its full potential. There is a lot of value to be unearthed in studying the pillar of ecology in Rojava, as ecology is a way to intellectually engage with society on both a political and economic level. Ecology could also be a tool, through permaculture, to provide the Autonomous region in Northern Syria (Rojava) with ways to be more autonomous.

This ecological society ties into the principle of direct democracy and form the basis of Bookchin's theory called 'Social Ecology.' Social Ecology is predicated on the notion that hierarchy is a characteristic of societies where individuals dominate one another, where class struggles and subjugation of the environment persists. Social Ecology has been studied greatly and has been popularized even further after the Kurdish revolutionary Ocalan (founder of the PKK<sup>5</sup>) studied it in prison – leading him to change his views on the best way to achieve political liberation for the Kurdish people and the people of the region.

Allsop and Van Wilgenburg in their book 'The Kurds of Northern Syria' (2019) say that the PKK and its allies set up a Kurdistan Communities Union (KCK), which aimed to put into action Ocalan's ideals in the regions where Kurds lived. The KCK established a branch in

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<sup>5</sup> Kurdistan Workers' Party, in Kurdish: *Partiya Karkerên Kurdistanê*.

Syria called 'KCK-Rojava' headed by Sofi Nureddin (KCK-Rojava is the predecessor of the YPD). The authors believe that YPD was formed to distance the Syrian movement from the PKK, and I will go into further detail on this topic in the first content chapter of this thesis.

## Literature Review

I have identified several authors of academic papers that are worth discussing in the context of a literature review: Eleanor Finley (2019), Stephen E. Hunt (2019), and Saed (2017). These three academics serve as a guide to the current academic landscape and debate of the Rojava revolution's ecological pillar. Finley (2019) in her article 'Beyond the Limits of Nature: A Social-ecological Perspective on Degrowth as a Political Ideology' studies Bookchin's social ecology and how this can act as an antidote to some of the more 'deep ecology' elements of the degrowth ideology<sup>6</sup>.

For Finley (2019), social ecology is the antidote to 'deep ecology'. She goes on to say that we need to go beyond the advocacy of the mere dissolution of capitalism and the advocacy for degrowth 'because the root of our present ecological crisis is hierarchy'. Social ecology is an alternative to the more 'economistic concerns' of 20<sup>th</sup> century socialism that fails to 'adequately address the personal, social and political expressions of hierarchy in our current society'. She uses Rojava and its delocalized forms of popular governance such as 'assemblies, councils, leagues, and confederations' to illustrate that various forms of 'local politics' gives 'renewed meaning' to socialism. She proposes that we think more holistically about how we humans fit in with nature. In this sense, social ecology provides this system within which to think even in a degrowth context:

If we believe that human beings are part of nature and are disposed to think and act generatively within it, libertarian socialism would bring about the ecologically sustainable future that degrowth advocates seek. Degrowth, when coupled with an enlarged perspective of humanity's relationship to the natural world, has a great deal to offer this growing liberatory alternative. (Finley, 2019)

Finley is the only author that I have come across (until the present moment) that mentions Permaculture and Rojava in the same academic article:

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<sup>6</sup> Giorgos Kallis explains, in his book 'Degrowth', that degrowth is contraction of economies by reducing production and consumption, arguing that it is possible to do so without reducing prosperity or wellbeing. Degrowth is an interdisciplinary science that combines ecology, politics and economics that explores what it would take for an economy to transition to a position that enabled it to prosper without growth.



Permaculture provides another example of ecological design and technology that provides an abundance of food and goods for people, while also enriching the non-human ecosystem. The current ecological catastrophe is the result of a particular kind of society that systematically denigrates and simplifies human and non-human worlds in the service of an exceedingly powerful yet tiny global elite. (Finley, 2019)

Finley's article mentions social ecology because social ecology refers to hierarchy as a tool of domination on human and non-human animals, as well as the natural environment. The only way to reestablish a balanced relationship without our environment is to do away with hierarchy. Capitalism is not the only concept we have to deal with when talking about our ecological crisis:

The ecological crisis thus demands fundamental change to our social relations, from the intimate sphere of sex and gender relations to colonization and political domination on a global scale. Furthermore, Bookchin argued, hierarchical society manifests not only a set of institutions, but also in our ways of thinking and conceiving the world. (Finley, 2019)

Hierarchy, as a result, is not just a way in which we deal with each other and our surroundings: it also informs how we view the world. Finley (2019) is disagreeing with Kallis (2017) in her article that defines self-restraint in terms of growth and abolishing capitalism, as a way to solve the ecological crisis. It is deeper than that: 'social and ecological crisis stem are products of particular institutions' (Kallis, 2017). We have to deal with root cause rather than the symptoms. System change and political change is needed:

Environmental problems are rooted in the problem of social hierarchy. This rooting occurs on both a material and an epistemic level. Materially, social exploitation of human by human motivates and drives human exploitation of the natural world. Epistemically, the notion that human beings can dominate nature stems from this very real domination of human beings over one another (Bookchin, 1982).

In order to address the current global ecological crisis, we must dismantle hierarchical society in general, and not simply capitalism. This means the solution to ecological crisis lies not with the limitation or containment of society, but rather with its liberation. Hunt (2019) and Saed (2017), interestingly, both mention that ecological pillar of the Rojava revolution is the one that is the least considered after direct democracy and feminism – echoing my hunch that this pillar is the least regarded in media and academia. Hunt says that ecological sustainability has received the least critical attention to date. The author mentions the lack of academic

concern with the ecological component of the revolution. On the other hand, Saed (2017) states that ‘Environmental concerns seem to be placed in a back-seat position in practice’.

So, the conclusion is that ecology is not talked about enough when we hear about the Kurdish situation in Northern Syria nor do we hear enough about ecology as an ideological pillar in the academic literature. To give an example, one of the main books on the Rojava revolution that I reference ‘Revolution in Rojava: Democratic Autonomy and Women's Liberation in Syrian Kurdistan’ eschews the ecological pillar entirely in its title. My suspicion is that ecology is not practiced as urgently in Northern Syria – and this is what I hope to change with my thesis, by talking about the ideology and practice of ecological principles through the prism of permaculture.

Hunt (2019) recognizes the contribution of Bookchin and his theory of ‘social ecology’ and mentions in his article that ‘hierarchy is both a corollary of the human domination of the natural environment and an ideological formation that would need to be deconstructed if there was to be progress in establishing a sustainable relationship with the rest of the living world’. If we go back to Bookchin (1982), we see that the way we subjugate and dominate each other, in particular women, translates into a subjugation of nature:

Even before man embarks on his conquest of man – of class by class – patriarchal morality obliges him to affirm his conquest of woman. The subjugation of her nature and its absorption into the nexus of patriarchal morality form the archetypal act of domination that ultimately gives rise to man’s imagery of a subjugated nature (1982, p. 121).

Öcalan (2005), upon reading Bookchin, comes up with Democratic Confederalism in order to tackle this pervading hierarchy that corrupts our relations to one another and our environment. This is why the three pillars of democratic confederalism (direct democracy, feminism and ecology) have been key in the Rojava Revolution. With these three pillars we can change the way we relate to each other and the environment by removing hierarchy. Thus, liberating ourselves.

The author advocated direct democracy ‘as a means to realise an anti-hierarchical politics ultimately able to negate the nation-state and potentially to establish the kind of egalitarian human relations that, he hoped, could challenge structural domination and oppression’ (Öcalan, 2005). Following this logic, he defends that ‘the principle of democratic confederalism promotes an ecological model of society. It seeks the establishment of democracy in all spheres of life of Kurdish society which is based on ecology and equality of the sexes and struggles against all forms of reaction and backwardness’ (Öcalan, 2005).

Hunt (2019), in his article ‘Prospects for Kurdish Ecology Initiatives in Syria and Turkey: Democratic Confederalism and Social Ecology’ does a good job in recounting the setup of democratic local councils in Kurdish inhabited areas. He also goes into detail about Social ecology in the Kurdish inhabited areas of Turkey. He gains insight into their burgeoning through interviewing Ercan Ayboğa who happens to be a founder of the Mesopotamian Ecology Movement (MEM) in Turkey and co-author of the book ‘*Revolution in Rojava: Democratic Autonomy and Women's Liberation in Syrian Kurdistan*’ (2016).

Although MEM began in Turkey is it also very much concerned with what is happening on the Syrian side of the border. MEM is an interesting case study for the application of these principles set out by Bookchin and Ocalan in the Kurdish context: ‘MEM, since its declarations, express the most direct exposition of social ecology within the framework of democratic confederalism, as practiced by the ecological councils set up under its auspices.’ (Hunt, 2019).

To highlight the fact that the ecological pillar of the Rojava revolution is the least regarded, Hunt (2019) goes on to say that:

MEM has a lower level of participation and representation than initiatives concerned with women, youth and language.... ecological issues are infrequently discussed at this level. In this context, there is a risk that the ecological agenda remains a third priority within democratic confederalism, receiving less emphasis than participatory democracy and gender equality.

In the book ‘*Revolution in Rojava: Democratic Autonomy and Women's Liberation in Syrian Kurdistan*’, it says that ‘No councils dedicated exclusively to ecological matters have been established in Rojava to date, although 2015 saw the foundation of the first Ecology Academy in Jazira’ (Knapp, 2016, p. 220). The Internationalist Academy and the ‘Make Rojava Green Again’ Campaign date back to 2017. Little has been written on the topic in academic circles. To date, I haven’t found any peer reviewed material on the subject. What makes looking at the Internationalist Academy even more interesting, is the fact that it works in cooperation with the Ecology Academy of Jazira. There is a lot of potential links to be made. This is a contribution my research aspires to.

Saed (2017) is the author that is the most critical about the progress of Feminism, Ecology and Direct Democracy in Rojava. When talking about ecology he starts by saying that ‘the environmental scene in Rojava, though, is not as rosy as would be expected from

constitutional provisions and Öcalan's writings, which are supposed to inform the PYD-led revolution. Environmental concerns seem to be placed in a back-seat position in practice.'

The war effort and the ensuing difficulties means that questions such as ecology are placed on the back burner while more important things such as survival and social cohesion are privileged. The ecological destitution however dates back to before the war, when underdevelopment was rife in the Kurdish inhabited areas. Policies put forward by the Baathist regimes have meant that the economy and ecology have been left in dire straits. We have a duty to recognize the position from which the Democratic Confederation of Northern Syria started and the least we could do is afford them the benefit of time and patience.

The list of major challenges to securing basic necessities is rather long and it is difficult to make them cohere with an ecological outlook. Such problems are also the fruits of decades worth of economic marginalisation and intentional underdevelopment of infrastructure under Ba'thist rule (Ababsa 2015; Cemgil and Hoffmann 2016; Court and Den Hond, 2017).

Saed (2017) comes to a conclusion that 'the end result is a revolution that, due especially to rampant warfare, has yet made little progress ecologically beyond good intentions and promising legislation.' This criticism is interesting in a climate where socialists and leftists within the region and the rest laud the feminist, democratic and ecological achievements of the Rojava revolution. Much is left to be desired but the fate of the Democratic Federation of Northern Syria is not sealed yet. He adds that in spite of the leftist leanings of the Rojava revolution 'it has yet to make a major dent on class-based exploitation.'

No academic article seemed to cover the 'Make Rojava Green Again' campaign or the talk about the Internationalist Commune. This is why I will resort to the content made available by the Internationalist Commune to provide me with primary resources in order to attempt to paint a more complete picture of the ongoing ecological commitments of the Rojava revolution. The potential for permaculture as a crucial element to tie to Bookchin's theoretical framework of social ecology will be explored. Permaculture as an agricultural practice that could 'Make Rojava Green Again', providing The Democratic Federation of Northern Syria with the much needed food and energy security it so desperately needs, will be also looked into – especially, considering the boycotts from neighbouring Turkey, Iraqi Kurdistan and the Syrian government in Damascus<sup>7</sup>.

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<sup>7</sup> The embargo will be explained in more detail in the first content chapter that will lay out the historical context to the Rojava Revolution and this emerging political movement in Northern Syria and the challenges it faces with

For that, chapter one will reveal a historical background, organized through a timeline from the End of the Ottoman Empire, passing by the French mandate, to Bathism and situating Northern Syria and the Kurds within that historical context. This will allow an understanding of the prevalent dynamics of the main stakeholders in political, social and economic terms in the region. This chapter will address the Syrian uprising and subsequent civil war and what can be recognized as the start of Rojava, bringing to analysis a brief historical timeline of the civil war and the development of the YPG, SDF and the cooperation with the Syrian state. For that, an overview of the geographical expanse of the Kurdish controlled areas (Afrin, Kobane, Jazira) will dialogue with the Turkish wars of aggression. The ecological blunders by Turkey and the Syrian government<sup>8</sup> will help understanding the role of ecology in their regional politics. This is the context in which I will bring the Internationalist Commune and the 'Make Rojava Green Again' initiative, situating the development of the Internationalist Commune within the Rojava Revolution in general and within the municipal level, analysing its cooperation with the Ecological committee of Jazira.

The second chapter will portray permaculture and ecology as an ideology in nation-building in Northern Syria, highlighting permaculture expressions in politics. The lack of hierarchy, expressed through a horizontal model (communes and committees) will show how permaculture is a system based on whole-systems thinking, and as a way to mimics patterns of nature. The role of permaculture in economics, through cooperatives, will bring to light the role of agriculture – as it accounts for roughly 70% of Syria's economy and is its breadbasket. By aiming to analyse how Permaculture, as an ideology through political and economic systems, allows Kurdish exercise autonomy and its consequences on nation building, I start the dialogue with chapter three, that will address specifically permaculture and ecology as tools in nation-building in Northern Syria.

In this sense, my third chapter will analyse permaculture in different frameworks, such as ecology, agricultural practice, and education. When debating permaculture in ecology I aim to understand if it plays a role in the reforestation programs of the Internationalist Commune via the 'Make Rojava Great Again' initiative. As an agricultural practice, I am to analyse the links between permaculture and resilience, and as an alternative to deal with water scarcity (due to dams and climate change) – I will also aim to analyse permaculture as a response to the

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internal actors in Syria and external actors abroad; notable, the Turkish state and the Barzani government in Iraqi Kurdistan and the Syrian government in Damascus.

<sup>8</sup> Such as the construction of the dam on the Tigris and Euphrates rivers (Ilisi Dam) and the policies of the Baathist government (starting with Hafez Al Assad), such as the plantation of wheat monocrops in the Northern Eastern Syria and removing agricultural variety, deforestation, ethnic cleansing and oil exploitation.

monocrops of the past agricultural policies of the Baathist government. When it comes to education, I will look at the place of permaculture in agricultural studies at University level, the role of the Ecological committee in Education and the role of the Internationalist Commune in Education. This will allow me to understand how permaculture, as a tool or a practise, through agricultural, ecological or technological practices, enables Kurdish exercise autonomy and what consequences these have on nation building.

## **Chapter One: History and background**

Understanding permaculture and its impact on Kurdish nation-building requires digging deeper into the origins of Kurdish political developments in the Middle East. This means situating the Rojava Revolution within its Syrian context but also within the broader Kurdish political context. This first half of this discusses Kurdish history during the Ottoman Empire and the making of Kurds as minority groups in Syria and Turkey. The second half deals with developments in Syria in the aftermath of 2011, focusing on Kurdish autonomy, while outlining the array of ecological issues that Kurds in north-eastern Syria are facing.

### **Kurds in the Ottoman Empire**

Kurds are an ethnic group that speak an Indo-Iranian language. The vast majority of the Kurds live in an area known as ‘Greater Kurdistan’ that is currently divided between Turkey, Syria, Iraq, and Iran. Kurds inhabit the high plateaus of western Asia and have done so for centuries.



Source: United States Central Intelligence Agency (1992)

This map of Kurdish-inhabited areas gives us a good overview of where Kurds presently and historically form a majority of the population. This map is however dated and is produced by the United States Central Intelligence Service (CIA). This means that we have to be critical of what this map portrays and be aware what previous iterations of maps of the Middle East were used for. It is also important to note that the map as produced a year after the US and its allies fought and concluded the Gulf war against Saddam Hussein's Iraq in February of 1991. Just as we need to be critical of maps created by an intelligence agency of a country that has fought wars in the Middle East, we need to maintain our critical eye when observing maps of Kurdistan, such as the one below, that greatly exaggerate the extent of Kurdish lands and display signs of Kurdish irredentism. With a 'Kurdish-style irredentism' being characterised as the joining of kin to create a new state (Saideman and Ayres, 2000).



Source: The Decolonial Atlas' Kurdistan map by Jordan Engel (2017).

The Kurds are recognised for having diverse ethnic origins, with the Medes acting as a common ancestral reference point in the Kurdish national narratives and myths (Bengio, 2014). The Medes were an Iranian people that inhabited what is now modern-day Iran. In the 8<sup>th</sup> century before Christ, Median tribes eventually coalesced into a cohesive Median empire and formed an alliance with the neo-Babylonian empire and defeated the neo-Syrian empire in 609 BC, extending the geographical reach of the Median empire into Anatolia (Diakonoff, 1985).

Kurds have interacted and coexisted with a multitude of ethno-linguistic groups, such as Turks, Arabs, Assyrians, and Armenians for centuries. They have been part of large multi-ethnic and multicultural empires such as the Safavid and Ottoman empires. The 19<sup>th</sup> century saw nationalist fervour bubble to the surface. The French revolution in 1789 precipitated the rise of nationalism, as well as democracy and liberalism, by transforming the French state from an absolutist monarchy into a republic of the people. The French revolution therefore placed the nation-state as a political model to strive for. Political upheavals in Europe inspired by the French revolution swept across Europe and triggered national emancipatory movements such as the Greek, Romanian and Serbian independence movements (Baradat, 2009). The three nations I just cited, were examples of nations that rebelled against the Ottoman Empire because they saw that self-determination was their political right and a weak Ottoman Empire as an opportunity. With Greece being the first nation in the European part of the Ottoman empire to declare independence in 1822.

The First World War erupted and consumed Europe. The Ottoman Empire sought an alliance with Austria-Hungary and Germany, in order to strengthen and modernise the weak Ottoman army (Weber, 1970). After the first World War, the victors – France, the US, the UK, and their allies, had plans of retribution, such as signing treaties that would entail ceding territory or limiting industrial and military capacity.

The Treaty of Sèvres, signed in 1920 by the Allied forces and the Ottoman Empire, would lead to the carving up of the Ottoman provinces in Anatolia. Anatolia would be divided into various European spheres of influences, such as the French mandate in Syria and Lebanon and the British mandate of Palestine and Iraq. Besides a rump Turkish state in central Anatolia, the remaining parts were to be integrated into neighbouring countries such as Greece or destined to become independent nations such as Armenia and Kurdistan (Hovannisian, 1996).



Source: The Decolonial Atlas, Kurdistan map by Jordan Engel (2017).



Woodrow Wilson, in his '14 points', recognised the importance of the right to self-determination and it was also applicable for the Middle Eastern context. The Middle East was to be organised into discrete nation states in spite of France's and Britain's colonial ambitions (Bajalan, 2019). This was a continuation of the 'nation state creation' process that was spreading globally since the late eighteenth century (Gellner, 1997; Roeder, 2007). The Kurds had all the reasons to believe that their turn would come to form a state of their own. After all, the activism of the Kurdish elites in Istanbul that were associated with the Society for the Betterment of Kurdistan, had managed to, through their lobbying efforts, to include a clear reference to the independence of the Kurdish inhabited areas of the dying Ottoman Empire (Bajalan, 2019).

The period from 1918 to 1923, from the end of world war one and to the signing of the treaty of Lausanne, has been described as a 'lost opportunity' for Kurdish nationalists (Eppel, 2016). With the treaty of Sèvres being characterised as an 'auspicious opportunity' for the Kurdish nationalists as it was forced on the Sultan and supported by the Allied powers (Romano, 2006). What ultimately determined the fate of Kurdish nationhood was not the inherent failure of Kurdish political organisations (Strohmeier, 2003) but the failure to attract international political support and recognition (Bélanger, Duchesne, & Paquin, 2005; Horowitz, 1985; Young, 1994).

The resistance of the Turkish nationalist movement to the treaty of Sèvres under the command of Atatürk and the breakoff of the Arab provinces under French and British tutelage were starting to create 'unfavourable conditions' for Kurdish nationhood. What ultimately weakened the Kurdish national movement in the Ottoman provinces was the inclusion of the southern Kurdish regions in the French mandate of Syria and the league of nations awarding the vilayet of Mosul to the British as part of the mandate for Iraq in 1918, which comprised the northern Kurdish regions. The northern Kurdish areas were under effective Turkish control. The 'partition' of Ottoman Kurdistan was therefore complete (Hurewitz, 1979). The 'unfavourable conditions' therefore played a bigger role than the 'missed opportunity' according to Bajalan (2019).

Turkey's triumph in its war of independence and its victory over the signatories of the Treaty of Sèvres and their Ottoman allies meant that Turkey could retain sovereignty over all of Anatolia, including East Thrace and the zone of the straits. Following the Turkish victory in the war of Independence, The Treaty of Lausanne was signed in 1923, marking the birth of the Turkish republic as we know it today.

The year 1923 is a symbolic date, as it marks the end of the multicultural empire of the Ottoman Empire and the birth of the Turkish nation-state. This new political reality was responsible for shaping Kurdish history irreversibly, and it continues to do so until today.

### **Kurdish Minority in Syria and Turkey**

As a result of the establishment of the Turkish republic over all of Anatolia, there has been a prevailing zeal to '*Turkify*' all the inhabitants of the modern Turkish republic. The Turkish republic of post-Lausanne aimed to create a homogenous nation-state by a process of 'assimilation of non-Turkish-speaking Muslims on the one hand, and for the Turkification of Kurdish-populated eastern provinces on the other' (Ülker, 2010). The Turkish republic sought to assimilate its national minorities and bring them into the Turkish fold, and in this sense, Turkey emulated European nationalist movements by copying a 'Western-style nation-state ideology (Zeydanlioglu, 2008, Bozdoğan et al. 1997). The Turkish government's Kurdish policy has been that of a 'repressive assimilation policy to transform Kurds into Turks' (Belge, 2011). The policy of cultural assimilation consisted in 'denial of Kurdish identity' (Belge, 2011) as well as forced assimilation.

During much of the 20<sup>th</sup> Century, the Kurdish language and Kurdish festivities were banned. Only in the 1990s were the rules concerning Kurdish language and identity relaxed. Kurdish language instruction is still banned today, and Turkish is the only permissible language of instruction in schools in Turkey (Bozarslan, 2008).

A reaction to the repression of Kurdish identity in Turkey, was the founding of the Kurdish Workers' Party (PKK) by Abdullah Öcalan in 1978. The PKK have been fighting an armed struggle with the Turkish state since 1984, fighting the Turkish state on and off for decades in the hopes of creating an independent communist Kurdish state. Up until Öcalan's 'paradigm shift', the party was a fusion of Revolutionary Marxism and Kurdish nationalism, in a context where the Kurds were violently repressed by the Turkish state. In fact, after the military coup of 1980, the very mention of Kurds or Kurdistan was banned (Hannum, 1996). Following the 1980 coup, the use of Kurdish as a language or the practice of Kurdish folklore was also banned. Prior to Öcalan's 'paradigm shift' and adoption of democratic confederalism, the PKK believed that an independent communist Kurdistan would free the Kurds from oppression from both Turkey and capitalism. The PKK became a movement for discontented Kurdish voices that sought to reassert their cultural and linguistic rights. Since the armed

insurgency began in 1984, roughly 40,000 soldiers and civilians have died at the hands of the conflict between the Turkish army and the PKK (Lust, 2019).

Similar to Turkey, the Kurds in Syria have been heavily persecuted and discriminated against. Speaking Kurdish has been stifled by the Baathist government although not outright banned, like in Turkey. In a Human Rights Watch report from the year 1996, the Kurdish language along with other non-Arabic languages were banned from being used in public gathering such as weddings or festivities. The same report from Human Rights Watch describes in detail the human rights violations carried out by the Syrian state when it stripped the Kurds of their citizenship in 1962. This decision was taken because the Syrian state accused many Kurds of having illegally settled in northern Syria while originating from neighbouring countries. As a result, more than 300,000 non-citizen Kurds are estimated by Refugees International to be residing in Syria (Albarazi, 2013).

Öcalan left Turkey in 1979 to go to Syria, where he stayed until 1998 before being forced to leave by the Hafez al Assad government in Syria (Mango, 2005). In 1999, Öcalan was captured by Turkey and sentenced to death. However, this was then relaxed. Öcalan was instead sentenced to life in prison on an island in the sea of Marmara.

In 2002, the Kurdistan Communities Union (KCK) was formed by individuals that were previously involved with the PKK, its allies, and its ideology. The KCK is a political organisation that revolves around Abdullah Öcalan's vision of 'democratic confederalism'. The KCK is the political result of Abdullah Öcalan's 'paradigm shift' from a Marxist and Kurdish Nationalist ideology to that of 'democratic confederalism'. The KCK serves as an umbrella organisation for the Kurdish progressive political parties in Turkey, Syria, Iraq and Iran; that adhere to the political vision of 'democratic confederalism'. The PYD being the representative democratic confederalist party in Syria. Similarly the PKK in Turkey. Democratic confederalism is reflected in the structure of the KCK with its subdivisions 'the ideological centre, the social and cultural centre, the political centre, the ecology centre, the economic centre and the Free Society centre' (Saeed, 2017).

A KCK chapter was opened in Syria by Sofî Nureddin, known as KCK-Rojava. In 2003 the PYD (Democratic Union Party) was formed in Syria. Salih Muslim is one of the co-founders of the PYD and has said that he sympathises with both Öcalan and Mustafa Barzani's ideas (Basaran, 2018). Mustafa Barzani was the founder of the Kurdistan Democratic party (KDP) in Iraq and was one of the most important Kurdish political figures up until his death in 1979. Serving as an inspiration as one of the key political and military figures in leading Kurdish revolts against the Iraqi regime (Korn, 1994). His ties deepened with Öcalan and the

PKK after having met with Öcalan in person in Damascus. Before this encounter, he sympathised primarily with Mustafa Barzani, like many other Syrian Kurds who identified with the PYD (Basaran, 2018). In spite of the rapprochement with Öcalan and the PKK, Salih Muslim co-founded the PYD as a party for the Syrian Kurds and rejects a direct affiliation with the PKK (Basaran, 2017). It is clear, that the PYD wished from the very start to be an independent Kurdish voice for the Syrian Kurds but that cooperates with the PKK within the framework of the KCK.

Kurdish politics is often a game that also involves the nation states in which these Kurdish political parties operate. Hafez Al Assad, president of Syria from 1971 until 2000, supported the PKK in order to destabilise Turkey back in the 1990s (Alantar, 2001). Hürriyet news also mentions an intelligence report of the Turkish government, which details Assad's current support to the PKK as a form of retaliation for Turkey's presence in the war in Syria. The report cannot be found as it is classified, but it illustrates that the relationship between Turkey and Syria are on somewhat shaky ground. The strained relationship dates back to Syria's support of the PKK since 1984 (Makovsky, 1999). Syria however, in a weakened position towards the end of the 1990s, sought to 'back down' in light of Turkey's increasing power and 'military pressure' (Makovsky, 1999).

Being the regional rivals that they were, up until the diffusion of political and military tensions between Syria and Turkey, Hafez al Assad allowed Öcalan to stay in Syria from 1979 to 1998. Öcalan was forced out of Syria by the Assad government in a bid to improve relations with Turkey. Assad also allowed Jalal Talabani, an Iraqi Kurdish leader of the Patriotic Union of Kurdistan (PUK) to receive safe haven in Damascus in 1975 to form the PUK. In many ways, the Kurdish political leaders were used as pawns in regional plays and power dynamics. Offices for the Kurdish Democratic Party (KDP) led by Mustafa Barzani and the PUK (also led by Mustafa Barzani) were opened in Qamishli by Assad. The KDP sponsored the Kurdish National Council in Rojava alongside Turkey (Carnegie Middle East Center, 2012). Turkey's support for certain Kurdish political organisations such as the KDP and the Kurdish National Council are strategic since the Kurdish National Council was the opposition party to the PYD. Turkey makes little distinction between the PYD and the PKK (Alantar, Dal, Kursun; 2018). This just goes to show how complicated Kurdish politics is within the respective states as national and regional tensions work their way into Kurdish politics, causing rifts and political fragmentation among different Kurdish groups both within national borders and beyond.

## **The PYD and Kurdish autonomy in Syria after 2011**

The beginning of the Syrian uprising in 2011 proved to be a difficult but determining time for Kurdish politics in northern Syria. After a fallout with Syrian opposition, embodied by the Syrian National Council, the two biggest Kurdish political factions (the PYD and the Kurdish National Council) formed a Kurdish Supreme Council to rule on matters pertaining to security after Assad pulled out of northern Syria in 2012 (Carnegie Middle East Center, 2012). Assad made the decision to pull out of northern Syria (while still leaving a large contingent in Qamishli and Hasekeh) and to leave it in the hand of the Kurds when Damascus was under siege by opposition forces (Caves, 2012). This therefore left a power vacuum in northern Syria where Kurds could exercise power as military custodians, and it eventually paved the way for political control that solidified over time.

November 2013 marked a new political beginning for the Kurdish inhabited areas of northern Syria. The PYD announced the creation of an interim government, which would be led by an umbrella organization that joins multiple progressive Kurdish political parties together. TEV-DEM stands for Movement for a Democratic Society. While the KNC wanted to work with the Syrian opposition to eventually oust the Assad government, the PYD treaded more carefully and didn't join the Syrian opposition (Sary, 2016). The PYD led TEV-DEM sought to offer an alternative to the Syrian government and the Syrian opposition. The PYD opted for a 'third way' that would mean that the the PYD would not attach itself to the Assad government nor the Syrian opposition (Altuğ, 2013). The PYD chose to organise the territory that it controlled through a principle of 'democratic autonomy' whereby most of the power would lie in the Kurdish autonomous regions or cantons (Hinnebusch & Imady, 2018).



CÉCILE MARIN

Source: Institute for the Study of War; Syrian Civil War Map.

The PYD's ascent to power was somewhat controversial and did not go down well with the KNC and Masoud Barzani. Masoud Barzani and KNC wanted the Kurdish political movement in Syria to be allied with the Syrian resistance. The PYD ascent in popularity pushed the KNC to withdraw from the Kurdish Supreme council as the KNC believed that the PYD was harassing KNC activists (Sary, 2016). The PYD completed its power grab by unilaterally forming a new coalition in 2013 known as the TEV-DEM and as such replaced the Kurdish Supreme Council as the de-facto government of Rojava (Sary, 2016). What ultimately cemented the PYD led TEV-DEM political power and legitimacy was its defeat of ISIS in Kobane in September of 2014. The YPG and YPY forces, along with a tactical alliance with the US, is what secured the defeat of ISIS with a combination of 'air strikes and boots on the ground' (Sary, 2016). The symbolic struggle of the YPG and YPY forces against the powerful ISIS military forces garnered international support and ultimately Barzani's support for the Syrian Kurdish struggle under auspice of TEV-DEM affiliated Kurdish military forces. I argue that the decisive power grab and the fallout with the KNC was overlooked by international observers and the Barzani led Iraqi Kurdish region once the PYD proved that it could protect the Kurdish inhabited regions of northern Syria.

The military rise to power of the PYD meant that the PYD could leverage its political popularity to shape Rojava as it saw fit. The diminishing popularity of the KNC meant that the PYD could instore its own governance model of 'democratic confederalism' (Sary, 2016.) The

TEV-DEM could hold onto power because of its ‘nuanced position towards Damascus’. The PYD’s authoritarian rise to power and its unclear position vis-à-vis Assad hindered the approval and backing of Western powers (Sary, 2016).

The democratic confederalist ideas were cemented in the Constitution of Rojava, adopted on the 29<sup>th</sup> of January 2014. The declaration of autonomy of the three cantons proved to be an unpopular move within the Syrian opposition, in particular, among the Islamist, moderate opposition, and Kurdish nationalists (Lister, 2015). The increased concentration of power in the hands of the PYD-led TEV-DEM was deemed as authoritarian, illegal, and supportive of the Assad government (Allsop et.al, 2019).

The path of democratic confederalism kept strengthening with the PYD in power and it culminated in ‘Federal Democratic Rojava Social Contract’ in July of 2016 which replaced the provisional constitution of 2014<sup>9</sup>. The social character of the contract makes reference to multi-ethnic character of Northern Syria: ‘We, the peoples of Rojava-northern Syria, including Kurds, Arabs, Syriacs, Assyrians, Turkmen, Armenians, Chechens, Circassians, Muslims, Christians, Yezidis’. The contract contains articles committed to Human rights and gender equality as well as decrying the ‘tyrannical nation-state regime’ and seeing ‘the democratic federal system’ as a solution. The contract also highlights Rojava’s commitment to the 3 basis principles of Democratic confederalism, as mentioned by Öcalan in his pamphlet of ‘democratic confederalism’. Article 2 states that: ‘The democratic federal system of northern Syria adopts the ecological and democratic system and women’s freedom.’

The TEV-DEM government, even before the adoption of the contract, committed itself to decentralisation in accordance with the principles of democratic confederalism and its own charter in 2014. Local decision making would take place in committees and local councils and woman and minorities would be amply represented (Romano, 2015). However, the Authoritarian nature of the TEV-DEM did not go unnoticed and opposition was still vocal. The KNC opposition leader Ibrahim Berro was imprisoned for opposing the ‘Kurdish revolution in Rojava’ (Sary, 2016). Another trait of the TEV-DEM’s authoritarian streak is its cult of personality of Abdullah Öcalan with his poster being strewn all over Rojava (Sary, 2016).

In spite of the PYD led TEV-DEM’s democratic shortcomings and muzzling of opposition, the adoption of a comprehensive ‘Federal Democratic Social Contract’ in 2016, brought new political freedoms to Syria that were up until then unprecedented. The Contract

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<sup>9</sup> ‘Federal Democratic Social Contract’, from 1st of July 2016. Available on: <<https://rojvainformationcenter.com/storage/2019/12/2016-Social-Contract-of-the-Democratic-Federation-of-Northern-Syria.pdf>>.

in question also formally aligned the TEV-DEM with the principles of democratic confederalism. The ecological principle is mentioned already in the very beginning of the contract. Ecology is now part of the TEV-DEM's ideological conviction. Albeit formally. That being said, the autonomous areas of north-eastern Syria have an uphill ecological battle due to challenges that predate the Syrian war. Northern Syria has been devastated by decades of imposition of monocultures and the resource-extraction model (Mastandrea, 2019).

### **Ecological Issues in North-Eastern Syria**

The first ecological blunder is that of deforestation and of the plantation of monocrops by the Hafez Al Assad government in northern-eastern Syria, a region often termed as the 'breadbasket of Syria' (Cemgil, Hoffman; 2016). The 'Make Rojava Green Again' campaign has likened monoculture to colonialism against nature. 'Make Rojava Green Again' has come out with a book where it spells out some of the ecological challenges that Rojava has faced and currently faces. It declares that Rojava was in a colonially dependent relationship with the Syrian Assad regime. Maximum resource exploitation and high agricultural production rates were given the highest priority. Systematic deforestation enabled monocultures of wheat in Jazira canton, of olives in Afrin' (Internationalist Commune of Rojava, 2019, p. 66).

This idea can be reinforced through the recognition that 'construction of dams and massive extraction of groundwater for Turkish agriculture is a problem' (Internationalist Commune of Rojava, p. 67).

How to organise, cultivate, and develop the land is a problem that the Rojava revolution will have to grapple with. This is something that the 'Make Rojava Green Again' campaign has identified as a problem that can be remedied with a renewed commitment to the environment through social ecology that eschews relations of domination in favour of endeavours that work with the land, and not against it. Working against the land can be characterized as an agricultural activity that depletes the soil of its nutrients to the point that chemically produced fertilisers need to be brought into the equation in order to artificially supplement the soil to grow the monocrops, as stated by Mastrandrea (2019):

Atavistic richness of a region transformed by the Baath party into the Syrian granary: the government of Damascus imposed monocrops in Rojava, impoverishing the land, imposing the use of pesticides and forcing a large part of the rural population to urbanisation. Wheat to feed the rest of the country, and cotton with which to dress it. The Committee's system is the opposite: diversification to restore fertility to the



land, make the region autonomous and return it to its former splendour, made of the colours and flavors of chickpeas, lentils, beans, figs and cherries, pomegranates and apricots, pistachios and pear trees.

The plantation of monocrops results from an agricultural policy that reflected more and more the centralized state that Syria was becoming. Syria attempted to mimic the large-scale agricultural projects of the Soviet Union that aimed for ‘major irrigation and recultivation projects’ (Springborg, 1981). The centrally planned agricultural projects resulted in large scale production and subsidizing of certain crops, making the agricultural landscape to change to accommodate the policies spearheaded by the Baath party. With centralization came monocrops, but later in 1980s, ideology made way for economic practicability (Hinnebusch, 2011).

The agricultural policy that led to monocropping came from a desire to give Syria food security through wheat and the ability to export cotton. The Syrian government ‘gave precedence to strategic crops with high water demand (such as wheat and cotton) and promoted a type of crop rotation that favoured cultures dependent on high resource usage’ (Ansar, 2017). Farmers who aligned themselves with the agricultural policy were given permits to construct wells, receives subsidies for pesticides and fertilizer (Aw-Hassan, 2013). The increased specializing of Syrian agriculture, through mass planting of wheat and cotton, meant that Syria would be fragile and susceptible to drought. This is what happened in 2006 when 300,000 from north Eastern Syria were forced to move to the larger cities further south (De Châtel, 2014).

A second large ecological blunder is the building of a dam in south-eastern Turkey: the Ilisu dam is part of a larger infrastructure and energy project called the south-eastern Anatolia project<sup>10</sup>. This dam was constructed with the aim of providing Turkey with hydroelectric power. However, the immediate danger of the project is the flooding of a heritage site such as the historic city of Hasankeyf and the relocation of thousands of people from their home (Fox, 2019). In addition, the construction of the dam will inevitably severely impact the flow of water of the Tigris downstream. Rojava is located downstream and agriculture, the main livelihood of the people in north-eastern Syria, would be severely impacted. The planned construction of the Ilisu dam gave birth to a contestation movement that flourished. The Mesopotamian Ecology Movement (MEM) emanated from single-issue ecological campaigns such as the Ilisu dam project and other affronts to the natural environment, such as deforestation and climate

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<sup>10</sup> On a side note, I would like to share that I had the opportunity to visit the Hasankeyf village, that hosts the Ilisu dam, when I went on a bus trip from Diyarbakir to Sulaymaniyah in Iraqi Kurdistan.

change in general. MEM, in 2015, grew from a ‘small collection of local ecological groups’ to become a more complex ‘network of ecology councils’ (Keller, 2018).

The MEM laid the ideological foundations for a more ecologically rooted Kurdish movement. Ercan Ayboğa says: ‘MEM’s mission is to “strengthen the ecological character of the Kurdish freedom movement [and] the Kurdish women’s movement”. Working on solidifying the ecological character of the democratic confederalist model and its application in a democratic Kurdish context has been key for MEM. An ecological Kurdish movement has also been applied in Syria but with the Internationalist Commune of Rojava and the various ecological committees. Even with limited resources and education, the ecological character has managed to be present in Syria.

The Rojava revolution and ecology are intimately linked and the environmental destruction in both of the past and present make that bond more apparent. According to Keller a short list of the social and ecological problems that plagued the region are: The historical lack of crop diversity due to an agricultural policy that favoured monocultures. Dwindling stock of native seeds. Trade embargoes from Turkey, Iraq, and Syria. Diminishing ground water reserves due to reduced rainfall. Destruction of wells and farms by the Islamic State. Lack of reliable access to electricity. Influx of refugees fleeing civil war. This just goes to show the gravity of the problem that Rojava faces.

In spite of the great number of challenges facing the Kurdish inhabited regions of both Turkey and Syria, an impressive ecological resistance was mounted in spite of the lack of resources and know how. The reaction was to look inwards. The Kurdish regions decreased ‘the dependence on imports, traditional water-conserving cultivation techniques, advocating for ecological policy-making at the municipal level, promoting local crops and livestock and traditional construction methods, organizing educational activities, working against destructive and exploitative “investment” and infrastructure projects such as dams and mines’ (Keller, 2018).

The political transformation that is occurring in Rojava is one that privileges ‘democracy over the nation-state, the communal economy over capitalism, organic agriculture over industrial agriculture and alternative models of living and technology against capitalist modernity’ (Keller, 2018). In spite of TEV-DEM’s grand ambitions to radically transform the socio-political structure of Rojava, the grand plans still fall short. Rojava is far too preoccupied with the prevailing violence and much of the money and energy goes to support the war effort. Rojava is focused on internal security and defence meaning that access to services and basic necessities such as water and electricity are notably precarious (Sary, 2016).

Up until today, the utopian vision of a radically democratic and ecological society based on democratic confederalism remains for the most part a vision. The political, economic, ecological and security conditions in Rojava and Syria as a whole are not favourable to the implementation of all facets of democratic confederalism. The TEV-DEM for a long time has been too preoccupied with the pursuit and the maintenance of power as well as trying to stay away from too much scrutiny from the Syrian government.

## **Chapter Two: Permaculture and ecology as an ideology in nation-building in northern Syria**

Öcalan's political pivot, or 'paradigm shift', from nationalist and state centred approach to a democratic confederalist approach redefines the ideal political unit as one that is non-state centric. It is also a 'non-nationalist solution to 'Kurdish national question' (Öcalan, 2005). He defines this as 'democratic modernity' and presents as an anti-thesis and a solution to the 'hierarchical and patriarchal order of capitalist modernity' (Öcalan, 2005). By extension, the 'killing of the dominant male and the abolition of the state' is necessary, in Öcalan's eyes, because he regards the nation-state, capitalism and colonialism to be 'closely linked to each other that neither can be imagined without the other' (Öcalan, 2007). With the nation-state being the 'paradigm of capitalist modernity' (Öcalan, 2007). The nation-state therefore in his conception is, by its very design, a destructive force and a driver processes of homogenisation. With the state being the 'maximum form of power' and 'complete monopoly of power (Öcalan, 2011). Decoupling from the nation-state model is a political answer to the 'capitalist exploitation' that drives inequality through a process of 'unregulated accumulation of capital and unhindered exploitation' (Öcalan, 2005). Borrowing from Bookchin's idea that relations of domination underlie capitalist modernity. The answer in Öcalan's eyes is to remove hierarchy by installing a political system that does not use the state as organising principle and that centres itself on democracy, gender equality and ecology.

The promotion of an 'ecological society' is part of his political utopia of democratic confederalism as his ecological society seeks to reverse the domination of nature in the destructive relationship that capitalist modernity maintains with the environment. Öcalan's in his writings on democratic confederalism is more concerned with superficial notions of 'unity in diversity' (Öcalan, 2011). Ecology is elevated to a position of heightened importance, as an idea that underpins the democratic transformation of Öcalan's political thought, but it is lacking depth in his writings. Ecology is only mentioned twice in his book 'democratic confederalism'.

Ecology's owes its relevance, within the political ideology of democratic confederalism, to its implementation in Rojava through the various ecological committees in the cantons rather than through Öcalan's intellectual labour. It is however organisations such as the 'Internationalist Commune of Rojava' or the Mesopotamia Ecology Movement that successfully 'think ecologically' and follow through with ecological action.

I argue that Öcalan's role is that of communicator when it comes to ecology. Öcalan was responsible for recognising the importance of ecology in his vision of democratic confederalism but lacked a deeper analysis of its place within it. I can however attribute Öcalan with what I call 'thinking permaculturally'. His disillusionment with the state-centric model is not to simply replace it with its opposite but to replace it with non-state centred democratic model that operates in a wholistic manner. I argue that democratic confederalism is a permaculture model in that it redesigns the relationships of gender, political power and the environment in way that is horizontal and non-hierarchical and that these relationships strengthen each other and the system as a whole. His vision of 'democratic confederalism' is a departure from a destructive political model, that of the capitalist nation-state, to a constructive political model of democratic confederalism. Permaculture, in a theoretical and practical sense, is also constructive or regenerative.

### **Permaculture as politics**

The ecological pillar is a recurring theme in the model of socialism that Öcalan proposes in his democratic confederalist ideas. It might not be as prominent as the other central tenets of democratic confederalism, but it is nevertheless there. The author states that 'the ecological question is solved if a socialist social system is developed. The combination of the struggle for the environment with the struggle for a general social revolution is necessary.' According to Öcalan, ecology is a two-pronged phenomenon. It is something that can be achieved once the right circumstances are there. Secondly, it is also a struggle that needs to be continuously fought for alongside a socialist social system. This makes ecology an essential part of the struggle for a fairer and more equitable society in the eyes of those who identify with the revolutionary ideas of Öcalan.

The desired rekindling of healthy relationships with each other and the flora and fauna and redesigning the economic, political, and human relationships we entertain with each other come from a place that is eerily similar to what permaculture teaches. That is, not necessarily, the complete overhaul of our current systems whether they be political or economic, but a

repurposing of the relationships we maintain within a given system. This way of thinking is a whole-systems approach that is used in permaculture which vouches to come up with a set of design principles that highlight the interconnectedness between various parts of a system to form a cohesive whole. This is also what the Rojava revolution strives for: a solution that aims for the total.

The total solution that Rojava offers is a way to reestablish a balance with nature and each other that has been lost. ‘The alienation of “sic” from the environment and its destruction stem from a conflict imposed by exploitative economic systems and a ‘liberal capitalism of unsustainable exploitation of natural resources’ (Mastrandrea, 2019). I argue that the Rojava revolution answers urgent questions concerning Kurdish self-determination but also questions the place of the modern human and its relationship with liberal capitalism as a political and economic system.

Öcalan is a Kurdish activist first and foremost, but the questions that he grapples with are relevant to non-Kurds too. This is also perhaps why the Rojava revolution has gained the international traction that it has: because its fight is a fight that all people that feel alienated by liberal capitalism can relate to and rally around. The paradigm shift, in ways, has *dekurdified* Kurdish self-determination. Even though, it is tasked with solving Kurdish political problems, in practice, it also aims to bring in minorities to their cause. The Kurdish pursuit of self-determination via stateless direct democracy also concerns the other minority groups present in the region such as Arabs, Turkmen, Assyrians, and Armenians (Malik, 2019).

The resilience of the Rojava revolution is a built-in feature of the ideology that governs it. When we talk about the ideological foundation of democratic confederalism and its three pillars, its tangible outcome is ‘de-centralization and the basic community economy.’

Kurdish self-determination in a permaculture sense can be defined as being the pursuit of self-sufficiency or reliance. In order to introduce permaculture as an overarching ideology that informs or could potentially inform the Rojava revolution, it is necessary to define it and to introduce the concept. I argue that permaculture is best thought of as a whole-systems paradigm, going beyond some notions that people have of it as being an ecological agricultural practice.

Permaculture is a concept coined and popularized by two Australian scholars, David Holmgren and Bill Mollison, the former being an environmental designer and the latter being an environmental psychologist. In Holmgren’s book *Retrosuburbia* (2018), he states that permaculture is a ‘design system for resilient living and land use based on universal ethics and ecological design principles’ (Holmgren, 2018). This creative design that defines permaculture

is infused with notions of ethics and ecology that can transform our relationships to the Earth and ourselves.

Permaculture uses nature as a template through which it bases its design principles to mimic the relationships that are found in nature. These relationships in nature inform the design process of permaculture and provides those who practice permaculture with the tools to transition from being ‘dependent consumers to responsible producers’ (Holmgren, 2018). Permaculture does not solely focus on food production but also concerns the way we live, relating it to construction, technology, education, and economics. Permaculture gives us the cognitive tools and physical know-how to build resilient systems, as highlighted by Holmgren:

Applying permaculture ethics and principles in our gardens and homes inevitably leads us towards redesigning our ways of living so as to be more in tune with local surpluses and limits. Permaculture is also a global movement of individuals, groups and networks working to create the world we want, by providing for our needs and organising our lives in harmony with nature (Holmgren, 2018).

Permaculture as a system has three ethics that are central to it: earth care, people care, and fair share. These three ethics direct from the 12 design principles of permaculture outlined in Holmgren’s book, ‘*Permaculture: Principles and Pathways Beyond Sustainability*<sup>11</sup>’.

In this sense, I have developed a way of using permaculture as a concept to frame the way I think about the ecological pillar of the Rojava revolution, as it provides another way of thinking about ecology in Rojava. It aligns with Murray Bookchin’s (1982) Social ecology and Abdullah Öcalan’s (2011) Democratic confederalism. Social Ecology tackles hierarchy and domination head on as obstructive social constructions that inhibit us from organizing

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<sup>11</sup> The 12 design principles of permaculture are: 1) *Observe and interact*: By taking time to engage with nature we can design solutions that suit our particular situation. 2) *Catch and store energy*: By developing systems that collect resources at peak abundance, we can use them in times of need. 3) *Obtain a yield*: Ensure that you are getting truly useful rewards as part of the work that you are doing. 4) *Apply self-regulation and accept feedback*: We need to discourage inappropriate activity to ensure that systems can continue to function well. 5) *Use and value renewable resources and services*: Make the best use of nature's abundance to reduce our consumptive behaviour and dependence on non-renewable resources. 6) *Produce no waste*: By valuing and making use of all the resources that are available to us, nothing goes to waste. 7) *Design from patterns to details*: By stepping back, we can observe patterns in nature and society. These can form the backbone of our designs, with the details filled in as we go. 8) *Integrate rather than segregate*: By putting the right things in the right place, relationships develop between those things and they work together to support each other. 9) *Use small and slow solutions*: Small and slow systems are easier to maintain than big ones, making better use of local resources and producing more sustainable outcome. 10) *Use and value diversity*: Diversity reduces vulnerability to a variety of threats and takes advantage of the unique nature of the environment in which it resides. 11) *Use edges and value the marginal*: The interface between things is where the most interesting events take place. These are often the most valuable, diverse and productive elements in the system. 12) *Creatively use and respond to change*: We can have a positive impact on inevitable change by carefully observing, and then intervening at the right time.

politically in the most expedient fashion according to Bookchin (1982). Libertarian municipalism would serve as the political template in which social ecology is expressed or practiced in Rojava, as it refers to ‘politics as being given institutional form in public assemblies that become decision-making bodies’ (Bookchin 1991). Democratic confederalism adapts Social Ecology and identifies three pillars to be erected that would form a basis for Kurdish political life.

What permaculture teaches us is that it is sometimes more fruitful to deal with a system as if it were a whole. It looks at the relationships between different components of a design and weaves these different components into a whole (Make Rojava Green Again, 2019). Particularly, it looks closely at the relationships that occur within nature, specifically at how ecological systems sustain themselves within a system that is resilient and needs little outside interference. This is how permaculture resonates ideologically, but also how it is practiced. Permaculture gardens attempt to imitate forests and meadows. Building on that, forest and meadows grow and provide for animal and plant populations the means to sustain life without ‘external fertilizer, chemical pesticides or artificial watering systems’ (Make Rojava Green Again, 2019).

Permaculture makes various parts of a system work in concertation with each other. A permaculture garden has various plants working together, not in competition with each other. A way of growing plants is to plant in a pattern that facilitates the kind of positive interactions that do not require outside interference, in a system where plants are not grown in isolation but next to each other. This is the case in an indigenous form of planting called ‘the three sisters’:

Maize, climbing beans and squash are grown together, so that the squash covers the soil to keep moisture in the ground, the climbing beans put nutrients into the soil that the other plants need, and the maize provides a climbing structure for the beans. If planted in this way, this vegetable patch preserves soil quality, reduces need for water and improves harvest, so it’s sustainable and efficient (Make Rojava Green Again, 2019).

I propose we analyse the way in which permaculture systems work, where various elements of the system work together, in order to strive for abundance and solidify resilience, to be studied and used in a political context. Permaculture can either provide the seeds for the construction of an alternative political framework or it can provide us with a lens to study political movements, as it is not just gardens that can be more productive and sustainable: political systems can emulate a *permacultural* model and provide these same benefits to a design inspired by nature.

## **Make Rojava Green Again**

Make Rojava Green again, the ecological campaign set up by the Internationalist Commune of Rojava in collaboration with the ecological committee of Jazira canton, draws parallels between Permaculture and what it calls the ‘Kurdish Liberation ideology of Öcalan’. The author is credited with having fashioned a political movement akin to permaculture in many ways. The ‘Kurdish liberation ideology’ also known as the ‘New Paradigm’ is a ‘holistic ideological approach’ akin to permaculture. Permaculture has three ethics at its core, and so does Democratic Confederalism.

When it comes to politics, permaculture can serve as a reference just as much as agriculture because of the central aspect of relationships within it. Permaculture sees relationships in the optic of collaboration rather than domination, and this is also what the democratic confederalism in the context of Rojava is trying to achieve. A practical example of this change in relationship can be seen when we look at the TEV-DEV controlled Rojava, as the government is trying to implement a new way of looking at relations among the various groups and people living in the areas in north-eastern Syria. This is notably the case with diversity in political representation. Mansour Salloum was elected a co-president of Rojava following the recapture of Tel-Abyad in 2015 (Sary, 2016). Or the exclusively female YPJ (woman’s protection units).

This social change in relations manifests itself in the political realm, where the political structure tries to align with principles of Democratic Confederalism. These principles of Confederalism can be paralleled to Permaculture. The relationship that the political administration in Rojava or north eastern Syria entertains with the various political branches within itself as well as the general populace reflect the relationships that permaculture cultivates with various aspects of a system. These relationships are based on collaboration because they view collaboration as a better way to maintain a resilient system. Relations of domination are not conducive to building a resilient whole: in fact, it potentially makes it more vulnerable and weaker. By analysing the political reality of Rojava one can deduce that it attempts to be more horizontal by avoiding relations of domination, and this also applies to hierarchy: the political system is not hierarchized in a way that would foster relations of domination.

The way the ‘Rojava revolution’ or the democratic process in Rojava remedies this situation of relations of domination is by instituting new political hierarchies where minorities and women are present in every level of decision making. We can look more closely at the way



politics is done in the ecological way by looking at it through the prism of permaculture. Make Rojava Green Again references one of the Permaculture principles as a way of understanding the political change that has swept through north east Syria. The permaculture principle of ‘creatively use and respond to change’, that can also be declined in the following way: ‘the problem is the solution’, captures a ‘shift of mentality’ that allows for the conception of creative political solutions in times of strenuous circumstances.

The shift of mentality that is described by Make Rojava Green Again can be seen as the reframing of the ‘Kurdish problem’ from a state based one to a stateless one (Make Rojava Green Again, 2019). This reframing is derived from the permaculture principle of ‘the problem is the solution’ where ingenuity is required to give something the right impetus to keep generating new solutions rather than to remain stagnant. This ‘shift in mentality’ is also known as the paradigm shift that occurred within the PKK, except that the link to permaculture is made clear.

The principle of self-determination is not what is questioned, but the political structure that will govern people’s right to organize themselves politically. The paradigm shift has the vocation to develop people’s capacities to govern themselves, as stated by Jongerden (2016): ‘the PKK disconnected the idea of self-determination from the idea of state establishment and reconnected it to that of self-government’.

I must note that the PKK and the PYD-led TEV-DEV coalition in north east Syria are not synonymous. They have their divergences that perhaps merit to be explored. It must be said that the founding father and ideologue, Öcalan, inspires both the PKK and the Rojava Revolution in perhaps unequal and different measures, but the result is that the ideological rupture with a Kurdish nation-state is prevalent in both Rojava and Bakur.<sup>12</sup> Avoiding the structure of a state avoids the relations of domination that comes with it. Relations of domination between genders, minorities, and classes is often accentuated in a structure that resembles that of a centralized state. In some sense, you can erect a system that does not exploit women, minorities, or others by doing so from the ground up and by instituting a self-governing system that is close to the population in question, through local democratic assemblies in a decentralised political structure.

Another way in which Permaculture can be applied to the Rojava revolution is by drawing upon the principles of ‘use and value the margins and edges’ and ‘use and value diversity.’ This is what Make Rojava Green Again (2019) highlights in its article ‘Reber Apo

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<sup>12</sup> Bakur refers to ‘Turkish Kurdistan’ and means north in Kurmanji Kurdish.

is a permaculturalist – permaculture and political transformation in North East Syria’. Permaculture in an agricultural context would apply this principle by growing various crops together as explained above in the ‘three sisters’ fashion. The presence of the state is likened to a monocrop in that it represents a centralizing power that doesn’t exist naturally in nature, as in nature you do not find monocrops. It is agriculture practices and policies that give rise to monocrops.

The ‘margins and edges’ applies directly to Rojava as the ongoing ‘revolution’ in Rojava is occurring at the margin of the Syrian state in a figurative and a literal sense. The ‘Rojava Revolution’ is a democratic experiment that operates on the margins of conventional political frameworks whether they be democratic or not. The ‘Rojava revolution’ is a political experiment that does not operate within a system that is recognized by the state in which it is located. In many ways, the ‘Rojava revolution’ has been able to unfold due to the circumstances brought about by the Syrian crisis, which meant that the state was too busy to quell insurgencies that threatened its very survival. At the margins, life can go on and even thrive. The margins can be areas of ‘high diversity and productivity.’ At the margins, we can cultivate new systems that work ‘alongside marginal communities’. By acting with what power and what margin they have, the Rojava revolution could question the place of the state and corporations and their relation to power. A hedge or a pond, it can act as something peripheral to a permaculture garden but it can also harbour incredible life and diversity that can either act stand alone or in concert with the other components of the garden.

The ‘Rojava revolution’, like any organism or process in nature, finds an equilibrium, flourishes and grows or shrivels up and dies. It is important to note that Öcalan has written about the rise of the Sumerian state, in his book *‘The Roots of Civilisation’* (2007) and has written about the process of the creation of the first state through sedentarisation. Sedentarisation occurred in large part due to agriculture. The agricultural revolution was responsible, to a large extent, for the creation of a more complex political society. However, Öcalan’s highlights that ‘social formations can only be understood in their temporal and physical context – i.e., they are part of their historical and geographical environment’ (Öcalan, 2007). Permaculture mirrors Öcalan’s understanding of socio-political processes by rooting politics to the physical – nature. Permaculture, etymologically speaking, is made up of two words: permanent and culture. The culture element is sometimes substituted for agriculture, but it is in fact limiting to do so. The Rojava revolution, like any system in nature, must deal with elements that are perhaps different or even contrary to it. Make Rojava Green Again describes it as a way to ‘absorb and work with change’ while ‘staying true to the values at the

heart of the system'. This is the principle of 'apply self-regulation and accept feedback' that comes into play. The way I understand self-regulation is that a system needs to be aware of the limits it poses on the resources of its surroundings and to act accordingly. If your actions go against the values at the core of your system, then readjust your approach.

Permaculture if applied, requires a system to be dynamic and to be able to respond to many different changes or challenges on many different levels at different times. We can draw a similar lesson from permaculture and apply it to politics and ecology and see how a resilient system can be erected. This is the challenge that the 'Rojava revolution' has to take on. This is something that the TEV-DEV-led institutions in north east Syria are attempting to do with their system of libertarian municipalism and direct democracy.

A dynamic, responsive, and resilient political system is perhaps what is allowing Kurds in Syria to wield political power and to govern themselves for the first time. The tenets of direct democracy, feminism, and ecology is what allowed the Kurds to stay resilient in these hard times and harsh circumstances. Democratic confederalism did not need a rigid state structure for it to emerge. The benefits of the democratic confederalist system in Rojava is that it can get up and running rather quickly and it can take on tasks normally handled by a more centralized state power such as the Syrian government in Damascus. Rojava can also act as its own political entity and represents itself domestically and internationally. The TEV-DEV government could carry out tasks of statehood on multiple levels without officially acting as a state.

### **Permaculture as economy**

The structure of the economy plays a role in Öcalan's thought on a democratic confederalist political society. From his thoughts on socialism, there is an emphasis on the collective rather than on the individual. The whole-systems approach that permaculture is fond of has been applied to all elements of 'Rojava's revolution' inventory of ideas. From gender, libertarian socialism, economy and ecology. Democratic confederalism requires system change in order for it to best serve its people and to be more resilient in the challenges it faces in the region at large. One way in which this new approach of democratic confederalism has been applied to Rojava is the economy. Knapp (2016) captured the transition the economy was undergoing with the following: 'the method in Rojava is not so much against private property, but rather has the goal of putting private property in the service of all the peoples who live in Rojava'.

The approach that Rojava has adopted with regards to private property has been that of tolerance as long as it benefits the community at large. Rojava is invested in a reconfiguration of society on all levels and when it comes to the economy of democratic confederacy as imagined by Öcalan and as pursued by the TEV-DEV coalition, it starts to look a lot like a cooperative economy. Localised communes and cooperatives have been tasked with producing essential products of consumption. The Economic Development Centre of Rojava has laid the foundations for a social economy in its co-operative guidelines.<sup>13</sup> This has resulted in the cooperative sector playing a much bigger role in the way economy works. This can be reinforced by recognizing that agriculture, construction, and energy production now account for a large percentage of their respective areas of production (Restakis, 2017).

Cantons make their money by selling unrefined oil, farming, and customs (Omrani, 2015). Of the funds levied on its citizens and various economic enterprises, ‘about 70 percent of the entire budgets of the cantons are spent on the military effort and other public services’ (Omrani, 2015).

What makes self-sufficiency more feasible for the Kurds is the land they currently control solely or with the Syrian government is some of the most agriculturally productive land in Syria and agriculture accounts for a significant part of the economy and plays a crucial role in attaining political autonomy through food security. The agricultural importance of northern Syria is of vital importance to both Rojava and Syria. Northern Syria is irrigated by two rivers, the Tigris and the Euphrates and forms what it commonly known as the fertile crescent and is home to the first human civilisations such as the Sumerians.

Ahmed Yousef, head of the Economic Body and chairman of Afrin University, claimed that the Kurdish-controlled areas' economic output, which includes agriculture, industry and oil, accounts for about 55% of Syria's gross domestic product. Jazira's agriculture accounts for 17% of Syrian production. ‘In a bid to secure our initial needs, we have come to develop plans adapted to the [realities of the] war, so we have used the resources of our area, especially agricultural ones’, Yousef said (Omrani, 2015).

## **The Canton, The Communes and Democracy**

What has emerged since then is a ‘social revolution’ based on a set of values that aspire to a radical form of direct, grass roots democracy and the recognition of gender, religious, and

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<sup>13</sup> *Rêzîknameya kooperatîfa*, xalên bîngêhîn which roughly translates as ‘co-operative guidelines’ (basic principles).

ethnic equality among all citizens. In a land where the Kurdish language and culture had been outlawed and rights of citizenship denied, the Rojava constitution establishes a polity based on inclusion and co-operation (Restakis, 2017).

Alone among the political systems of the Middle East, the Rojava constitution explicitly recognizes the equal rights of women and mandates the ending of gender discrimination in public institutions. Every formal political formation, from the citizens' councils of the local neighbourhoods, to the heads of the various ministries, to the elected heads of the regional administrative bodies, must be co-chaired by both a man and a woman.

Politics in Rojava follows a bottom-up model of governance. This is the case, as long as you operate within the framework of democratic confederalism as seen by the PYD. In spite of the high praises Rojava gets for its democratic experiment, the tensions within the supposedly democratic system in Rojava become apparent when you take a step back. If you look at the way the cantons are organised politically, local councils and assemblies do have a say in local matters but if you climb to the highest forms of representation in Rojava, i.e. the canton level, you see that the PYD has effective authoritarian control (Leezenberg, 2016). The question of grassroots democracy and the bottom's up approach experiences another tension when we realise that the PYD is in a forced position of tacitly supporting Assad and of stifling of Kurdish opposition (Leezenberg, 2016).

Where the democratic experiment has been the most successful however is at local level. Communes are 'the smallest and the most active units of the communal society' (Omriani, 2015). Communes are tasked with arbitrating, drawing up projects and resolving problems that pertain to everyday life at the local level. In Omriani's article interviewing the chief administrator of the Movement for a Democratic Society (TEV-DEV), communes are seen as a cornerstone of a democratic ecological society. Since the YPD and its allies took office, there has been a proliferation of communes in the neighbourhoods, villages, counties, as well as big and small cities in Rojava. Within a given commune, there is the social committee, the youth committee, the women committee, the peace committee, the self-defence committee, and the economic committee. In keeping with the spirit of equality among sexes, communes are headed by both a man and a woman. Communes meet on a regular basis, typically weekly, and monitor their progress via the compilation of monthly reports. Who is in charge in the commune and the various committees is decided by direct elections at the communal level. There is a heavy emphasis on things be done collectively, whether it is discussions or decision making (Omriani, 2015).

The chief administrator of the Movement for a Democratic Society stated that the value of the commune's signature is more than the ministry's signature, as the minister cannot do anything if the commune does not approve it (Omrani, 2015). By cementing the commune as the building block of the democratic confederalist system, it ensures that people are still very much in charge of what decisions are to be made and how they are implemented. This reverses the top-down model that is prevalent in the vast majority of political systems worldwide. Political decisions sprouting from the origin, in a model akin to Ancient Athens of 'by the people for the people', is very much in tune with the relationships that are present in a permaculture system.

The democratic revolution in Rojava is still finding its bearings and, naturally, elements that go against the principles of governance in Rojava can be found. The simultaneous application of democracy at the local level, while democracy being diluted the further one goes up the political food chain, suggest something is amiss. In spite of Rojava's high praises among its allies in the region and beyond, it is fraught with inconsistencies that could potentially question the nature of the democratic model it aspires to, or at the very least the effective application of such model. An example of the democratic deficit is that a decision from the leaders of the commune can override the general consensus of the commune in desperate times. It is important to highlight too that, like many other systems, the political administration of Rojava can be corrupt. The analogies drawn between the 'Rojava revolution' and nature are not coincidental: the administration 'interprets the relation of an individual with the commune as the relation of a tree with the forest implying a two-way relationship'. Permaculture clearly is present in the way the Rojava administration thinks about politics. However, the two-way relationship however can be quite unidirectional and top to bottom. So the harmonious relationships that are meant to strengthen the pillars of democratic confederalism are sometimes weak if not missing.

### **Regional autonomy in practice**

Cantons are regional autonomous units, and in Rojava they are Jazira, Kobane, and Afrin. The latter is currently under Turkish occupation – and so is a significant part of Kobane. The Cantons are responsible for completing bigger projects, such as building roads, and communes tend to handle smaller projects, such as the creation of a park. Some projects are undertaken in cooperation between the Canton and the Communes. This is notably the case with matters concerning energy: each commune has a generator funded with money from

communal collections. The cantons, however, deal with the energy infrastructure maintenance such as reparation of power cables (Omrani, 2015).

The ‘Rojava revolution’, although innovative in its aims at a form of governance that is more social and democratic, has its limitations. The chief administrator of TEV-DEV said ‘the social revolution is more intellectual, rather than material’.

The Rojava constitution recognizes Syria’s territorial integrity. In article 12 of the constitution, Rojava is described as an integral part of Syria. We can therefore sense the stateless nature of the Rojava revolution and of the Kurds’ pursuit of self-determination. I argue that the self-determination of the Kurdish people in Syria goes beyond the fate of Kurds but aspires to include at first all Syrians living in north eastern Syria in their radical democratic experiment. We see clearly in the ‘social contract’ and provisional constitutions of Rojava that the PYD-led TEV-DEM recognises the territorial integrity of Syria as a whole. The democratic process in Rojava is a sui-generis process but that could be expanded to the rest of Syria. Abdullah Öcalan, although he recognised the national value that democratic confederalism and the non-state solution has for the Kurds, he states in his writings on democratic confederalism that the radical democratic experiment is very much applicable to the Middle East through a process of confederations that slowly expand over time and space.

The ‘Rojava revolution’ can in a sense, be seen as a laboratory for progressive politics in an unfavourable environment. The Kurds’ willingness to incorporate minorities living in north eastern Syria in the defence forces that have been renamed into the SDF (Syrian Democratic Forces). The break from ethnic politics was further cemented when the Northern Syria Federal System Organizing Council decided to remove Rojava from the official name of the Autonomous region and subsequently adopted the name ‘Autonomous Administration of North and East Syria.’ The name Rojava was dropped on the 28 of December 2016 to become initially the ‘Democratic Federation of Northern Syria’ and later became the ‘Autonomous Administration of North and East Syria’ on the 6th of September 2018 (Akbulut, Aktoprak; 2019).

The lack of a central Kurdish identity to Rojava means that minorities feel included in the burgeoning political project but it also means that Rojava is invested in its future as an autonomous region in Syria. But perhaps the leaders of Rojava knew that a fully-fledged state, with its own borders, would not be tolerated by its neighbours and therefore would not be given the sight of day. We can clearly see that Turkey does not want a Kurdish political presence in the region that it does not see eye to eye with. Even a multicultural and stateless Kurdish presence in north eastern Syria is too unsettling for Turkey.

Rojava, or the autonomous Administration of North and East Syria, is a complex political phenomenon. It is an expression of self-determination for Kurds and it is also a radical democratic experiment that includes all people inhabiting the areas under the control of the TEV-DEV in north and east Syria. Rojava is about reimagining collective politics in a part of the world where democratic rights for minorities is actively fought against. Rojava is an expression of Kurdish politics that is infused with ideological borrowings from Öcalan and Bookchin but that also adapts itself to the socio-political reality of Syria and the Middle East. It is a complex design with intermeshing relationships that work with the resources at its disposal and works within the limits of its environment.

### **Chapter Three: Permaculture and ecology as a tool in nation-building in Northern Syria**

The study of ecology is perhaps best understood as a practical matter to the average citizen. Ecology figures in the mind of policy makers and citizens alike, as a set of practices that would bring us into a state of equilibrium with the environment and the planet. The ecological and democratic state of Rojava, or the Autonomous Region of North and East Syria, illustrates its inherent ecological character best through the actions that it has undertaken in north and east Syria. Yet again, I wield permaculture as my ideological tool for framing the study of the ecological practices of the Autonomous Administration of North and East Syria. It is easier to see the link between permaculture and practice than Permaculture and ideology in Rojava. I argue that permaculture informs the ecological initiatives set up by the administration and the ecological organisations such as Slow Food International and the Internationalist Commune of Rojava. Often, this permaculture inspired approach to the environment and nature, is undertaken as a collaborative project between an ecological organisation and an ecological committee of the relevant canton administration. I have studied the efforts of Slow Food International and the Internationalist Commune in Rojava along with state actors in bringing about ecological actions that conform to the wholesome design principles proposed by permaculture.

This chapter will discuss the practical applications of permaculture when it comes to questions pertaining to Ecology. I will be studying the place of ecology within the key spheres education, sustainability and agriculture and how the permaculture techniques in place or being put into practise will yield results that will bring Rojava one step closer to ecological autonomy and resilience through principles such as food and energy security.



## **Ecology and education**

I will start with the most marketable and eye-catching form of practicing ecology: conservation and reforestation. The Internationalist Commune of Rojava has quite rightly made this their first port of call because the region's biodiversity in terms of both fauna and flora have been decimated through decades of deforestation to make way for wheat and cotton monocrops (Perry, 2016). It therefore made sense, from an ecological point of view, to deal with the most flagrant problem that faces Rojava when it comes to ecology: the painstaking lack of trees. Trees are not only very poignant symbols of nature, but they also carry vital functions that help preserve soil quality, bolster water retention, and provide habitat for wildlife. Trees are a reference in permaculture because food forests are an ideal form of permaculture where human needs and non-human needs can be met and form a symbiotic relationship.

Permaculture can be regarded as the study of the perpetuation of life. To be more exact, the study of design principles that provide a system with the ability to be resilient and to enable life to survive, but also to thrive. One way of making sure an ecological way of life lasts into the future is to pass it down to new generations so that they can do the same. This is why education is important in making sure that we know how to eat, build, and live in a way that is sustainable. As a result, the committee in Afrin and the slow food gardens have targeted children as the participants of their food garden programs. The slow food gardens are an attempt at bringing ecology to the forefront of early childhood education through food.

During an interview with activist and Slow food coordinator, Nazarena Lanza, I was able to delve deeper into the motivation and the ambitions behind the 'Gardens in Rojava' project. Nazarena Lanza explained to me that the 'notion of permaculture or agroecology' is not present among the population. The task of educating the population on how to cultivate in a more ecological way demonstrates the steep hill that ecological pillar of the Rojava revolution has to surmount. In retracing the historical context of agriculture in Rojava, Lanza explains that 'farmers couldn't choose what to plant.' It turns out that it was the Syrian state that informed the farmers what kind of crop they were allowed to plant. Syria subsidized cotton and wheat farming, with Syria becoming wheat sufficient in the mid 1990s (Westlake, 2000). What Slow food wanted to do was to instil the 'political value of autonomous agriculture'.

From what I could sense in my interview with Nazarena Lanza and my study of Slow Food movements in general is that the 'Gardens in Rojava' might have yielded underwhelming results. She was quick to dispel that permaculture was not taught nor mentioned in the 'Gardens

in Rojava' project. In fact, the project was just to get children to be acquainted with the process of growing fruits and vegetables in light of the dire economic and military situation. The Slow Foods programme did gain traction with the canton of Afrin and the experiment was reproduced in multiple schools. The issue now is the follow up with the successes of these developments. Since march of 2018, the canton of Afrin has been under Turkish occupation. This makes monitoring the situation difficult. The successes or failures of 'Gardens of Rojava' will as a result not be determined with the tenacity of the organisation, ecological committee and the project but by the impact of occupation.

The Syrian state's policy of promoting monocrops, typically wheat, ruptured the link that farmers in Rojava had with the land. This was not just a rupture but a systemic weakening that made farmers and people dependent on Assad for food (Jasim, 2017). Indigenous cultivating techniques and crops were lost. This is why there have been attempts at growing pistachios and olives to bring back some of the crops that once were present in this fertile section between the Tigris and the Euphrates. This would bring back a little diversity to the agriculture landscape and provide the local farmers with valuable cash crops. Most important of all, Lanza told me that cultivating land brings a person closer to the land in a physical and symbolic sense, and this restores an identity that is tied to the land.

Land is important for growing food and land just as it is important for allowing a human culture, connected to the land, to flourish. The 'Gardens in Rojava' have had a marked impact on children according to Lanza. The connection with food was fostered. The aim of the food gardens was to show the children that they could be actors when it comes to food.

The Slow Food gardens were inaugurated in January and February of 2017 and were spread among 10 schools in the Kobane canton. Teachers and agronomists alike carried out the 'training sessions'. The Gardens in Rojava managed to integrate 'ecological ethics' into the curriculum and make it a vital part of the children's education. The idea behind the project was to empower local people and to establish food sovereignty, starting with children (Slow Foods, 2017). This allowed them to conclude that the integration of children into their picture of a whole system influenced by permaculture, and also in keeping with permaculture's penchant for nature inspired metaphors, could be likened to saplings that they would need to take care of and nurture to ensure that they grow up in a safe environment in which they can survive and thrive.

Close to Damascus, similar experiences with children and gardening have been conducted. A project in refugee camp in southern Syria had the stated aim

for children to build a relationship with the land and, eventually, for them to grow plants in the camps. The children need to develop a positive relationship with nature and agriculture. Nature is the source of our food and our medications – this is what we’re trying to teach them. In the nursery, we’ll show them why trees are important for us (...). Having been driven off their land, it is especially important to rebuild a relationship with the soil. In war, agriculture has a special meaning. Farming the land is a form of resistance, and thus it is important to get the children to relate to nature’ (Jasim, 2017).

This ecological work starts at the roots, because the ecological state of Rojava is starting from scratch. North and east Syria are tasked not only with reversing desertification and loss of biodiversity (Kelley et al, 2015) but also with erecting a system which ensures that a plurality of crops is cultivated, and biodiversity is restored.

‘Make Rojava Green Again’ is focused on helping develop an ecological consciousness by working directly on the ground in a more hands-on and pragmatic way. Make Rojava Green Again is focusing on reforestation by growing tree nurseries and on water conservation by effective use of water.

International organisations such as Slow Foods International and the Internationalist Commune of Rojava that share either the same ideological values or the same environmental preoccupations can assist Rojava in attaining a more resilient food and energy system. Rojava’s interest in becoming more resilient and, in some regard, self-sufficient, is perfectly compatible with the ecological pillar of democratic confederalism. The study of how to set up an energy and agricultural system that mimics nature and that provides a form of community resilience is very much what permaculture is about: designing an intelligent system that functions without external sources such as fertilisers or fossil fuels.

The reality on the ground, however, is very different. Rojava is not self-sufficient food wise nor energy wise and its food and energy production is not resilient, being a poignant reality of Rojava and its inhabitants. It’s a long way until Rojava reaches a level of community resilience that will allow them to function independently whether that be political or otherwise.

Developing ecological projects such as the ‘Gardens in Rojava’ bring the inhabitants of Rojava one step closer to resilience and autonomy. But what these projects also achieve is a sense of dignity and liberty. Syrians in Daraa in 2011, when protesting Bashar’s government in Damascus, wanted dignity and liberty not through being fed or through temporary relief but through socio-economic change that would not just alleviate the symptoms of the war induced crisis but would change the structure of the agricultural economy. The protestors in Daraa chanted the slogan: “*Ya Bouthaina ya Shabaan ash shaab as-suri mu juan*” (O Buthaina, o

Shaaban, the Syrian people isn't hungry), underlining the point that Syrians were not merely objects to be fed (Jasim, 2017). Bouthaina Shabaan was the Syrian politician that served as minister of expatriates between 2002 to 2008. Shabaan is however considered to be the face of Syrian government to the outside world and a staunch supporter of the Assad government. (Saleh, 2012).

## **Ecological resilience**

The Ecological pillar of democratic confederalism, in conjunction with a gender-fair democratic system, could change the inhabitants of Rojava from consumers to producers. Just like Holmgren, who envisioned humans to be in a holistic system with intelligent design principles borrowed from permaculture. In this scenario, the inhabitants would not be at the mercy of a central government's agricultural or economic policy. Inhabitants would become economic actors in their own right, influence their local area positively, and become more resilient individually and collectively. A farmer from Idlib who current lives in Lebanon states that the political goal of the protests in the fateful year of 2011 was a call for 'agricultural liberty': it is about the manner in which the food is produced more than the food itself. Yet again, we see that its estrangement from food production that bothers the peasants (Jasim, 2017).

These farmers form the backbone of the economic landscape in both southern and northern Syria. Besides, the entrepreneurial drive, another form of agriculture, is being eyed as an alternative. The importance of ecology and the importance of preserving or restoring soil quality and ecosystems is made clear even to those with the only faintest notion of what ecology or permaculture means. They however understand the value of organic agriculture. Jasim, in his article for the Henrich Böll Institute, goes into more detail about Karam, the farmer who now lives in Lebanon, exploring his conviction that organic agriculture is the best method for the soil. Karam goes on to say that: 'today, we have come to realise that, as far as seeds, fertiliser, and pesticides are concerned, it is better to be self-reliant. Many people see it that way now'. He contributes to the development of a more resilient food system by teaching farmers organic agriculture techniques (Jasim, 2017).

We can clearly see the need for ecological resilience and food sovereignty appearing in all of Syria, in both Rojava and in the areas under full control of the government in Damascus. Via Campesina, an international farmers' organization, is credited with coming up with the term food sovereignty, and in their Nyéléni declaration, define it as: 'the right of peoples to

healthy and culturally appropriate food produced through ecologically sound and sustainable methods, and their right to define their own food and agriculture systems'. This means that if food sovereignty is a principle that is anchored in a given society, then threats from outside that would weaken the food system would be dampened. Yet, this is not the case in Rojava where trade is non-existent neither with Turkey nor with Iraqi Kurdistan. According to Jasim, hunger was weaponized by the government in Damascus to subjugate the population. Since a large portion of the Syrian population is dependent on agriculture and outside aid is hard to come by, agriculture has taken on a new meaning. Agriculture or control of agricultural production means independence, control, freedom, and dignity. Especially in a time of war when supply chains are disrupted and loss of businesses and jobs can be rampant.

What the Rojava revolution wants to achieve with a strong ecological pillar, besides a more democratic and holistic political system, is a system that ensures the well-being of the community. A system where local governments, cooperatives and members of the society can produce the essential goods necessary for a healthy and fulfilled life. The ecological pillar is not merely a green label, but a quest for a system that ensures the survival of the community. If you are not in control of your own food policy, then you are at the mercy of whoever leads you. That's why Rojava's 'ideological imperative' when it comes to food security is 'food sovereignty' (Cemgil and Hoffman, 2016).

A horizontal political structure, like the one led by the TEV-DEV in north and eastern Syria, means that all levels of administration and all interested can contribute to the formulation of policies that ensure that the ecological pillar is upheld. This is why there is a strong emphasis on education of agroecology, permaculture, or organic agriculture to guarantee that the people can influence the direction of politics in the Autonomous Administration in North and East Syria. Jasim argues that the 'mentality of dictators is to make you dependent – and as a consequence they don't want you to grow your own food.' Syria is not self-sufficient when it comes to food production and as a result of a dependence on food imports, a monopoly can be formed (Sulaiman, 2015) thus making people subject to the outcomes of Syrian food policy.

The prohibition of the Syrian government of growing one's own food has alienated farmers from the fruits of their own labour as well as from nature. Growing food is a way to dampen the divide and reduce the distance between peasants and the rest of society (Jasim, 2017). The Internationalist Commune in Rojava, in cooperation with the ecological committee of Jazira, is planning to turn the unproductive rooftops and vacant lots in the cities and turn them into urban gardens (Neef, 2018). Decentralizing food production and bringing it closer to people is a goal of the Internationalist Commune of Rojava to strengthen the ecological pillar

of the revolution as well as ‘build autonomy through ecology.’ The Internationalist Commune of Rojava also advocates for a ‘return to traditional organic fertiliser-based agriculture’.

The effective use of water, as previously mentioned, is also an important facet of the ecological struggle of Rojava. The access to drinking water and water for irrigation has been put into jeopardy for a long time as dams are being built and water thirsty monocrops surface and conquer the once fertile soils in north and eastern Syria. The agricultural protection committee has taken on the task of surveying the state of water reserves by counting the number of wells and by banning the building of future wells for agriculture (Neef, 2018). In order to reduce the need for more wells, the agricultural protection committee has limited the number of crops requiring irrigation to 60% of total crops and has mandated the recycling of greywater and blackwater for agricultural purposes (Neef, 2018).

By striving for a more efficient and resilient agricultural system, the pursuit of the ecological pillar starts to take on characteristics that resemble permaculture. By multiplying the relations between various parts of a system, you contribute to its overall resilience. The example of this kind of relation is the reuse of greywater or blackwater in agriculture. By taking waste and reinserting the nutrients back into the soil, the cycle starts to look like a self-actualising cycle that feeds itself with minimal external input.

According to Sabio (2015), ‘community economy’ is the economic model that the ‘Rojava revolution’ strives for. Cooperatives are the building blocks of this economy and educating people in the value of the cooperative economy forms a big part of what a sustainable economy that upholds the values of equality, democracy, and ecology could look like. These localized cooperatives are something that the three cantons pursued for the purpose of ‘self-sufficiency’.

North and east Syria were devoid of places to process the wheat into flour as the Assad government processed the wheat from North and East Syria elsewhere in the country. Sabio (2015) gives us an example of the community economy with a cooperative mill took on the challenge of milling the wheat to provide bread for the inhabitants of Rojava, and they do by improvising with rudimentary materials. Ecological activities, through a cooperative economic model, have been applied in other areas such as establishing small dairy productions or seed banks. The ecological pillar of the Rojava revolution is constantly being nurtured from various different angles whether it be political, economic, agricultural, or educational. With the ecological pillar being upheld by many different areas of political and civic society, it means that it is less likely to falter. If political will wanes, hopefully the agricultural and economic models that have been developed will ensure that it doesn’t fall too much to the wayside. In a

sense, this complex set of links that upholds the ecological pillar is another example of permaculture in action.

An application of resilient agricultural and economic models, strengthened with a socially and ecologically conscious education system, provides resilience and cushions one from the worst of the economic collapse that Syria has experienced. The hollowing out of Syria's economy has created a great deal of hardship and pain, but at the same time, peripheral economic models that are more ethical have allowed for people to at least be fed in the vast majority of cases. This is what a permaculture inspired model can achieve: even a weak agricultural and economic system can provide some relief as long as the foundations are strong and that the political system and the civic society is there to ensure its perpetuity. This 'ethical version of the economy', as Jasim calls it in his article, is 'created via social networks in accordance with the principle of food sovereignty' (Jasim, 2017). This is the case in both Rojava and the rest of Syria. Resilient models can provide food sovereignty but also economic sovereignty – and, ultimately, political sovereignty. Delocalisation of agricultural and economic models could allow for the recovery of 'knowledge around sustainable agriculture that had been lost in the centralization processes of the Syrian regime' (Jasim, 2017).

Ecology, as stated in the previous chapter, is the pillar of democratic confederalism that is least tended to – and this is visible. Whether it is thinking ecologically or practicing ecology, it takes a back seat in influencing the politics of the Autonomous Administration of North and East Syria, whether it be ideological or practical. The 'revolution's' aspiration to sustainability and a more ecological society functions economically and derives its energy from fossil fuel extraction (Community Food Growers, 2019). Some sustainable techniques have to be abandoned for more practical ones, although polluting solutions for urgent and more immediate needs.

Nonetheless, the lessons drawn from ecology and its possible applications to governance, agriculture or education, are valuable. Thinking and acting ecologically through the prism of permaculture can provide the inhabitants of Rojava, their leaders, and international observers (such as ourselves) with the seeds to that lead to a more resilient society. With the ever-encroaching presence of the Turkish military, the Turkish occupation, and a possibility of forced resettlement of Syrian refugees in the areas occupied by Turkey along the Syrian border with Turkey.

Autonomy or self-reliance supposes a political and material basis. There needs to be political will on behalf of the rulers but also the populous. However, all the political will in the world will not allow for the autonomy or self-reliance of the community if the material

conditions and tools are not there to make that political vision a reality. In the case of Rojava, political and food autonomy are closely aligned: food is lowest denominator when talking about what material condition is necessary for the autonomy of a community.

## **Conclusion**

Öcalan's utopia of a democratic confederalist Kurdistan has created a theoretical and practical blueprint for a democratic, pluralist and ecological society. The tensions within Öcalan's thought, the PYD's political challenges and the backdrop of the Syrian uprising and civil, as well as the Turkey military incursions have made the application of democratic confederalism in a Kurdish context challenging.

The weak position of the ecological pillar of democratic confederalism has meant that actors such as the Mesopotamia Ecological movement, the International Commune and Slow Food gardens have had a particular importance in shaping a renewed commitment between the 'Rojava revolution' and ecology. My application of permaculture as a theoretical and practical tool have allowed me to enrich my study of Öcalan's thought, democratic confederalism in Rojava and the ecological pillar. Permaculture gave me the possibility to enrich the analysis of ecology in democratic confederalism and to identify theoretical and practical connections that would otherwise have difficult to bring light to. Permaculture is what bridged the gap between Rojava, the PYD, democratic confederalism and the ecological organisations and integrated these disparate parts into an integrated 'whole'.

Syrian Kurdistan always found itself in a difficult predicament to begin with. Neither Syria nor Turkey would sit idly by as a portion of Syria, Syria's most productive land, would be carved out and set aside for a disenfranchised minority.

This is perhaps why the Syrian and Turkish Kurds have opted for a stateless solution to allow for the development of a Kurdish political life outside of a nation-state framework. Kurds in Syria therefore focused on the maximum they could achieve without resorting to independence. The structures that ensure political autonomy and economic resilience would be achieved outside the context of an independent Kurdistan.

One could argue that no state is the new state or that Rojava is a state without being a state.

The ruling coalition in Rojava, led by TEV-DEV, understands the precarious situation that they are in and have opted for a federal integration with the rest of Syria but the government in Damascus refuses this model until today. The longevity of the 'Rojava revolution' and the



radical democratic experiment depends on whether Turkey and Syria head the call by Kurds for greater autonomy. Even the premise of autonomy is questionable given Damascus' official position on the matter besides ongoing military and political cooperation, and Turkey's occupation of territories in Northern Syria that break up the geographical contiguity of the Autonomous Administration in North and East Syria (or Rojava).

What the 'Rojava revolution' and its democratic confederalist model teaches us is that even with few resources, virtually no international recognition and an embargo from NATO's second largest standing army after the US (Turkey), a radically democratic experiment that draws on local democracy, feminism and ecology can not only exist but actually flourish. The reason for the success of the democratic experiment even though its long-term survival looks bleaker by the day, is because it adopted structures, ideas and practices that emulate permaculture models. This in turn, reinforces the resilience of the system.

Democratic confederalism and its application in Rojava can provide us with the intellectual tools to conceive of alternative political systems based on Bookchin's social ecology. The case study of Rojava could teach us what to do and what not to do when erecting new communities based on social ecology and democratic confederalism around the world. The political experiment of the Rojava revolution might not be scalable in size but it could be reproduced in many areas around the world. The democratic model in its radical and localized variant does not aspire to be large, in fact, what Rojava taught us is that politics is most efficient when it's hyper-local.

The democratic experiment of Rojava based on social ecology and democratic confederalism could be a possible answer to tackling the new problems and crisis of the 21<sup>st</sup> Century and an alternative working model for our current Western state-centric societies. The new adage of 'think global and act local' could transition from becoming a fashionable motto into becoming a reality with the advent of a political movement that bases itself on Bookchin's social ecology and Öcalan's democratic confederalism. The template for alternative political systems that Rojava has given us could serve as reference for resilient localised political structures that could endure the stresses that climate change will wreak on our planet.

Local food production, local economies, equality of genders and neighbourhood assemblies could be the structures that enable communities to outlive the stresses that climate change could have on our overstretched network of international supply chains. Supply chains on which we depend for food, energy and almost everything in our globalised world. Climate change could test the elasticity of our supply chains or poke holes and reveal its fragile nature. If that day comes, we better have resilient models that could provide us with enough to survive.

Maybe the democratic model of Rojava is part of the answer and a political template for the future in which resilience will mean life or death.

I have chosen to study Abdullah Öcalan's thought and Rojava through ecology – its weakest pillar. There is potential for a strengthened analysis of radically alternative political models in the Middle East if we focus on theoretical and practical implications of ecology on politics. Permaculture could prove to a useful tool to study the relations between parts of a political system, how they interconnect and shed new light on the structure as a 'whole system'.

It is important that further research is conducted on Rojava's political application of Öcalan's democratic confederalism while Rojava still exists. With Turkey's increasingly aggressive military posture and the Assad's government slow recovery of political control over Syria could put the democratic experiment of Rojava in jeopardy. I see my ecology and permaculture focused research as an innovative way of studying political societies that have the potential to bring to the fore previously unforeseen elements. Permaculture is an alternative way of thinking about the world and the environment and it can be useful to couple alternative ways of thinking with radically alternative political models.

## REFERENCES

- Alantar, Özden Zeynep Oktav. (2001). *The October 1998 Crisis: The Change of Heart of Turkish Foreign Policy towards Syria*. Cahiers d'Études sur la Méditerranée Orientale et le monde Turco-Iranien, 31, 142-161.
- Alantar, Özden, Zeynep Oktav., Parlar dal, Emel., Kurşun, Ali Murat. (Eds.) (2018). *Violent Non-State Actors and the Syrian Civil War: The ISIS and YPG Cases*. Springer International Publishing.
- Albarazi, Z. (2013). *The Stateless Syrians*. Report of the Middle East and North Africa Nationality and Statelessness Research Project. Tilburg University.
- Allsopp, Harriet, and Wladimir Van Wilgenburg. (2019). *The Kurds of Northern Syria, Volume 2: Governance: Diversity, and Conflicts*. Bloomsbury Publishing.
- Al-Saleh, Asaad (2012). *Failing the Masses: Buthaina Shabaan and the Public Intellectual Crisis*. Journal of International Women's Studies, 13(5), 195-211.
- Altuğ, S. (2013). *The Syrian uprising and Turkey's ordeal with the Kurds*. Dialectical Anthropology, 37(1), 123-130. Dordrecht.
- Aw-Hassan, A. Rida, F., Telleria, R., and Bruggeman, A. (2013). The impact of food and agricultural policies on groundwater use in Syria. Journal of Hydrology, S. 205.
- Bajalan, Djene Rhys. (2019). *The First World War, the End of the Ottoman Empire, and Question of Kurdish Statehood: A 'Missed' Opportunity?* Ethnopolitics, 18:1, Missouri State University.
- Balanche, Fabrice. (2016). *Rojava's Sustainability and the PKK's Regional Strategy*. Available on: <<https://www.washingtoninstitute.org/policy-analysis/view/rojavas-sustainability-and-the-pkks-regional-strategy>>.
- Baradat, Leon P. (2009). *Political Ideologies: Their Origin and Impact*. 10th ed. Upper Saddle, NJ: Pearson.
- Basaran, Ezgi. (2018). *Frontline Turkey: The Conflict at the Heart of the Middle East*. I.B. Tauris & Co.
- Bélanger, L., Duchesne, É., & Paquin, J. (2005). *Foreign interventions and secessionist movements: The democratic factor*. Canadian Journal of Political Science, 38/2, 435–462.
- Belge, C. (2011), *State Building and the Limits of Legibility: Kinship Networks and Kurdish Resistance in Turkey*. International Journal of Middle East Studies, Vol.43(1), pp.95-114.
- Bengio, Ofra. (2014). *Kurdish Awakening: Nation Building in a Fragmented Homeland*. University of Texas Press.

Biehl, Hanet. (2012). *Bookchin, Öcalan, and the Dialectics of Democracy*. Conference Challenging Capitalist Modernity: Alternative concepts and the Kurdish Question, Hamburg. Available on: <<http://new-compass.net/articles/bookchin-öcalan-and-dialectics-democracy>>.

Bookchin, Murray. (1991). *Libertarian Municipalism: An Overview*. Green Perspectives, No. 24.

Bookchin, Murray. (1982). *The Ecology of Freedom*. Palo Alto, Cheshire Books.

Bozdoğan, S., Kasaba, R. (1997). *Rethinking Modernity and National Identity in Turkey*. University of Washington Press.

Bozarslan, Hamit. (2008). *Kurds and the Turkish State*. In *The Cambridge History of Turkey: Turkey in the Modern World*, edit by Resat Kasaba, 333-57. Cambridge: Cambridge University Press.

Carnegie Middle East Center. (2012). *The Kurdish National Council in Syria*. Available on: <<https://carnegie-mec.org/publications/?fa=48502>>.

Caves, John. (2012). *Syrian Kurds and the democratic union Party (PYD)*. Institute for the Study of War.

Cemgil, C., and Hoffmann C. (2016): *The 'Rojava Revolution' in Syrian Kurdistan: A Model of Development for the Middle East?* IDS Bulletin, 47(3).

De Châtel, F. (2014). *The Role of Drought and Climate Change in the Syrian Uprising: Untangling the Triggers of the Revolution*. *Middle Eastern Studies*, DOI: 10.1080/00263206.2013.850076

Diakonoff, I. M. (1985). *Extended Families in Old Babylonian Ur*. *Zeitschrift für Assyriologie und Vorderasiatische Archäologie*. Volume 75: Issue 1.

Eder, Mine. (2016). *Turkey*. In Lust, Ellen. *The Middle East* (14 ed.). CQ Press.

Enciclopedia Iranica. Concept of 'Media'. Available on: <<http://www.iranicaonline.org/articles/media>>

Eppel, M. (2016). *A people without a state: The Kurds from the rise of Islam to the dawn of nationalism*. Austin: University of Texas Press.

Feldman, B. & Herson-Hord, M. (2019). *Building Dual Power for a Symbiotic Future*. *Journal of World-Systems Research*, 25(1), 49-58. University of Pittsburgh.

Finley, Eleanor. (2019). *Beyond the limits of Nature: A Social-ecological Perspective on Degrowth as a Political Ideology*. *Capitalism Nature Socialism*, 30(1):1-7

Fox, Tessa. (2019). *They are barbaric: Turkey prepares to flood 12,000-year-old city to build dam*. Available on: <<https://www.theguardian.com/cities/2019/sep/12/they-are-barbaric-turkey-prepares-to-flood-12000-year-old-city-to-build-dam>>.

- Gellner, E. (1997). *Nationalism*. New York, NY: New York University Press.
- Hannum, Hurst. (1996). *Autonomy, sovereignty, and self-determination: the accommodation of conflicting rights*. Philadelphia: University of Pennsylvania Press. pp. 187–9.
- Hinnebusch, Raymond. (2011). *The Ba’th’s Agrarian Revolution (1963–2000)*. In: R. Hinnebusch, A. El Hindi, M. Khaddam and M. Ababsa, *Agriculture and Reform in Syria*. University of St Andrews Centre for Syrian Studies, p. 4.
- Hinnebusch, Raymond., Imady, Omar. (2018). *The Syrian Uprising: Domestic Origins and Early Trajectory*. Routledge.
- Holliday, Joseph. (2012). *Syria’s Armed Opposition*. Institute for the Study of War. Available on: <[http://www.understandingwar.org/sites/default/files/Syrias\\_Armed\\_Opposition.pdf](http://www.understandingwar.org/sites/default/files/Syrias_Armed_Opposition.pdf)>
- Holmgren, David. (2018). *RetroSuburbia. The Downshifter’s Guide to a Resilient Future*. Melliodora.
- Horowitz, D. (1985). *Ethnic groups in conflict*. Berkeley, CA: University of California Press.
- Hovannisian, Richard G. (1996). *The Republic of Armenia, Vol. IV: Between Crescent and Sickle, Partition and Sovietization*. Berkeley, California, University of California Press.
- Human Rights Watch. *Syria: The Silenced Kurds*. October, 1996, vol. 8, no. 4 (E). Available on: <<https://www.hrw.org/reports/1996/Syria.htm>>.
- Hunt, Stephen E. (2019). *Prospects for Kurdish Ecology Initiatives in Syria and Turkey: Democratic Confederalism and Social Ecology*. *Capitalism Nature Socialism*. 30:3, 7-26, DOI: 10.1080/10455752.2017.1413120.
- Hurewitz, J. C. (1979). *The Middle East and North Africa in world politics: A documentary record*. Vol. 1–2, New Haven, CT: Yale University Press.
- Internationalist Commune of Rojava. (2019). *Make Rojava Green Again*. Dog Section Press.
- Inter Press Service. (2013). News and Views from the Global South. *PKK leader calls for ceasefire in Turkey*. Al Jazeera, 21 March 2013.
- Jasim, Ansar. (2017). *Agriculture and food Sovereignty in Syria*. Available on: <<https://lb.boell.org/en/2017/10/04/agriculture-and-food-sovereignty-syria>>. Heinrich Böll Stiftung, Beirut.
- Kamran, Matin. (2019). *Democratic Confederalism and Societal Multiplicity: A Sympathetic Critique of Abdullah Öcalan’s State Theory*. Geopolitics. Taylor Francis.
- Keller, Sean. (2018). *Spotlight on Rojava, North Kurdistan, and the Mesopotamian Ecology Movement*. Available on: <<https://mesopotamia.coop/agriculture-autonomy-in-the-middle-east/>>.

Kelley, C.P., Mohtadi, S., Cane, M. A., Seager, R., Kushnir, Y. (2015). *Climate change in the Fertile Crescent and implications of the recent Syrian drought*. PNAS, vol. 112(11), pp. 3241-3246.

Knapp, Michael. (2020). *Privateigentum im Dienste aller*. Available on: <<http://www.kurdistan-report.de/index.php/archiv/2014/171/13-privateigentum-im-dienste-aller>>.

Knapp, Michael., Ayboga, Ercan., Flach, Anja, Biehl, Janet. (2016). *Revolution in Rojava: Democratic Autonomy and Women's Liberation in the Syrian Kurdistan*. Pluto Press

Korn, David. (1994). *The Last Years of Mustafa Barzani*. Middle East Quarterly.

Leezenberg, Michiel. (2016). *The ambiguities of democratic autonomy: the Kurdish movement in Turkey and Rojava*. Southeast European and Black Sea Studies, 16:4.

Lister, Charles R. (2015). *The Syrian Jihad: Al-Qaeda, the Islamic State and the Evolution of an Insurgency*. Oxford University Press.

Lust, Ellen. (2019). *The Middle East*. SAGE Publications.

Make Rojava Green Again. *The New Paradigm Weaving Ecology, Democracy, and gender Liberation into a Revolutionary Political Paradigm*. Available on: <<https://makerojavagreenagain.org/2019/10/06/the-new-paradigm-weaving-ecology-democracy-and-gender-liberation-into-a-revolutionary-political-paradigm/>>.

Makovsky, A. (1999). *Defusing the Turkish-Syrian Crisis: Whose Triumph?*. Middle East Insight. The Washington Institute for Near East Policy.

Malik, Kenan. (2019). *Syria's Kurds dreamt of a 'Rojava revolution'. Assad will snuff this out*. Available on: <<https://www.theguardian.com/commentisfree/2019/oct/27/syria-kurds-dreamt-of-rojava-revolution-assad-will-snuff-this-out>>

Mango, Andrew. (2005). *Turkey and the War on Terror: for Forty Years We Fought Alone*. Contemporary Security Studies. Routledge.

Mastrandrea, Angelo (2019). *The Social-Ecological Rebirth of Rojava*. Available on: <<https://mesopotamia.coop/the-social-ecological-rebirth-of-rojava/>>. Cooperation in Mesopotamia.

McMurray, David. Ufheil-Somers, Amanda. (2013). *The Arab revolts: dispatches on militant democracy in the Middle East*. Bloomington, Indiana University Press.

Neef, Andrew. (2018). *Building Autonomy Through Ecology in Rojava*. Available on: <<https://unicornriot.ninja/2018/building-autonomy-ecology-rojava/>>.

Olgun, Akbulut and Elçin, Aktoprak. (2019). *Minority Self-Government in Europe and the Middle East: From Theory to Practice*. Studies in International Minority and Group Rights, Volume: 15

- Öcalan, Abdullah. (2007). *Prison Writings: The Roots of Civilization*. Pluto Press
- Öcalan, Addullah. (2005). *Democratic Confederalism*. London: Transmedia.
- Omriani, Zanyar. (2015). *Introduction to the Political and Social Structures of Democratic Autonomy in Rojava*. Available on: <<https://mesopotamia.coop/introduction-to-the-political-and-social-structures-of-democratic-autonomy-in-rojava/>>. Cooperation in Mesopotamia.
- Peace in Kurdistan. *Charter of the Social Contract: Self-Rule in Rojava*. Available on: <<https://www.peaceinkurdistancampaign.com/resources/rojava/charter-of-the-social-contract/>>.
- Perry, Megan. (2016). *How climate change and failed agricultural policies have contributed to conflict in Syria*. Sustainable Food Trust.
- Pinar, Dinc. (2020). *The Kurdish Movement and the Democratic Federation of Northern Syria: An Alternative to the (Nation-)State Model?*. Journal of Balkan and Near Eastern Studies, 22:1.
- Restakis, J. (2017). *Rojava, Syria: A revolution of hope and healing*. Vancouver Observer.
- Roeder, P. G. (2007). *Where nation-states come from: Institutional change in the Age of Nationalism*. Princeton, NJ: Princeton University Press.
- Romano, David. (2006). *The Kurdish nationalist movement: Opportunities, mobilization and identity*. Cambridge: Cambridge University Press.
- Romano, David. (2015). A Very Different Ideology in the Middle East. Rudaw.
- Rudaw News. (2011). *Documentary on the Stateless Kurds of Syria*. Available on: <<https://web.archive.org/web/20120511094112/http://www.rudaw.net/english/news/syria/4003.html>>.
- Rudaw News. (2012). *More Kurdish Cities Liberated as Syrian Army Withdraws from Area*. Available on: <<https://web.archive.org/web/20141015194927/http://www.peyamner.com/english/PNAnews.aspx?ID=283053>>. Peyamner News Agency.
- Rudaw News. (2013). *PYD Announces Surprise Interim Government in Syria's Kurdish Region*. Available on: <<https://www.rudaw.net/english/middleeast/syria/13112013>>.
- Sabio, Oso. (2015). *Rojava: An Alternative to Imperialism, Nationalism, and Islamism in the Middle East (An introduction)*.
- Saed. (2017). *From the October Revolution to Revolutionary Rojava: An Ecosocialist Reading*. Capitalism Nature Socialism, 28:4, 3-20, DOI: [10.1080/10455752.2017.1409403](https://doi.org/10.1080/10455752.2017.1409403)
- Saeed, Seevan. (2017). *Kurdish Politics in Turkey: From the PKK to the KCK*. Routledge.
- Saideman, S., & Ayres, R. (2000). *Determining the Causes of Irredentism: Logit Analyses of Minorities at Risk Data from the 1980s and 1990s*. Journal of Politics, 62(4), 1126-1144.

Sary, Ghadi. (2016). *Kurdish Self-governance in Syria: Survival and Ambition*. Middle East and North Africa Programme. Chatham House.

Scott, Peter. (2003). *A Political Theology of Nature*. Cambridge University Press.

Slow Food. *Growing Future in Rojava*. Available on: <<https://www.slowfood.com/growing-future-rojava/>>.

Springborg, R. (1981). *Baathism in Practice: Agriculture, Politics, and Political Culture in Syria and Iraq*. Middle Eastern Studies, 17:2, S. 192.

Strohmeier, M. (2003). *Crucial images in the presentation of a Kurdish national identity: Heroes and Patriots, Traitors and Foes*. Leiden/Boston, Brill.

Sulaiman, R. (2015). Livestock Production: A Neglected Oil-Substitute in South Kurdistan. Kurdistan Tribune, 15 June. Available on: <<http://kurdistantribune.com/2015/livestock-production-a-neglectedoil-substitute-in-south-kurdistan/>>.

Tropeano, Maurizio. (2016). *Io, contadina scampata all'Isis creo orti nelle scuole di Kobane*. Available on: <[https://www.lastampa.it/esteri/2016/09/22/news/io-contadina-scampata-all-isis-creo-orti-nelle-scuole-di-kobane-1.34808806?refresh\\_ce](https://www.lastampa.it/esteri/2016/09/22/news/io-contadina-scampata-all-isis-creo-orti-nelle-scuole-di-kobane-1.34808806?refresh_ce)>.

Ülker, Erol. (2010). *Assimilation of the Muslim communities in the first decade of the Turkish Republic (1923-1934)*. European Journal of Turkish Studies.

Ülker, Erol. (2010). *The Kurdish Question in Turkey: Denial to Recognition*. In Nationalism and Politics in Turkey: Political Islam, Kemalism and the Kurdish Issue, edited by Marlies Casier and Joost Jongerden, 67-84. Taylor & Francis

Van Wilgenburg, Wladimir. (2016). Dissecting the YPG: structure and capacity; operations and strategies as defender of Rojava, unpublished paper presented at the London School of Economics and Political Science on 19 July 2016.

Weber, Frank G. (1970). *Eagles on the Crescent: Germany, Austria, and the diplomacy of the Turkish alliance, 1914-1918*. Cornell University Press.

Weiner, Tim. (1999). *U.S. Helped Turkey Find and Capture Kurd Rebel*. The New York Times.

Westlake, Michael. (2000) Economics Of Main Sub-Sectors in Syrian Agriculture. CHAPTER 6. The Economics of Strategic Crops. Food and Agriculture Organization.

Young, R. A. (1994). *How do peaceful secessions happen?* Canadian Journal of Political Science, 27, 773–792.

Zeydanlioglu, W. (2008). *The White Turkish Man's Burden: Orientalism, Kemalism and the Kurds in Turkey*. Newcastle: Cambridge Scholars Publishing.