Networking the Blue Economy in Seychelles: pioneers, resistance, and the power of influence

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Abstract

The Blue Economy has gained traction as a key concept that seeks to stem biodiversity loss whilst stimulating economic development, thereby integrating environmental and economic interests. Although the Blue Economy builds on the more familiar Green Economy, academic critique is still emerging and can be slow to translate into changes in policy and practice. What the Blue Economy means to national and local policy makers and practioners is seldom explored, and specificity is lacking on how the triple bottom line of economic growth, environmental sustainability, and social equity can be attained. This article explores these issues in one of the pioneering nations promoting the Blue Economy – the Republic of Seychelles – to establish a) how policy makers and practitioners in Seychelles perceive the Blue Economy b) what perspectives influence the concept; and c) who stands to gain or lose from its implementation. Seychelles has a unique position in Africa, due to its remote location in the Indian Ocean, its political history, and its pioneering role in promoting the Blue Economy: it presents itself as a leader for Africa in this respect. Using a combination of interviews and Q-methodology, we identify three perspectives on the Blue Economy in the country. Policymakers and practitioners are either: *supportive* in principle, *critical* in practice; *pragmatic and accepting*; or *idealistic*. These three perspectives capture the interpretations of those tasked with enacting the Blue Economy, but many of the perspectives present in international discourse are not present in the country, and indeed elements of them are met with resistance. Drawing on a social network analysis we find that the *critical* perspective is most influential in terms of information, both with government and non-government actors. However, the *pragmatic and accepting* perspective is more influential in terms of resource allocation, indicating a lack of resources could hamper actions by the actors that would like to see change.

Keywords: Blue Economy, blue growth, oceans economy, Seychelles, Africa, Q Methodology, network analysis, natural capital

Résumé

L'économie bleue est devenue un concept fondamental qui vise à enrayer la perte de biodiversité tout en stimulant le développement économique et en intégrant ainsi les intérêts environnementaux et économiques. Bien que l'économie bleue s'appuie sur l'économie verte, qui est plus familière, des critiques continuent d'émerger et peuvent tarder à se traduire en changements de politique et de pratique. Ce que l'économie bleue signifie pour les décideurs et les praticiens nationaux et locaux est rarement exploré, et il manque des spécificités sur la manière d'atteindre le triple résultat de la croissance économique, de la durabilité environnementale et de l'équité sociale. Cet article explore ces questions dans l'un des pays pionniers promouvant l'économie bleue - la République des Seychelles - afin d'établir a) comment les décideurs et les praticiens aux Seychelles perçoivent l'économie bleue; b) quelles perspectives influencent le concept; c) qui est gagnant ou perdant de sa mise en œuvre. Les Seychelles occupent une position unique en Afrique, en raison de son emplacement éloigné dans l'océan Indien, de son histoire politique et de son rôle de pionnier dans la promotion de l'économie bleue: elles se présentent comme un leader africain à cet égard. En

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combinant entrevues et méthodologie Q, nous identifions trois perspectives de l'économie bleue dans le pays. Les décideurs et les praticiens sont soit: *favorables* en principe, *critiques* dans la pratique; *pragmatique et acceptant*; ou *idéaliste*. Ces trois perspectives capturent les interprétations des personnes chargées de mettre en œuvre l'économie bleue, mais les perspectives présentes dans le discours international ne sont pas toutes présentes dans le pays, et certains de leurs éléments rencontrent une certaine résistance. En nous basant sur une analyse de réseau social, nous constatons que la perspective *critique* a le plus d'influence en termes d'information, avec des acteurs gouvernementaux et non gouvernementaux. Cependant, la perspective *pragmatique et acceptant* a plus d'influence en termes d'affectation des ressources, ce qui indique qu'un manque de ressources pourrait entraver les actions des acteurs souhaitant voir un changement.

Mots-clés: économie bleue, croissance bleue, économie des océans, Seychelles, Afrique, méthodologie Q, analyse de réseau, capital naturel

Resumen

La economía azul ha ganado fuerza como un concepto clave que busca parar la pérdida de biodiversidad mientras estimula el desarrollo económico, integrando intereses económicos y ambientales. Aunque la economía azul se desarrolla en la mejor conocida economía verde, la crítica desde la academia sigue surgiendo y puede tardar en reflejarse en cambios de políticas y prácticas. Lo que la economía azul significa para quienes elaboran y practican las políticas locales es rara vez explorado, y su especificidad carece del cómo la triple línea base, de crecimiento económico, sustentabilidad ambiental y equidad social, puede ser alcanzada. Este artículo se enfoca en una nación pionera en promover la economía azul -la República de Seychelles- y explora dichos temas con el fin de determinar a) cómo quienes elaboran y practican políticas en Seychelles perciben la economía azul; b) qué perspectivas influyen en el concepto; c) quién gana o pierde con su implementación. Seychelles tiene una posición única en África por su lejana ubicación en el Océano Índico, su historia política, y su papel como pionera en la promoción de la economía azul: se presenta a sí misma como líder de África en este tema. Combinando entrevistas y metodología q, identificamos tres perspectivas en la economía azul en dicho país. Los responsables de elaborar y quienes practican políticas públicas pueden: respaldar en principio, y ser críticos en la práctica; ser pragmáticos y aprobar; o ser idealistas. Estar tres perspectivas capturan las interpretaciones de aquellos encargados de promulgar la economía azul, pero muchas de las perspectivas presentes en el discurso internacional no están presentes en el país y de hecho, algunos de sus elementos se topan con resistencia. Con base en análisis de redes sociales, encontramos que la perspectiva crítica tiene más influencia en términos de información, tanto en actores del gobierno, como de fuera de este. No obstante, la perspectiva pragmática y de aprobación influye más en términos de asignación de recursos, indicando que la falta de ellos puede obstaculizar acciones de los actores que quieran ver un cambio.

Palabras clave: economía azul, crecimiento azul, economía de los océanos, Seychelles, África, metodología q, análisis de redes, capital natural

1. Introduction

Marine ecosystems are some of the most vulnerable ecosystems on the planet, and are increasingly threatened by anthropogenic pressures, leading to concern over a decline in marine biodiversity (Hughes *et al*. 2017). However, areas of greatest biodiversity also tend to be where people are most dependent on their natural environment but where the capacities to sustainably manage these resources are lowest (Barlow *et al*. 2018). In an effort to conserve this rich biodiversity, whilst simultaneously supporting people's wellbeing, interest has grown in the 'untapped' economic opportunities that oceans offer and their potential to address these goals (OECD 2016; The Economist Group 2018).

The Blue Economy has emerged as a key concept in this area and seeks to stem biodiversity loss whilst stimulating economic development, thereby integrating both environmental and economic interests. Building on the Green Economy concept, the Blue Economy was popularized during the Rio+20 summit in 2012 (Campbell *et al*. 2013; Silver *et al*. 2015). Since then, the concept has received attention from sovereign nations, NGOs, and researchers. Articles have tracked the development of the concept and its meanings (Silver *et al*. 2015; Winder and Le Heron 2017; Voyer *et al*. 2018), and the Blue Economy, particularly in Africa, is having a prominent impact on environmental governance (e.g. African Union Commission 2014). The Blue Economy originated as a way of connecting oceans to the Green Economy – the theme of the

Rio+20 conference (Silver *et al.* 2015) which was popularized in environmental governance as a way of expressing and incorporating the economic importance of the environment to decision-making (Pearce, Markandya and Barbier 1989). To many, the Blue Economy is the new Green Economy, with a similar emphasis on the benefits of nature for the economy (United Nations 2014). And like the Green Economy, funding bodies such as the World Bank, the EU, and the UN/UNDP all now mention the Blue Economy in their strategy documents (UNEP *et al.* 2012; The World Bank 2017).

Although the Blue Economy builds on the Green Economy, academic analysis can be slow to translate into changes in policy and practice, and as a result familar critiques are emerging in relation to the Blue Economy. Indeed, Barbesgaard (2017) argues that the flaws of the Green Economy have not been addressed in the Blue Economy, where the same practices of privatization and capture of natural resources are happening in the oceans, just as they happened on land. This has led to 'ocean grabbing' (thereby negatively affecting human and/or environmental well-being (Bennett, Govan and Satterfield 2015)) under the guise of conservation. Fundamental issues associated with neoliberal environmental management persist in the Blue Economy, such as a lack of situated historicity, and by only working with established powerful actors, existing power inequities are enhanced or entrenched (Dempsey 2016; Dempsey and Suarez 2016). Moreover, there seems to be little agreement on what the Blue Economy actually *is* and how the promoted triple bottom line of economic growth, environmental sustainability, and social equity can be attained.

While there are various perspectives on and definitions of the Blue Economy, insights into how critiques are regarded by policy makers and practitioners have been absent. Furthermore, if the multiple, competing priorities are not acknowledged, conflict is rendered more likely (Silver *et al.* 2015; Voyer *et al.* 2018). It becomes more difficult to engage with contructive critique, made more difficult when Blue Economy perspectives in practice (especially at a national level where implementation occurs) are seldom analyzed. Whilst there is an emerging body of work taking a critical stance towards the Blue Economy (Childs and Hicks 2019), what it means for the positioning of the state and for different conceptualisations of the ocean (e.g. Choi 2017; Steinberg and Kristoffersen 2018), there is a lack of understanding on the extent to which these critiques are incorporated into policy and practice. Thus, what is lacking is a critical reflection, drawing on political ecology, of what the Blue Economy means in practice, and an understanding of who is driving this agenda at a sub-national scale.

To address this we first revisit current understandings of how the Blue Economy has been articulated at an international, national and sub-national scale. We then use a mixed methods approach integrating social network analysis, Q-methodology, and qualitative interviews, in one of the pioneering nations promoting the Blue Economy – the Republic of Seychelles – to establish a) how policy makers and practitioners in Seychelles perceive the Blue Economy; b) who and what perspectives are influencing the Blue Economy in practice; c) who stands to gain or lose out.

Perspectives on the Blue Economy

Different perspectives on the Blue Economy have emerged during international conferences, within national and international policy documents, and other grey literature. The triple bottom-line goal of economic growth, environmental sustainability, and social equity is mentioned in most definitions of the Blue Economy (United Nations 2014; Abu Dhabi Declaration 2016; The Economist Group 2018). However, within them, five distinct perspectives emerge that variously emphasize 'Economic', 'Environmental', or 'Social' priorities. **Firstly** the Abu Dhabi Declaration (2016) emphasizes the economic opportunities that oceans have to offer, a perspective that views "Oceans as good business" (Silver *et al.* 2015; Voyer *et al.* 2018). This perspective tends to be shared by high-income countries and their representative organizations, such as the OECD, and is particularly focused on the growth potential of oceans, exemplifying the 'oceans as the new (economic) frontier' narrative (OECD 2016; Steinberg 2018). **Secondly** and closely related is the "Oceans as drivers of innovation" (Voyer *et al.* 2018). This perspective is expressed by various institutions and businesses in policy documents and grey literature that emphasize the role technology can play in the Blue Economy (European Union 2015; The Economist Group 2018).

The **third** perspective, mostly used by environmental NGOs, emphasizes environmental opportunties, highlights the importance of natural capital and ecosystem services and, in doing so, views "Oceans as natural

capital." Within this perspective, nature was never intended to be commodified or financialised. Rather, it sees the Blue Economy as a way to let biodiversity become a part of the equation, and thus to create an enterprising nature (Dempsey 2016). This enterprising nature is reflected in definitions of the Blue Economy that focus on recognising marine ecosystems as natural capital, with protection of these ecosystems assumed to follow automatically (WWF 2015). However, in practice, protection has often not followed automatically. Rather, 'nature' has had to be actively turned into natural capital, made investable, and comparable to other economic investments (Dempsey and Suarez 2016; Ouma, Johnson and Bigger 2018). This transformation has been criticized for its unintended consequences. This is both in ontological terms by turning nature into something instrumental that can be managed in order to maximise human well-being (McAfee 1999; O'Neill 2007), as well as epistemologically by bringing nature into alignment with the vision of natural capital, thereby becoming prescriptive of what nature should be (Macdonald and Corson 2012). These two critiques identify an inherent contradiction in the natural capital approach, and how in its application to an "Oceans as natural capital" narrative may diverge from its original meaning.

The last two perspectives on the Blue Economy emphasise societal opportunities and view "Oceans as (small-scale fisheries) livelihoods" and "Oceans as integral to (Pacific) Small Island Developing States". These perspectives both stress the importance of oceans for local economies and livelihoods, thereby being quite similar. The **fourth**, "Oceans as integral to SIDS" draws attention to the unique vulnerabilities that small islands experience, a result of their geographic positioning, whereas the **fifth**, "Oceans as livelihoods" is concerned with all coastal communities. Additionally, while both these perspectives stress the importance of oceans for local economies and people, the "Oceans as integral to SIDS" lens is not found to "necessarily exclude large conservation enclosures or extractive activities like industrial fishing or mining" (Silver *et al*. 2015:150). The combined perspective of "Oceans as livelihoods" is expressed by the UN, saying that "an oceans economy approach supports sustainable livelihoods and food security for SIDS and coastal populations." (United Nations 2014: 2).

In addition to research on different perspectives on the Blue Economy in international discourse, other work, such as in China (Choi 2017) and in Norway (Steinberg and Kristoffersen 2018), has contributed to understanding local articulations of the Blue Economy in practice. This work has emphasized the role of the state in positioning and sustaining itself as a key actor, whilst attempting to de-politicize and bring into the managerial realm decisions about ocean governance. This is done by attending to a perceived need for a better-managed ocean, which positions oceans as currently chaotic and full of competing uses. This, according to Choi (2017), leads to the subtle governmentality that embodies 'ocean grabbing' by changing people's relationships with and perspectives of the ocean in the name of sustainable development. However, as Steinberg and Kristoffersen (2018) point out, the existence of several (sometimes competing) discourses means that there is room for negotiation, and that ocean grabbing is not the inevitable outcome. Here, we draw on earlier critiques to empirically explore how competing discourses play out in practice in one of the pioneering nations promoting the Blue Economy – the Republic of Seychelles. Aiming to complement previous critical work, we assess how "the ether of the Blue Economy touches [the] ground" (Choi 2017: 40), through exploring how local practitioners experience and participate in the drive towards a manageable 'ocean sector', how the materialization of the Blue Economy is conceptualized and felt, and how local actors provide resistance/offer counter-narratives.

Policy context

Seychelles has embraced the Blue Economy enthusiastically, positioning itself as a leader for Africa and small island states in general. Driven forward by the leadership of its former president, in 2015 Seychelles established a Department for Blue Economy (Seychelles Nation 2015). Through a debt-for-nature swap and the creation of the Seychelles Conservation and Climate Change Adaptation Trust (SeyCCAT), Seychelles has begun to translate the Blue Economy message into practice (Seychelles State House 2015; Silver and Campbell 2018). In many ways, the debt swap, and a consequent obligation to put 30% of Seychelles' EEZ under protection, has enabled the materialization of the Blue Economy. For example, a Marine Spatial Planning (MSP) exercise is currently underway, using geographical information systems (GIS) methods to map and describe the different uses and thus define the zonation of Seychelles' EEZ into zones of high

biodiversity protection (15% of the EEZ), medium biodiversity protection and sustainable use (15% of the EEZ), and multiple use areas (70% of the EEZ) (Seychelles Marine Spatial Planning Initiative 2014; Seychelles Government *et al.* 2017). Through the formation of a 'Blue Grants Fund' – established in conjunction with the debt for nature swap – SeyCCAT is now disbursing money through a competitive proposals process, thereby influencing the way in which funds are distributed across Seychelles under the objective "supporting the development of the Seychelles' Blue Economy" (The Seychelles Conservation and Climate Adaptation Trust 2019: 1). The Blue Economy brings together directed public management that is based on use value (the MSP) and private accumulation of capital (through the Blue Bonds). The focus on use value and private capital creates conditions that can contribute to the economization of the ocean, whereby an agenda of economic growth subsumes environmental and equity concerns (Steinberg and Kristoffersen 2018).

The Government of Seychelles emphasizes the importance of oceans for local economies and livelihoods, as in the "Oceans as livelihoods" and "Oceans as integral to SIDS" perspectives on the Blue Economy (Michel 2015). Despite having graduated from a developing state into a high-income country, Seychelles remains environmentally and economically vulnerable. It is geographically isolated, at risk from sea level rise and coastal inundation, and has an economy that relies heavily on two sectors, fishing and tourism, which are vulnerable to external shocks (Amla 2015). Furthermore, being classified as a high-income country now, Seychelles is no longer eligible for many aid projects. The combination of these factors might help explain why Seychelles has embraced the Blue Economy so vigorously, presenting itself as a pioneer not only to other island states, but also to international donors that are committed to environmental and climate change concerns. Indeed it has been argued that "the [debt] Swap is a product of, and inseparable from, a much longer geopolitical and political-economic history of SIDS, economic globalisation, debt and 'sustainable development'" (Silver and Campbell 2018: 2).

2. Methods

We developed a mixed methods approach that integrates qualitative interviews, Q-methodology, and social network analysis, to investigate Blue Economy-influenced environmental policy making in Seychelles. This is to:

a) establish how policy makers and practitioners in Seychelles perceive the Blue Economy;
b) determine who and what perspectives are influencing the Blue Economy in practice;
c) evaluate who stands to gain or lose out.

Data collection took place between March 2017 and March 2018 and involved four stages:

1) initial face-to-face open-ended interviews;
2) structured online Q-method surveys;
3) structured online social network survey, and
4) follow-up face-to-face open-ended interviews.

Actors in Seychelles' Blue Economy

We are interested in exploring the perspectives of environmental policy makers and practitioners involved in the enactment of the Blue Economy in Seychelles. The Marine Spatial Plan has been the centerpiece of the Blue Economy in Seychelles (Seychelles Government *et al.* 2017). Forty organizations were identified by the Seychelles Government as relevant to the Blue Economy and included in Seychelles MSP process. We managed to obtain contact details for 29 of these organizations and approached these for interview and asked them to complete our surveys. We added additional interviews and surveys as new organizations were mentioned in the initial interviews (Table 1). Respondents were considered representatives of their organizations, and thus key actors in the Seychelles Blue Economy. We conducted 18 initial interviews (45% of the organizations from in the MSP) across the four main sectors involved in the Blue Economy (Fisheries, Conservation, Economic Development, and Blue Economy). The social network survey

was completed by 18 organizations, the Q-method by 12, and follow up interviews conducted with 11 (Table 1).

Perspectives on the Blue Economy in Seychelles

We followed a Q methodology to establish how policy makers and practitioners in Seychelles perceive the Blue Economy. Q methodology combines quantitative and qualitative techniques to understand values and perspectives of various actors (McKeown and Thomas 1988; Watts and Stenner 2005; Zabala, Sandbrook and Mukherjee 2018). Q methodology does not aim for a representative sample, since as opposed to "R methodology" it is not concerned with the prevalence of opinions in populations (Zabala, Sandbrook and Mukherjee 2018), and therefore large and random samples are not required (McKeown and Thomas 1988).

The Q-methodology approach we followed was based on Zabala, Sandbrook and Mukherjee (2018) and involved three broad steps. **First** we used a snowballing sampling approach to identify actors involved in, and documents relevant to, policy and practice around the Blue Economy in Seychelles to extract a set of statements that reflect an entire spectrum of opinions. We conducted 18 initial face-to-face interviews with actors involved in the Blue Economy in Seychelles, in which we explored the work their organizations were involved in, if respondents mentioned the Blue Economy, they were asked to elaborate on the opportunities and challenges it raised for them. All respondents mentioned it. These interviews were combined with data extracted from official government documents on the Blue Economy, such as *The Blue Economy roadmap* and archives of the speeches from the former and current President, classified under 'Blue Economy' in the Seychelles State House online archives. We used the interviews and document analysis (so-called naturalistic samples) (McKeown and Thomas 1988) to extract statements reflecting the range of perspectives on the Blue Economy present in Seychelles. These were inductively coded under five emergent themes: Conservation, Culture and Identity, Economy, Equity, and Rhetoric. The coded statements were then organized into a comprehensive list of statements (a concourse) that reflects the entire spectrum of opinions about the Blue Economy, as expressed by the respondents and in official documents (Zabala, Sandbrook and Mukherjee 2018). We reduced the concourse to 32, by removing repetitive statements, and these reflected opinions on: Conservation (6 statements), Culture and Identity (5), Economy (10), Equity (8), and Rhetoric (3). Choosing 32 representative statements allowed for a symmetrical Q-sort for respondents to complete (Zabala, Sandbrook and Mukherjee 2018).

Second, all initial interviews, and an additional 11 individuals representing organizations in the BE, were asked, via an anonymized online survey, to rank the 32 selected statements following a Q methodology whereby respondents organize statements into categories of 'agree', 'neutral', and 'disagree'. The 12 respondents span the broad range of sectors involved in the Blue Economy (Fisheries, Conservation, Economic Development, Blue Economy-specific), although there was only one respondent from both fisheries and tourism/economic development. In the first part of the Q-survey, respondents were free to allocate as many statements to each category as they desired. In the second part of the ranking exercise, respondents had to follow the forced distribution that is characteristic for Q methodology (McKeown and Thomas 1988; Zabala, Sandbrook and Mukherjee 2018). This forced distribution (shown in Figure 1) made sure that respondents rank statements relative to each other, as well as forcing respondents to make difficult decisions.

Figure 1: Ranking grid.

Analysis

To specify a discrete set of perspectives, we analyzed responses to the Q exercise using a principal component analysis with a varimax rotation in the R package qmethod (Zabala 2014). The number of factors to be extracted was determined using the scree plot, the eigenvalues, and informed by prior knowledge (McKeown and Thomas 1988). Four factors were chosen in the initial solution; however, factors 3 and 4 were similar in nature because they loaded on the same statements. We therefore re-ran the analysis, this time choosing a solution with 3 factors, which was also supported as a potential solution by the scree plot and eigenvalues larger than 1 (McKeown and Thomas 1988). One respondent was not flagged for any one of the factors. After identifying the factors, the three perspectives were interpreted together with the interviews to characterize each perspective and identify differences.

Finally, we returned to Seychelles to explore and validate our characterization of the emergent perspectives. We conducted follow-up interviews with 11 individuals from different organizations involved in the Blue Economy in Seychelles. Of these 11 respondents, 5 had participated in the initial interviews and the complete online survey (consisting of both the social network survey and Q methodology ranking exercise), 3 respondents had taken part in the initial interviews and the social network survey, one respondent had only completed the social network survey, and two were new respondents that served as expert interviews. The additional respondents also served to add fisheries and economic development perspectives; sectors that had lower representation in the previous stage. These interviews thus served to sense check and validate the Blue Economy perspectives found with the Q methodology.

Type of organization	Number of organizations in MSP	Initial interviews	Invited for both surveys	Social network survey	Q-method survey	Follow-up interviews
Fisheries	12	4	4	3	1	3
Economic Development & Tourism	12	3	5	2	1	2
Conservation & Environment	14	7	13	8	7	1
Blue Economy	2	4	7	5	3	5
TOTALS	**40**	**18**	**29**	**18**	**12**	**11**

Table 1: Actors involved in Seychelles Blue Economy, interviewed and surveyed in this study.

Who or what perspectives are influencing the Blue Economy in Seychelles?

Information, resources, and ideas tend to spread through formal and informal networks. Actors, based on their position, can thus exert a greater or lesser influence over how information, resources, and ideas spread through a network (Evans *et al.* 2017; Rogers 2010). By examining actors and their relative positions in a network, processes around power and influence can be explored (Freeman 1977), especially where actors are diverse and have potentially different views on environmental governance strategies such as the Blue Economy. We used network analysis to examine how actors, involved in the Blue Economy but with differing perspectives, share information and resources, and how influential this sharing of information and resources is perceived to be.

Actors identified as involved in Seychelles' Blue Economy were presented, via an anonymized online survey, with a list of organizations (from the MSP plus any other Seychellois or outside organizations that were mentioned in the initial interviews) and asked, in the context of their work in the Blue Economy, which organizations they 1) provide with information; 2) receive information from; 3) provide with resources, and;

4) receive resources from. Respondents were subsequently asked *how often* they share this information and resources, and *how influential* this information and resource sharing is in their work. All respondents had the opportunity to include additional organizations not specified in the list. In total, 18 respondents completed this part of the survey.

Further analysis

We created relational matrices based on reported information and resource-sharing ties to calculate how influential, based on their position in the network, the individual actors are, and plotted these relationships in CytoScape (Shannon *et al*. 2003). Specifically, we used a 'betweenness centrality' metric that calculates the number of times an actor (node) is on the shortest path between two other actors (nodes). When an actor (node) is on the shortest path between two other actors (nodes), they can be thought of as influential in connecting these actors to each other. Betweenness centrality thus provides insight into the capacity of an actor to connect groups that are otherwise distinct (Freeman 1977; Mbaru and Barnes 2017). In the case of information and resources flowing, actors that have high measures of betweenness centrality can be said to be important in transferring information or resources between others, or to act as brokers (Borgatti, Snijders and Wolfe 1998; Butts 2008; Freeman 1977).

We used the 11 follow-up face-to-face interviews to discuss the information and resource sharing network; explore and validate influential connections between actors; and to identify sources of contestation or conflict. These interviews further served to triangulate and validate the influence of individual actors as indicated by their betweenness centrality and the flows of information and resources. We presented the networks to the 11 respondents and asked if the network data accurately represented flows of information and resources in Seychelles, and how influential the flows and actors are.

We interpreted the flows of information and resources in the context of the Blue Economy perspectives found in Seychelles, in order to gain insight into the distribution and influence of these perspectives across the network of actors involved in the country's Blue Economy. By combining the perspectives with the analysis of influence through betweenness centrality, we were able to identify what perspectives the most influential actors hold. This helped us to answer the question of how influential the different perspectives are in the network of actors involved in the Blue Economy in Seychelles.

3. Results and Discussion

Perspectives on the Blue Economy in Seychelles

The Q method provides evidence of at least three different perspectives amongst national policy practitioners in Seychelles.[2] The perspectives identified are: *supportive in principle, critical in practice*; *pragmatic and accepting*; and *idealistic*.

Supportive in principle, critical in practice

Three actors from Blue Economy-specific organizations, one fisheries organization, and three conservation and environment organizations loaded on this factor. This perspective was characterized by a critical attitude towards the Blue Economy in practice, but not in principle as conservation linked to development. This is expressed in their recognition that 'conservation is a hard sell', and resignation that 'the only way to sell it [conservation] is through sustainable development' (29**, +2, Table 3).

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[2] Table 1 shows the statement Z-scores and the normalized scores for each statement. In the discussion of the perspectives, numbers represent the statement numbers that are distinguishing that particular factor, followed by the normalized score. An asterisk is included in the text when the statement distinguishes a factor/perspective significantly from the other factor(s)/perspectives (* means p = 0.05, ** means p = 0.01). Qualitative interview data are reported as "I-#", with # denoting the interview that is the source of the data. This reporting method follows recommendations from Zabala, Sandbrook and Mukherjee (2018) and examples from Holmes, Sandbrook and Fisher (2017) and Fisher and Brown (2015).

If we want to keep on doing conservation, we have to rebrand it as something much more relevant to the economy, or else it would die on its own.   [I-11]

Although this group strongly reject 'financial reasons for environmental protection' (2, -3, Table 3), they also accept that 'economic growth afforded by oil and gas exploration can be used to advance sustainable development whilst meeting environmental challenges created through these activities' (25*, +2, Table 3). However, the respondents are concerned with how the Blue Economy in Seychelles is currently proceeding. They view the motivation behind the Blue Economy as 'Seychelles running away from debt, rather than moving towards better protection of the ocean' (21*, +3, Table 3), particularly as they do not see 'protection and recovery of ecosystems as a priority' in the Blue Economy (5**, -3, Table 1). Overall, this perspective sees the potential for the economy to work for the environment in Seychelles, but is aware of key tensions that exist in practice. This is expressed in their acceptance of trade-offs between economy and environment, combined with pessimism about the motivation of Blue Economy actions such as the debt-for-nature swap and a perceived lack of attention for protection and recovery of ecosystems:

[The Blue Economy is about] income, money (…). It's not about how we are going to protect [the environment], [or] how we get equality, that's what I am saying.   [I-05]

This indicates that those that pioneered the Blue Economy in Seychelles – the specific Blue Economy institutions and organizations – are now amongst those showing resistance against the practical implementation of the concept, and would like to see changes, not in the least in the way they have been involved:

So many people, I will say it openly, that so many people involved in the field, in the subject, we were put aside a bit too much. And then all of a sudden the Blue Economy happened, with a new group, and it was a bit disturbing to many people. [I-02]

Pragmatic and accepting

Three actors, all three working in the conservation and environment sector, were characterized by a less critical and more pragmatic attitude towards the Blue Economy in practice and the role it can play in conservation. They believe that the 'preservation of Seychelles' unique and pristine marine environment is core to the transition to a Blue Economy' (22**, +2, Table 3), which shows their belief in a conservation focus:

The Blue Economy is meant to give a better quality of life to people. So that means more money their hands, living better. But by protecting the environment.   [I-09]

They also think that 'economic growth afforded by oil and gas exploration can advance sustainable development whilst meeting environmental challenges created through these activities' (25**, +3, Table 1), which highlights their belief in the development side of the Blue Economy. However, this perspective also disagrees relatively strongly that 'working with economic sectors (including fisheries) is the best way to do conservation' (13*, -3, Table 3). Overall, this perspective is characterized by an optimistic view that the economy can work for the environment. Economic growth is regarded as a way to advance conservation – not by 'mainstreaming it into the economy' (17**, -2, Table 1), but by transferring funds. The Blue Economy is seen as a mechanism to generate this funding:

If you can generate revenue or income from the Blue Economy for the environment, at one point they [actors] can say it can be diverted towards them also.   [I-05]

In expressing this perspective, actors align with the "Oceans as natural capital" perspective, but also with "Oceans as livelihoods", as indicated by their emphasis on sustainable development. Additionally, they express a pragmatic approach to the Blue Economy as a rhetorical tool – they agree to an extent it is a different word for business-as-usual (Table 1, statement 7). Some even report using the term with no real foundation:

> Even my [policy document] talks about the Blue Economy, but if somebody comes and does a mid-term review and asks me what have you with the Blue Economy, I would have to scratch my head and say I'll get back to you. And then I have to go and see what we have done and try and get a link with the Blue Economy, stretch it to the limit.   [I-06]

Idealistic

The final perspective, conveyed by an actor that works for an international development organization, represents an idealistic view of the Blue Economy and thinks that 'Seychellois are well placed to be the greatest of activists for the Blue Economy' (1**, +3, Table 1), and it is the only perspective that agrees that 'the environment should be mainstreamed into the economy' (17**, +3, Table 1). However, they do not believe that this mainstreaming should happen through moving into a market economy and fostering entrepreneurship – they do not believe this is the way to make the Blue Economy successful (31*, -2, Table 1). This perspective is the only one that quite strongly believes that the 'Blue Economy is fundamentally about social inclusion' (10, +2, Table 1). Therefore, the idealistic perspective seems to favor inclusion of the environment in the economy, but through government actions rather than leaving it to the market economy. This perspective points to tensions between neoliberal approaches to environmental governance and the socialist history of Seychelles (Scarr 2000). In contrast to the other two perspectives that consider 'it is wrong to have financial reasons for environmental protection', the Idealistic perspective is neutral about this (2*, 0, Table 3):

> I think the only way you will be able to protect [the environment] is through increasing your income, having more resources to protect.   [I-06]

This perspective disagrees strongly that the 'Blue Economy does *not* make a difference on the ground' (15**, -3, Table 1). This perspective is the only one that disagrees that 'economic growth from oil and gas activities can advance sustainable development and meet environmental challenges caused by it' (25**, -1, Table 1). Furthermore, it feels strongly that 'the Blue Economy does not have enough attention for the effects of its policies on livelihoods' (6, +2, Table 1):

> If we need to cut down a bit on the export of fish, let's do it. Let's do it, let's find alternative ways. Because a lot of the demersal fishing should be for domestic consumption, but a lot of it is being exported.   [I-06]

There is idealism about the Blue Economy, in a narrow definition that does not include oil and gas exploration, and with a strong role for government. It also is the only perspective that reflects livelihoods and engagement, as included in the official definition of Seychelles for the Blue Economy: "those economic activities that directly or indirectly take place in the ocean, use outputs from the ocean, and put goods and services into ocean's activities and the contribution of those activities to economic growth, **social, cultural** and environmental wellbeing" (Seychelles Ministry of Finance Trade and the Blue Economy 2015: 2, emphasis added). In doing so, this perspective is more closely aligned with the perspective of "Oceans as livelihoods" as adopted in Seychelles government communications. It also aligns with the "Oceans as integral to SIDS" perspective, when it champions Seychellois as able to be 'the greatest of activists for the Blue Economy' (Table 1, statement 1**).

There is surprising agreement (given the variety of backgrounds) between the actors involved in the Seychelles Blue Economy policy landscape, with seven of the eleven actors sharing the same perspective. Furthermore, all three identified perspectives engage with the "Oceans as natural capital" perspective as identified by Silver *et al*. (2015) and Voyer *et al*. (2018), exemplified by all actors subscribing to the need to express the importance of ocean resources. However, all three perspectives reject outright the notion of 'putting a price on nature' (Table 3, statement 9), which for some is a logical consequence of the "Oceans as natural capital" perspective as expressed in international discourse (e.g. WWF and the Boston Consulting Group value 'ocean assets' at US$24 trillion (Hoegh-Guldberg *et al*. 2015)). However, "Oceans as natural capital" is not the same as having financial reasons for environmental protection, something that is clearly articulated by most of the respondents who agree strongly that having financial reasons is wrong (Table 1, statement 2).

This points to tensions within this natural capital perspective on the Blue Economy as well as between different proponents of this view. International discourse marries a perceived need to express the importance of nature in economic terms with pricing nature through valuation of ecosystem services, for example – how could nature become part of the equation otherwise? Despite many NGOs never intending nature to be commodified or financialized (Dempsey 2016), as discussed above, for some, this might seem a consequence of the natural capital view. By rejecting efforts to place an economic value on nature, Seychelles is critical of the 'selling nature to save it' maxim (McAfee 1999) and distances itself from the mainstream "Oceans as natural capital" perspective. This points to an alignment with academic critique on the concept coming from policy and practice.

An important cause of this critical stance might be the difference between the abstract level at which the Blue Economy is discussed in international discourse, at conferences and within other international fora, and the reality of the work on the ground to implement it. Whereas internationally, each of the perspectives identified in the Blue Economy discourse is accepting of the 'triple bottom line' (environment, social, and economic progress), this is less so in Seychelles. The different international perspectives bring to the fore different aspects of the triple bottom line objective without much consideration of potentially conflicting priorities (Silver *et al*. 2015; Voyer *et al*. 2018). Whilst this facilitates communication and collaboration, the presence of multiple competing priorities means that tough choices are required. In Seychelles, proponents of Factor 1 express concern about the balance of the three pillars, and worry about trade-offs. The second factor is much more optimistic about win-win-win situations, whereas the third factor seems to share the idealistic view often expressed in international fora.

Despite actors in Seychelles expressing views that partially overlap with internationally identified discourse and perspectives on the Blue Economy, there are many differences, likely caused by a more practical approach to the concept. Additionally, perspectives similar to "Oceans as good business" and "Oceans as drivers of innovation" do not emerge in Seychelles (Table 3). This means that firstly, Seychelles has its own specific interpretation of the Blue Economy, and secondly, a large part of the scientific discourse about the Blue Economy does not directly apply to Seychelles. Indeed, some international perspectives on the Blue Economy are met with resistance, for example to the statement that says: 'moving into a market economy and fostering entrepreneurship will make the Blue Economy a success' (Table 1, statement 31). When combined with a network analysis of actors in Seychelles, it becomes apparent that the most influential actors in the information network have a *supportive in principle, critical in practice* perspective on the Blue Economy (Figure 2). These actors are influential in the network of resources as well, however in this network a *pragmatic and accepting* perspective is more influential than in the information network, indicating a restrained influence of the more critical actor, limiting their role in initiating change (Figure 3).

Seychelles has embraced the Blue Economy as a concept and has presented itself as a pioneer, which has provided the country with opportunities for shaping the concept. All three perspectives are slightly positive or neutral on the view that the Blue Economy helped Seychelles to establish their national identity (statement 4, scores: +1, +1, 0 (Table 3)). This optimism might explain the converging thoughts on the way in which the Blue Economy is seen: all respondents can be broadly categorized as supportive of the "Oceans as natural capital" view, but either see the Blue Economy as 'economy *for* the environment' or 'economy *and* the environment.' The Blue Economy signals acceptance that environmental and economic outcomes are linked.

However, there are differences of opinion in whether the relationship between the economy and environment can be mutually beneficial (economy *for* the environment), or comprise separate policy realms to be pursued simultaneously (economy *and* the environment (Adams *et al.* 2004). To develop effective and equitable policy, clarity and transparency must exist in how organizations view these relationships. All respondents see Seychelles as an actor that can set the agenda, and they agree that that 'financing conservation with money from abroad means a loss of sovereignty' (statement 14, scores: +2, +3, +2 (Table 3)). This shows the desire for Seychelles to steer the Blue Economy locally. It has been able to do so, for example through the debt-for-nature swap that was finalized in 2015 and which was presented by Seychelles in the context of SIDS EEZs as a new frontier – a way of framing that attracts attention from NGOs, but also investors (Silver and Campbell 2018).

Despite broad agreement and a position in international debate, we have highlighted the divergent perspectives that exist among key Blue Economy actors in the country. There is a technical caveat to the three distinct perspectives we identified. Although it is generally recommended to only consider factors on which at least two respondents are loading (because Q methodology focuses on shared perspectives rather than individual views), when there is a theoretical or practical justification, using a factor with only one *exemplar* can be justified (McKeown and Thomas 1988; Watts and Stenner 2005). We believe this is the case here: only one respondent loaded on factor 3, yet this view was kept as a separate perspective. The reason for keeping 3 factors is that the respondent loading on factor 3 was the only representation of the economic development and tourism sector in the Q methodology survey. Moreover, this respondent loaded strongly on factor 3 (Table 2) and not significantly on either of the other two factors when reducing the number of factors to 2. Eliciting more development perspectives on the Blue Economy in Seychelles is needed – perspectives that are lacking both because of underrepresentation in the sample, but also because of non-response.

Q-sort factor loadings			
Respondent	*Factor 1*	*Factor 2*	*Factor 3*
Blue Economy 1	**0.786**	0.084	0.184
Conservation & Environment 1	0.444	**0.615**	0.336
Blue Economy 2	**0.584**	0.066	0.068
Conservation & Environment 2	-0.088	**0.803**	0.162
Economic Development & Tourism 1	0.047	-0.035	**0.866**
Conservation & Environment 3	0.285	**0.742**	-0.202
Fisheries 1	**0.497**	0.276	-0.067
Blue Economy 3	**0.621**	0.343	0.095
Conservation & Environment 4	**0.611**	0.138	0.522
Conservation & Environment 5	**0.843**	0.019	0.115
Conservation & Environment 6	0.358	0.57	0.503
Conservation & Environment 7	**0.791**	0.182	-0.141

Table 2: Q-sort factor loadings per respondent.

All actors representing Blue Economy-specific organizations (organizations that were either founded as a result of the Blue Economy agenda or have it as the focus of their work) expressed a *supportive in principle, critical in practice* stance. In addition, there are three actors from the conservation and environment sector that share this perspective. The other three actors from the conservation and environment sector load on the second perspective and are therefore more pragmatic and accepting of the Blue Economy. It is perhaps understandable that some of the organizations from the conservation and environment sector were happy with

how the Blue Economy is playing out in practice, since they might stand to gain from its practical implementation. Benefits might include increased awareness, funds, or recognition. For example, the Blue Grants Fund, which is disbursing grants to projects that "support the stewardship of Seychelles' ocean resources, island life and blue economy" (The Seychelles Conservation and Climate Adaptation Trust 2019) has in its first two rounds predominantly funded organizations and individuals working on conservation projects.

Statement number		Factor 1		Factor 2		Factor 3		
		Z	norm	Z	norm	Z	norm	Dist. and cons
1	Seychellois are well placed to be the greatest of activists for the Blue Economy.	-0.82	-1	-0.17	0	1.87**	3**	f3
2	It is wrong to have financial reasons for environmental protection, as within the Marine Spatial Plan and the debt-for-nature swap.	1.72	3	1.23	2	0*	0*	f3
3	Money is often dictating Blue Economy policies.	-0.08	0	-1.80*	-3*	-0.62	-1	f2
4	The Blue Economy has helped Seychelles establish the national identity. It is the Seychellois way of managing the environment.	0.6	1	0.64	1	0	0	cons
5	Protection and recovery of ocean ecosystems and biodiversity are a priority in the Blue Economy.	-2.32**	-3**	0.90	1	0.62	1	f1
6	The Blue Economy does not have enough attention for the effects of its policies on livelihoods.	0.48	1	-0.74**	-1**	1.24	2	f2
7	The Blue Economy just gives a different name to what is "business-as-usual".	0.52	1	1.17	2	0	0	
8	The Blue Economy makes optimal use of the untapped potential of our oceans.	-0.42	-1	-0.27	-1	0.62	1	
9	By expressing the importance of nature in economic terms,	-0.98	-2	-1.23	-2	-1.87	-3	cons

	people will think more about the consequences of acting upon nature.						
10	The Blue Economy is fundamentally about social inclusion.	-0.69**	-1**	0.33	0	1.24	2	f1
11	The Blue Economy fails to take into account the cultural importance of fisheries in Seychelles.	1.29	2	0.43	1	0.62	1	
12	Fishers have a disproportionately large voice in the Blue Economy, compared to their economic contribution.	0.42**	1**	-0.84	-1	-1.24	-2	f1
13	The best way to do conservation is to work together with the different economic sectors and try to get closer with the fisheries and tourism industry.	-0.86	-2	-1.66*	-3*	-0.62	-1	f2
14	Financing conservation with money from abroad means a loss of sovereignty.	1.59	2	1.86	3	1.24	2	cons
15	The Blue Economy is good PR - it has put Seychelles on the international agenda. But it does not really make a difference on the ground.	0.11	0	0.75	1	-1.87**	-3**	f3
16	The open market economy gives the public an opportunity to become stakeholders and thereby be involved in Blue Economy initiatives.	-0.46*	-1*	0.21	0	0.62	1	f1
17	The environment should be mainstreamed more into the economy and general policy making.	-0.64*	-1*	-1.33**	-2**	1.87**	3**	f1,f2,f3
18	Sustainable development is the new generation of conservation.	0.2	0	-0.64	-1	0	0	

19	The Blue Economy and related initiatives are helping stakeholders to get their voices heard.	-0.16	0	-0.06	0	0.62	1	cons
20	The Blue Economy should give more recognition to fishers, in correspondence with their importance for the economy of Seychelles.	0.35	0	0.00	0	-0.62	-1	
21	With the Blue Economy concept and the debt-for-nature swap, Seychelles is running away from debt, rather than moving towards better protection of the oceans.	1.62*	3*	0.90	1	0	0	f1
22	The preservation of our unique and pristine marine environment is core to the transition to a Blue Economy.	-2	-3	1.22**	2**	-1.24	-2	f2
23	Local communities are not represented enough in the Blue Economy.	-0.3	0	-0.05	0	0.62	1	cons
24	The goal of the Blue Economy is to make sure the ocean is utilized for the economy.	0.48	1	0.42	0	1.24	2	cons
25	The economic growth afforded by hydrocarbon (oil and gas) exploration and mariculture can be used to advance sustainable development while meeting environmental challenges created through such activities.	1.23*	2*	1.91**	3**	-0.62**	-1**	f1,f2,f3
26	When it comes to promoting behavioral change, we should be tapping into the intrinsic values that people hold for nature, rather than purely economic values.	-1.1	-2	-0.86	-1	-0.62	-1	cons

27	The Blue Economy banner is a leverage tool for Seychelles in international fora. It gives Seychelles a disproportionally large voice and works well for receiving funding.	-0.53	-1	-0.97	-2	0	0	cons
28	The Blue Economy can provide some much-needed coordination between different organizations and stakeholders related to the environment.	-1.01	-2	-1.49	-2	-1.24	-2	cons
29	Marine conservation is a hard sell. The only way to sell it is through development.	1.22*	2*	0.49**	1**	-0.62*	-1*	f1,f2,f3
30	Conservation is good, but we need to keep on the lookout in case the plans become tools to keep fishers away or it turns into land grabbing, like has happened in many other places.	1.01*	1*	-0.90	-1	0	0	f1
31	Moving into a market economy and fostering entrepreneurship will make the Blue Economy successful.	-0.19	0	-0.16	0	-1.24*	-2*	f3
32	The Blue Economy is trying to do too many things at the same time: it is about conservation, but also includes things that are in conflict with conservation.	-0.28	0	0.70	1	0	0	

Table 3: Statement Z-scores and normalized scores for each statement for each factor, with distinguishing and consensus statements indicated in the last row.

Networks of influence in the Seychelles' Blue Economy

There are clear differences between the information sharing network (Figure 2) and the resources sharing network (Figure 3) in the Seychelles' Blue Economy policy context. The influence of different actors, as captured in the flow of information or resources, tends to be more evenly distributed within the information network, where a higher number of actors were found, with a larger number of connections between them, and no single actor dominating. It is therefore likely that uneven power dynamics have less of an influence on the sharing of information. When it comes to the perspectives of the Blue Economy represented in the information-sharing network, a *supportive in principle, critical in practice* perspective tends to dominate. Conversely, within the resource sharing network, the *pragmatic and accepting* perspective is relatively more

influential. As noted above, critical perspectives challenging the Blue Economy have limited influence here. In addition, the resources network shows potential for conflicts and challenges, as there are a few influential actors, fewer flows between them, and a mixed point of view on the Blue Economy. The network structure points to more uneven power dynamics than is the case in the information network.

Using 'betweenness centrality' as a metric for influence in both networks (with node size representing betweenness in the network figures), Figure 2 shows that government organizations (identified by the dark green nodes), who expressed the *supportive in principle, critical in practice* perspective, are more influential in terms of controlling information. This is unsurprising given their central role. But they are are not entirely happy with the practical outcomes of Blue Economy-inspired initiatives. Non-government actors (represented by the light green nodes) are also critical. The most influential actor (depicted by the largest node and 'betweenness metric') in the information network is a non-government organization ('betweenness centrality' 0.055, Figure 2). The second and third most influential are governmental organizations (betweenness centrality 0.034 and 0.026, respectively, Figure 2). All these actors represent a "Supportive in principle, critical in practice" perspective and have the ability to drive this change through their influential positions in the network.

The only government organization that represents a pragmatic perspective is far more influential in the resources sharing network compared to the information network (betweenness centrality 0.045, Figure 3). Whereas the information network only shows small "Pragmatic" nodes, the only government organization that represents a pragmatic perspective is far more influential in the resources sharing network (betweenness centrality 0.045, Figure 3). This greater relative influence of the government actor with a pragmatic perspective may suggest inertia in leveraging change. Whilst there is still potential for change and further development of the concept in the resources network, this potential might be limited due to restrained resources and therefore influence of the critical actors. However, the largest and therefore most influential actor in the resources network is still a critical government actor (betweenness 0.055, Figure 3); therefore, the room for change is still there.

The organizations at the periphery of both networks are mostly non-government organizations, denoting a lower influence and less central position than the predominantly government organizations that are influential and central to the network.
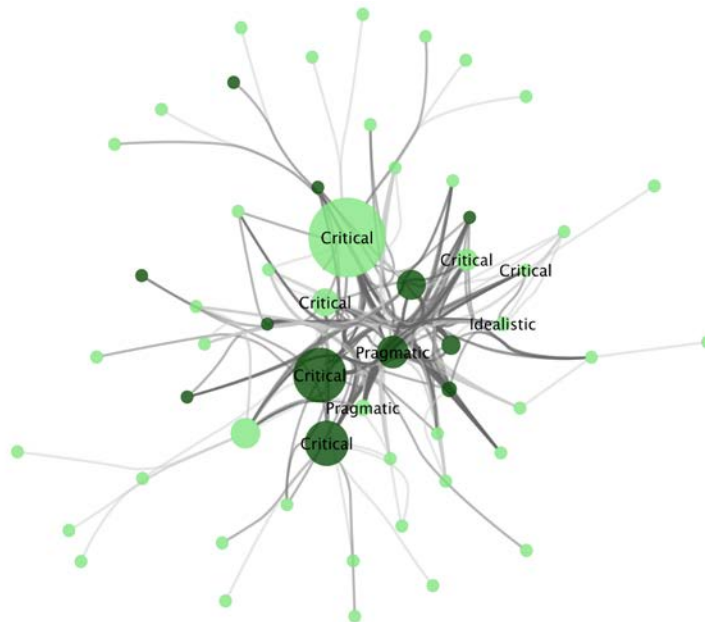

Figure 2: Information network showing the sharing of information between actors involved in Seychelles Blue Economy. Node sizes represent 'betweenness centrality' of actors (larger nodes have higher 'betweenness centrality'). Node colors represent organization type (dark green = government, light green = non-government).
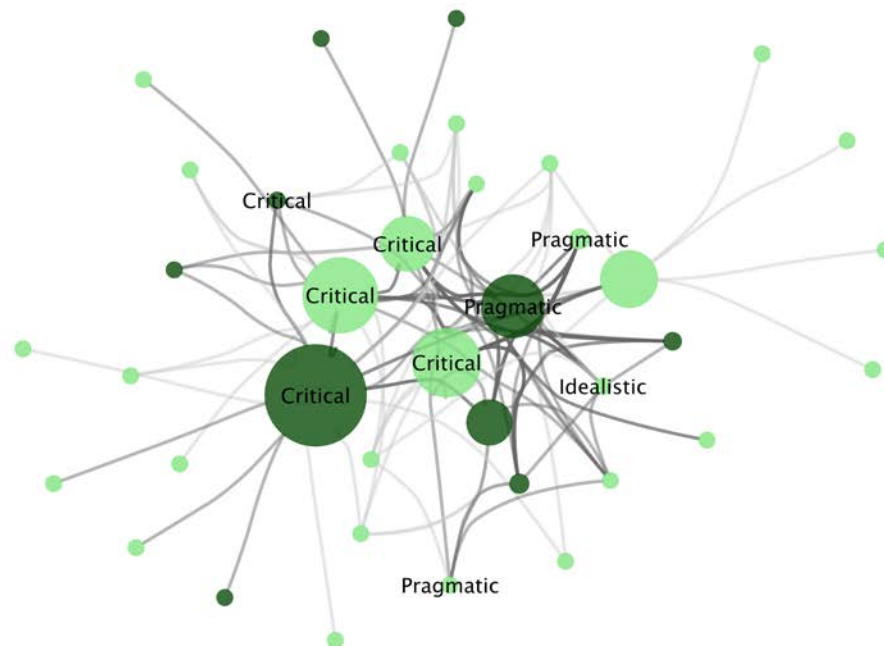
Figure 3: Resources network showing the sharing of resources (staff, equipment, money) between actors involved in Seychelles Blue Economy. Node sizes represent betweenness centrality of actors (larger nodes have higher betweenness centrality). Node colors represent organization type (dark green = government, light green = non-government).

Shaping the future of the Blue Economy in Seychelles

The analysis shows that in Seychelles there are still different perspectives on both the practical application and the underlying ideas of the Blue Economy. This might be due to the acceptance of the concept as a reality in the national environment governance seascape that must be worked with, even if the added benefit is not always clear, as indicated by one respondent:

We inherited this now. We have to make it work. You see what I mean? But then the people stepping at us say: why the Blue Economy? What's new? We have always been a Blue Economy, we have always been ocean-oriented: fishing, sailing, tourism. What's new? So there is (*sic*) people still looking for the new. And then, that's the problem about being the new, then they are trying to re-invent something to make it new. Then they say: Blue Economy is more than that.   [I-10]

The organizations that are critical of the Blue Economy in practice, be they government or non-government actors, are influential in both the information and the resources network. This means two things: the implementation of the Blue Economy is experiencing resistance from within, and from powerful actors; and Seychelles is putting its own mark on the Blue Economy by taking a perspective that is distinct from the international discourse. The international discourse, despite having conflicting views, does not have much to say on the possible discrepancy between Blue Economy in *theory*, and Blue Economy in *practice*. Seychelles, being one of the first countries to implement the Blue Economy, has experienced discrepancies in practice, not just between different interpretations of the concept, but also between the concept and its implementation.

The answer to the third research question posed in the article, who stands to gain or lose out from the Blue Economy, depends on its local meaning and who and what perspectives are driving it in practice. Environmental organizations voice some support, perhaps anticipating increased funding and/or continuation

of their activities through strategic use of the "buzzword" in their funding applications and other documents. The country's Blue Economy was introduced by the former President James Michel whose party was in power for twelve years, first in a one-party state and later in a multi-party arrangement in which it was dominant. Some identify the concept with this regime. A new party has gained power in parliament (but not in the Presidency), and this change of regime adds another layer of complication to the practical implementation of the concept:

> It didn't help that the new president didn't talk about Blue Economy in his first year of office, now he is starting to articulate it more so we might start to see a real focus on it again, but…
> [I-01]

> There is a potential risk to the Blue Economy's longevity in Seychelles, with various transition phases that are going on, so it might be something that is not on a upwards development curve…   [I-04]

It will be key for Seychelles to retain its autonomy in the emerging Blue Economy: and this is something that all actors felt strongly about: they agreed with the statement that financing marine conservation with money from abroad means a loss of sovereignty. This also came up in the follow-up interviews as well, when discussing the role of international funding bodies such as the World Bank and the UN:

> What worries me is that they [international funding organizations] will come and push this agenda, and since it [conservation activities/the Blue Economy] is still supply driven, the people in the Ministry of Finance or the Blue Economy Department will just take it. And it shouldn't be that way.   [I-06]

This shows some resistance to "driving an expansion of capitalist space to the oceans" as Choi found (Choi 2017: 39), in which a new "operative rationale" opens up new "governable spaces."

Framing ocean governance as the optimal configuration of ocean uses (thereby depoliticizing the ocean itself) can pave the way for state intervention. This framing has been used before to justify a combined use of public management and private accumulation (Steinberg and Kristoffersen 2018), and it sits uncomfortably with actors in Seychelles. With a historically strong state and sensitivities around the former President who pioneered the concept, the Blue Economy in Seychelles has always been politicized. Moreover, the country has a socialist history and its recent transition, under IMF guidance, from an "interventionist" economy to a "stable and private sector led" economy (International Monetary Fund 2013:1), means that the use of blended finance and the role of the state in driving this expansion of capitalist space both create discomfort. The concern for maintaining sovereignty over how oceans are represented and used might appear paradoxical. Since the Blue Economy is a form governmentality (potentially leaving room for 'interventionism') it is unsurprising to find private businesses, NGOs, and other international organizations involved in its delivery.

Although some concerns were raised in our research about attention to livelihoods, and levels of broader engagement, these concerns did not define any of the perspectives, and many responses are neutral, suggesting considerations of equity, identity, and engagement are largely lacking. The only perspective that has something to say about livelihoods, social inclusion, and equity, is the "Idealist" perspective, expressed by only one actor. Whereas this actor is idealistic about the Blue Economy and would like to see it go further on equity, other actors do not share this perspective. Moreover, the only actor that includes these considerations as important, in addition to being isolated, also has a very low influence in either the information or the resources network.

The fact that almost none of the respondents had a strong opinion about any of the statements relating to livelihoods, social inclusion, or equity, shows that at best, this is an overlooked issue within the Blue Economy in Seychelles. This mirrors findings by Steinberg and Kristoffersen (2018), who raise the issue that

concern for equity, purportedly taking a central position within the Blue Economy, is often subsumed in the quest for growth and accumulation. This might be explained by the fact that most of the actors in the Seychelles' Blue Economy are government actors, who, although critical, share similar views, leading to a one-sided debate. There is a lack of representation of more diverse actors, especially those representing livelihoods and communities; currently, government and environmental NGOs dominate the field:

> …the environment sector is very oversubscribed with NGOs, I think there are fourteen now registered in the environment sector here. When you look at other sectors, how many NGOs there are, you'll find two in tourism, you'll find one in fisheries. When you think about the scale of importance of that to the economy…   [I-04]

The lack of representation is reflected in the marine spatial planning process, which reportedly initially failed to include representatives from artisanal fishing, and once it did, not all felt that their voices were heard:

> I have participated in most of these MSP meetings and workshops, and this thing was a done deal, they wanted it through and sealed 2 years ago. We started making some noise and said it's not fair, we have participated, we've given information, and whenever they presented their draft zoning design, whatever we had said – it didn't show it, it wasn't reflected.   [I-03]

Through these developments, there is a risk of a breakdown of trust, between different actors, especially in a country as small as Seychelles, where interpersonal relationships can be affected in the course of policy-making. This also means that consideration must be given to actors 'outside' the networks presented here, and the extent to which these actors are able to exercise influence over the process. Considering most definitions of the Blue Economy contain the three pillars of sustainability (economic growth, environmental sustainability, and social equity), it seems that more attention to this aspect of the Blue Economy is warranted, and that there is a need for more diverse actors.

Finally, there seems to be a sense of urgency surrounding the Blue Economy, as observed by Silver *et al.* (2015) when they point out that there was "a sense of excitement regarding the heightened visibility of oceans at this summit and even among the global citizenry", and that "it may well be the early stage of a longer, power-laden process whereby one discourse about human–oceans relations […] will come to be seen as obvious or logical" (p. 152). This sense of urgency and excitement is also exemplified by Seychelles launching their Blue Bonds recently during the Our Ocean Summit, another 'world first', this time pushed forward by the World Bank and welcomed as investment opportunities by news outlets such as the *Financial Times*, *Business Times*, and Reuters (Allen 2018; Mehta 2018; Obulutsa 2018). However, as we saw earlier, this "Oceans as good business" perspective is not shared by any of the actors in the Seychelles policy-making landscape. This raises questions about who gets to decide what the obvious or logical discourse will be, and where that leaves people in small island states. As one respondent said:

> …we had to get the Commonwealth to help us define the Blue Economy, and we are the ones that are supposed to [know].   [I-10]

4. Conclusion

We have demonstrated a high level of support for the Blue Economy in Seychelles, both in principle and in practice. However, evident is a desire to shape it further, and for Seychellois to seize the opportunity to take control over both the process and the outcome. This view is shared by all actors across all three perspectives. Although there is broad agreement as to what the Blue Economy represents in Seychelles, important differences exist in its practical application. However, recognition of these differences and their associated incompatibilities is lacking across domains of national policy practice, and even within single perspectives. This lack of recognition of differences and incompatibilities of different interpretations of the

Blue Economy is not unique to Seychelles, and may indeed characterize this emerging policy arena (Silver *et al*. 2015).

What does it mean that there are un(der)acknowledged incompatibilities between different interpretations of the Blue Economy, both within and across scales (international discourse vs. the national policy level)? International discourse tends to sidestep this issue, but it gains relevance once applied in local settings. Moreover, it is on the local scale that tensions arise when attempting to bring ocean governance into a managerial realm. This attempt at depoliticizing ocean governance, together with optimism about the opportunities that the ocean frontier offers, does not engage with the realities of difficult trade-offs between winners and losers. This lack of concern for equity finds its origin in international discourse, but as demonstrated here it permeates into local policy settings as well. Space should be given to the question of what a just Blue Economy should look like, and who gets to decide on the answer to that question (Cohen *et al*. 2019). Future research must acknowledge the agency of SIDS and other countries that have adopted the Blue Economy by paying attention to the possible different interpretations of and perspectives on the concept, and to the role of power and influence in the adoption of these ideas.

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