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What do we talk about when we talk about integration: towards a differentiated view on integration and fragmentation in coastal and marine spatial planning

Patrick Berg Sørdahl¹

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Abstract

Bob Dylan once sang that he contained multitudes. So too does integration. More integrated planning of coasts and oceans has long been hailed as a goal and is seen as a pathway towards a more legitimate, cost-effective, equitable and sustainable planning of marine space. However, a reading of the literature indicates that many integration efforts have seemingly failed to reach their potential, and there is no clear understanding of what integration means or how we should best go about achieving it.

The paper claims that this uncertainty partially stems from a unnuanced and static treatment of the concept, and a lack of recognition of the multitudes of integration. The paper argues firstly that fragmentation should not uncritically be seen as the antithesis to integration and as a negative property to be avoided. Secondly, there needs to be greater recognition of both the varying degrees of integration and the contextually dependent necessity of different degrees of integration. Lastly, it is more fruitful to see the multitude of nodes in the expanding 'network of planning' not as fragmentation, but as differentiation. Such an approach allows us to see integration as a mean towards more sustainable planning of coastal and marine areas, not end in and of itself.

Keywords Marine spatial planning · Coastal zone planning · Integration · Fragmentation · Differentiation

Introduction

Integrated planning and management of coastal and marine areas have been put forward as a solution for a host of issues. A more integrated approach is thought to ensure more sustainable development and protection of marine resources (Forrest 2006), reduce overlapping and conflicting sectoral objectives (Kidd 2013), reduce democratic deficiency (Flannery and McAteer 2020), increase legitimacy (Saunders et al. 2019), and overcome conflicts and inefficiencies (Vince and Day 2020). Concepts such as 'integrated coastal area management' (ICAM), 'integrated coastal zone management' (ICZM) and, in the past decade, 'marine spatial planning' (MSP) have quickly made their way into both

Although there have been appeals for integration stretching back several decades, there is no agreed definition of what it entails, how it is best implemented in practice, or whether we are any closer to actually achieving it (Stephenson et al. 2019). According to Saunders et al. (2019), 'whilst integration has been universally adopted as a policy principle (...), there is confusion about what it means, how to do it and what it implies in different MSP contexts'. This is far from a new observation, however, as this point has been made by several authors at various moments during the past three decades (Eggenberger and Partidário 2000; Kenchington and Crawford 1993; Piwowarczyk et al. 2019; Stead and Meijers 2009).

In this paper, I argue that a substantial reason behind the uncertainty regarding what integration is, how we should go about achieving it, and whether we in fact are closer to accomplishing it, is a lack of attention to the full conceptual range of integration. When theorising social science concepts, it is necessary to develop an understanding of their

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national and international policy documents, strategies and guidelines (Vince and Day 2020).

Patrick Berg Sørdahl patrick.sordahl@nofima.no

Nofima AS — Norwegian Institute of Food, Fisheries and Aquaculture Research, Muninbakken 9-13, Post box 6122 Langnes, NO-9291 Tromsø Breivika, Norway

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full conceptual range. This requires us not only to focus on the positive pole, i.e., the concept which is under scrutiny but to also theorise the negative pole and the continuum between (Goertz 2006, p. 30). In other words, it is necessary to not just look at what a concept *is*, but also what it is *not*. In my attempt to contribute to the growing body of work within the 'critical turn' in MSP research (Flannery et al. 2020), I will focus not as much on integration itself, but rather approach the concept from the other side; I will focus on what integration is framed as representing a move away from.

Through this approach, the paper aims to provide greater clarification to the concept of integration and how it is used in the scientific debate, contributing to answering the what is, how is and why is of integration. According to Chircop and Hildebrand (2006), whilst arguably an intuitively positive aspiration, what integration entails is not a given, and it can easily be used as a buzzword, in a similar vein to other principles such as 'ecosystem-based management' or 'sustainable development'. Overuse of such concepts contributes to them becoming diluted and only providing 'political kudos, but little management content' (Chircop and Hildebrand 2006). To avoid this, it is necessary to take a critical look at some of the 'taken-for-grantedness' that surrounds integration. This paper is situated at a metalevel, discussing how the concept of integration is framed in the scientific discourse. As such, it is primary focus is not the empirical nature of how integration is handled in practical planning.

I begin by giving an overview of how integration has been conceptualised in the scientific literature. I will then discuss the negative pole to integration and how it is conceptualised, ending by arguing in favour of a differentiated approach to integration. First, however, I will start by clarifying some fundamental assumptions when discussing integration as a concept.

Blank canvases and conceptual fragmentation

The lack of a common understanding of integration seemingly being one of the few things that is universally agreed upon points towards its somewhat vague nature. Perhaps, aside from invoking the very general idea of something being brought together or connected in some way, shape or form, integration itself does not have a fixed universal meaning—at least, not one that allows it to be applied to planning practice in a substantial way. Rather, we can see it as an empty or floating signifier, a word or object that does not convey meaning in itself. Instead, it absorbs the many different, and sometimes contradictory, meanings imposed on it (Buchanan 2010, p. 173). Empty signifiers can be contested objects, where different framings are invoked by

different parties in an attempt to achieve a dominant discursive position.

Concepts are, in the most basic sense, a way of representing an object or phenomenon in the world. They are created through practices or performances (Mol 1999), abstractions that allow us to make sense of what is around us. In other words, when discussing the meaning of concepts, we are discussing the nature of reality (Goertz and Mahoney 2012). Debates about concepts are, therefore, first and foremost debates about their ontological nature. This understanding of social science concepts as abstractions of reality created through different practices has implications for how we view the ontological nature of concepts. If reality is made up of practices, if it is 'historically, culturally and materially located' (Mol 1999), and because these practices can change, that implies that reality is not something that exists 'out there' and is unchanging. Rather, it is shaped through these practices and changes with them (Boucquey et al. 2016; Mol 1999). This relational approach implies that concepts have a significant normative and cultural attachment (Palthe 2014; Scott 2008). They are imbued with ideas and expectations regarding values, roles and norms and 'shared conceptions that constitute the nature of social reality and the frames through which meaning is made' (Scott 2008, p. 57). Naturally, these conceptions can change with time, which means they are not stable structures.

However, concepts do not just exist as ideas. If reality is performed and acted out, then for this performance to take place it needs a stage. This stage comprises the various tools, mentalities and spaces that together make up the context within which the integration is to take place. As such, ideas are given a material dimension by being codified in tools and technologies such as documents, policies, procedures and techniques (Dean 2010; Rose and Miller 1992). Through this materialisation, whereby concepts and what they represent become embedded in 'routines, forms and documents', the 'material world' becomes organised in accordance with our 'mental categories' and the material and mental dimensions become self-reinforcing (Scott 2008, p. 127).

With concepts being reflections of a multitude of changing practices, this can lead to conceptual fragmentation where a plethora of different conceptual understandings are all bidding for space (Taylor and Vickers 2017; van Tatenhove 2017). This in turn can cause conflict. Concepts and the objects they represent take hold and persist because we believe in them. Their longevity depends on us having a more or less shared understanding of what they are and what their purpose is, and that they are the appropriate response to whatever problem they are meant to solve. In other words, they need to be perceived as legitimate. If there is no shared understanding about the meaning of a concept, its content, its purpose or whether it is an appropriate means to an end, cracks will appear along the conceptual foundation. To get



a sense of how these concepts are understood and the reality they represent, we need to structure them and theorise their basic components and the linkages between them.

Approaches to integration in coastal and marine areas

The focus on the need for, and how to achieve, (more) integrated management of coastal and marine areas that we see today is far from a new development, with calls for more integrated management having been made for several decades. National and regional initiatives had been made since the early 1970s, containing many of the same elements that are found in later, more wide-spanning, initiatives (Forrest 2006; Kenchington and Crawford 1993; Portman et al. 2015; Sorensen 1993; Stephenson et al. 2019). Looking beyond the coastal zone, one can also find references to the need for more integrated management on an international scale, such as the 1972 UN Stockholm Declaration: 'In order to achieve a more rational management of resources and thus to improve the environment, States should adopt an integrated and coordinated approach to their development planning so as to ensure that development is compatible with the need to protect and improve the human environment (...)' (Cited in Kenchington and Crawford 1993).

On a more international scale, the 1992 Rio Declaration is often cited as a starting point for a more joint international effort focused on managing coastal and marine resources (Bennett 2001; Forrest 2006), stating that 'Coastal States commit themselves to integrated management and sustainable development of coastal areas and the marine environment under their national jurisdiction' (UN 1992).

However, despite this history stretching back 50 years, the verdict appears to be that many integrative efforts have seemingly failed to realise their full potential. The reasons for this include the geographic and administrative scale (Vince and Day 2020), lack of integrative capacity (Vince and Day 2020), lack of attention to underlying

power structures (Flannery and McAteer 2020; Kelly et al. 2019), adoption of terrestrial planning practices ill-suited for the marine environment (Jay 2018) and institutional challenges such as policy layering, path dependency and institutional drift (Kelly et al. 2018; Rayner and Howlett 2009).

There is no clear agreed definition of concepts such as MSP, ICZM or even integration in coastal and marine areas in a more general sense. There are, however, some recurring key principles. Integration is generally seen as involving the coordination of both the use and non-use of coastal areas and resources between different actors across space and time, horizontally and vertically, with the goal of achieving a more sustainable use of coastal resources, taking into account all three dimensions of sustainability: environmental, economic and social. It is both a social and political process, and one that is informed by both social and natural science (for examples of definitions, see e.g. Cicin-Sain and Knecht (1998); Douvere (2008); Portman (2016); Zaucha et al. (2019)).

The challenge of defining or reaching a common understanding of integration or concepts such as ICZM or MSP, can be attributed to, among other things, the great difficulty of defining sustainable development, which is often seen as the goal of integration (Forrest 2006), and concepts similar to integration receiving different labels in different fields, leading to a proliferation of closely-related terms, each with different interpretations (Tosun and Lang 2017). The many different interpretations of what actually constitutes both the coastal and marine environment, as well as which resources and activities fall under coastal and marine planning and management, further adds to this complexity (Forrest 2006).

A recurring topic in much of the literature is what is meant to be integrated, or in other words, within which dimensions integration is meant to be achieved (Table 1) (for examples see Fischer et al. 2014; Hovik and Stokke 2007; Kidd 2013; Kidd and Shaw 2007; Olsen et al. 2014; Portman 2011; Saunders et al. 2019; Stead and Meijers

 Table 1
 Dimensions of integration

Dimensions	Description
Sectors, administration and policies	Horizontal/vertical linking up of sectoral agencies, national, regional and municipal administration and their policies. This can include the integration of processes, routines and legislative frameworks to avoid legal pluralism, as well as the integration of overarching goals such as sustainable development or public health considerations in the policies of different sectors, goals which cannot be achieved by one sector alone
Cross-border	Integration across geographical boundaries, e.g. municipalities in the case of inter-municipal planning, land and sea in (spatial) plans covering both terrestrial and marine areas and ecosystems
Temporal	The inclusion of the temporal scale, i.e. ensuring a connection between current and future needs and uses
Knowledge	Integration of different forms of knowledge, e.g. local indigenous and ecological knowledge and natural/social and economic science-founded knowledge, and sharing of knowledge between groups, providing an adequate basis for decision making
Stakeholders	The broad inclusion and participation of parties that might in some way be affected by the plan in question



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2009). The table below is a summary of some of the main dimensions highlighted in the literature, but it should be noted that many authors may use different terms or different groupings.

In practice, these different dimensions overlap in many ways. Integration across ecosystems will, in most instances, require integration across different sectors and municipalities; the inclusion of different stakeholders and sectors has implications for the types of knowledge required, and the involvement of different sector agencies influences their constituents, which in turn affects participation, etc. This tight connection between many of the dimensions as well as the use of several adjacent terms when describing them has been regarded as a further source of confusion (Spijkerboer 2021).

Although there is no clear consensus on either the definition of integration or within which dimensions it should take place, one area of consensus can be found. A recurring notion is that integration involves reducing the fragmented nature of current coastal governance arrangements, and that fragmentation represents one of the main barriers to a more sustainable use of coastal space. None of the literature, however, discusses the concept of fragmentation in any sufficient detail.

The negative pole to integration

Much of the literature on integration in a marine and coastal setting assumes that the negative pole to integration is fragmentation, and, by extension, that the more integrated we become, the further we will move away from a fragmented planning system. Here, fragmentation is arguably framed as a negative characteristic that should be avoided. However, the concept of fragmentation itself is undertheorised in the literature.

There are three main issues with uncritically labelling fragmentation as the negative pole to integration. The first concerns the more general linguistic characteristics of the word. Fragmentation, either as a state of being or as a process, refers to something disintegrating or having disintegrated, from a state of being whole into smaller components (Semancíková et al. 2019, p. 415; Zürn and Faude 2013, p. 121). This, however, is not an accurate description of the state of planning, whether it be on land or in the coastal and marine environment. The plethora of different interests and sectors that are involved in today's planning system were not originally part of a greater whole that have since become dispersed. Rather, they came into being outside of the planning system, and have later sought to become integrated into the fold. Although this might be seen as splitting hairs, it has a strong relevance when theorising the concept. This point is not simply about linguistic pedantry or definitions. Rather, and crucially, it is a question of ontology (Zürn and Faude 2013). If integration is conceptualised as the journey from more to less fragmentation, this will influence the answer given when asking the question of how far we have come along the road to more integration.

Second, regarding fragmentation as something negative and as the source of various governance-related problems overlooks the potential benefit and perhaps even necessity of a fragmented system. If integration is thought of in terms of gathering different sectoral areas under the same authority, this could in theory lead to it being easier to see different interests in unison. However, it could also be the case that minor interests that pertain to small or in some way marginalized groups would be overshadowed by more dominant ones. This form of system, with what is effectively unidirectional integration where one part comes to dominate others, can from the outside appear to be integrated, when the system effectively simply reflects the hegemonic party (Bornemann 2016). Furthermore, if sectors are too intertwined or become 'over-integrated' (Lange and Schimank (2004), cited in Bornemann 2016), this could result in inefficiencies where too many institutions are to have a say and provide input on too many issues. This would perhaps be a slightly ironic outcome seeing as how legitimacy and efficiency (Saunders et al. 2019; Vince and Day 2020) are among the many benefits that integration is thought to provide.

Lastly, and more fundamentally, a fragmented system should not be seen as an unwanted negative development, but rather a central characteristic of a postmodern condition. Postmodernity involves an increasingly pluralistic society with a proliferation of competing perspectives and a scepticism towards universal truth claims (Soja 1997, pp. 245–246). It is a response to modernisms 'anachronistic pursuit of 'unity' (Crook 1990, p. 53). This pluralism is found in all areas of society, be it economically, territorially, socially and culturally. This societal development is naturally also reflected in governance systems through a shift away from centralized, hierarchical systems of power towards more decentralized, pluralistic ones, and involves an increase in complexity brought on by the creation of various specialised subsystems (van Assche and Verschraegen 2008; Zürn and Faude 2013, p. 120). Regarding fragmentation as a characteristic of postmodernity implies that it, for better or for worse, is an inherent structural characteristic of all systems. As Zelli and van Asselt (2013, p. 3) argue, 'there is no policy domain where all relevant provisions are placed under, or legally linked to, a single institutional umbrella with universal membership'. As such, all systems will contain certain degrees of fragmentation. Naturally, this also works the other way around. In the same way that no system can be fully integrated, neither can any system be fully fragmented. Degrees of fragmentation and integration are forever present, simultaneously.



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Differentiated integration in a planning context

All taken together, if fragmentation is unavoidable and desirable (to a certain degree), and perhaps not even an accurate description of the state of planning, then achieving successful integration becomes highly difficult, if that success is measured by the absence of fragmentation. A more fruitful way to imagine this plethora of actors, sectors, interests, knowledge systems and territories, however, can be to see it not as fragmentation, but rather as differentiation (Zürn and Faude 2013). Differentiation can take different forms—it can be segmentary with functionally similar subsystems (e.g. municipalities where each has the same roles, functions and responsibilities), stratified with a hierarchical order between subsystems (e.g. the separation between counties and municipalities), or functional (Zürn and Faude 2013, p. 122). Functional differentiation involves a heterarchy of subsystems (e.g. law, politics, economics) each with their own description of the world. These subsystems cannot take each other's place or overrule each other's worldview. Functional differentiation is seen as a hallmark of modern society (Axtmann 2004), where 'there is no centre (...), only multiple functionally differentiated subsystems' (van Assche and Verschraegen 2008).

Within planning, this differentiation exemplifies itself in different ways. With planning having evolved from predominately being concerned with spatial distribution of activities, to covering more and more topics and being just as much about general societal development (Solås 2014), the scope of interests and activities influenced by planning increases. With more and more areas being brought into the fold, different topics, sector agencies and interest groups become involved, bringing with them specialised knowledge, different policy frameworks and objectives. These can include sectoral agencies tasked with regulating and controlling fishing activity, marine traffic, aquaculture production, pollution, etc.; special interest groups relating to tourism, leisure activities, etc.; and pan-sectoral topics not pertaining to one single sector, such as climate change. This sectoral differentiation also has a spatial side to it, where the different sectors and interest groups, through their specific knowledge, focus and mandate, each delineate areas pertaining to their field of vision. This form of 'functional territorialisation' helps to enable control pertaining to the different sectors' mandate within a given area (Lambach 2021). What constitutes territory can be understood in different ways (Paasi 2003). Following the same line of thinking as previously, territories can be divided geographically (e.g. municipal coastal areas with clear boundaries separating them from neighbouring

municipalities, and waters under national jurisdiction) or they can exist as different areas simultaneously, as envisioned by the different sectors.

Seen through this lens, integration becomes not about trying to unify fragmented pieces, but rather about coordinating and managing a differentiated network with a multitude of different nodes, within both the sectoral and territorial dimensions. In other words, as stated by Zürn and Faude (2013), the problem is not fragmentation per se; rather, the issue lies with a lack of coordination within a fragmented—or, rather, differentiated—system.

The idea that differentiated subsystems with their own logic and worldviews are not a negative or unintended development, but instead a central (and unavoidable) characteristic of a pluralistic society influences the ambitions set for how integrated planning should become. According to Candel and Biesbroek (2016, p. 213), approaching integration as a static rather than a dynamic concept, and having an outcome-centred focus, means that 'integration just comes in one flavour: it is a desired state that is reached, or else we do not speak of policy integration at all'. However, it is possible to add flavour to the concept by viewing integration as a differentiated concept in and of itself.

Differentiated integration is arguably most often spoked of within the context of the European Union, and refers to the various degrees to which different member states participate in or follow various European Union policies (Andersen and Sitter 2006; Eriksen 2022; Holzinger and Schimmelfennig 2012; Leruth and Lord 2015; Leuffen et al. 2013; Schimmelfennig et al. 2015). It is a pragmatic response to 'political challenges of a fundamental character' where 'greater integration is not on the table, and disintegration should be avoided' (Eriksen 2022). As such it can be a valuable perspective in many contexts. Both integration and planning are heterogenous concepts, and this heterogeneity should be viewed as an indication of differentiated integration, where degrees of integration within a system vary across time, space and matter (Leuffen et al. 2013; Schimmelfennig et al. 2015; Stubb 1996).

Different conceptions of degrees of integration exist, and whilst they differ in certain areas, there are some recurring building blocks. At lower levels of integration, there might simply be cooperation between actors, where information is shared between parties, but where no deeper efforts are made to ensure that everyone marches in unison. Further along, more efforts are made to ensure that actors coordinate, by, for example, aligning policy goals in such a way that they at least do not come into conflict with each other. Finally, the highest degree of integration is often conceptualised as involving actors jointly working together to create synergies and to design and achieve common goals that are mutually beneficial (Fischer et al. 2014; Geerlings and Stead 2003; Stokke 2021, p. 35).



Without recognising the various degrees of integration, we risk falling into the trap of believing that if planning becomes 'more integrated', it will also become more successful. The idea that more integration will result in better planning has been problematised. Fischer et al. (2014) found that those processes that were the most effective lay at the centre of an 'integration continuum' ranging from light to deep integration, and that 'effective integration may be best supported when actors and partners work together up to a point and subsequently develop their own mutually supportive policies and plans'. On a similar note, Stokke (2021) argues that the degree of integration needed is dependent on the type of plans in question. Having a high degree of integration where everybody is tightly intertwined is not necessarily beneficial when dealing with more overarching strategic plans, for example, as plans may quickly become outdated and there can be good reasons for deviating from the agreed plan. As well as inefficiencies, not all issues may be perceived as equally important, and there can be deliberation regarding important or less important issues (Scholten et al. 2019).

Another aspect adding to the multitude of 'flavours' of integration is the different dimensions within which integration can take place (Table 1). It is not a given that integration efforts within the different dimensions will advance along the same trajectory, neither with regards to pace nor direction (Bauer and Knill 2012; Candel & Biesbroek 2016). Integration efforts can even be scaled back as the ruling political regime changes from one side of the axis to the other (Jordan and Lenschow 2010). Adding further difficulty are the many different aspects of a planning process. In simplified terms, a planning process involves goal formulation and agenda setting, knowledge gathering, public participation and outreach, valuation and prioritisation and decision making. The different dimensions of integration, e.g. stakeholder participation, sectoral policies or knowledge types, will relate to these aspects in different ways. This complexity means that evaluating integration by measuring degrees of integration is unlikely to be informative (Saunders et al. 2016, p. 36).

Any system is therefore likely to be highly heterogeneous with regards to how integrated it is. In a 'differentiated view', the variance within a system does not necessarily signify a deficiency or a failure of some sort. Rather, a differentiated approach to integration can allow for a more functional system tailored to the issues at hand, instead of 'one-size-fits-all solutions' as well as easing the merging of different planning systems such as land and the marine (Scholten et al. 2019).

An important caveat when theorising concepts as a continuum is to not let the empirical distribution of cases dictate the stages in between the two ends (Goertz 2006). For example, the degree to which stakeholders are 'integrated' into a planning process can be considered deep in the sense

that they actually have meaningful participation, but perhaps not if who the relevant stakeholders are is narrowly defined (Saunders et al. 2019, 2016). Therefore, the continuum between the two poles must be theoretically or normatively founded, not empirically.

Towards a more dynamic concept

The aim of this paper was to show how the concept of integration is handled in the scientific literature within the field of coastal and marine planning, arguing that the continuing uncertainty concerning the concept stems from an unnuanced approach to its full conceptual range.

The above exemplifies the many nuances that exist when talking about integration in the marine and coastal environment. Social science concepts must be treated as a blank canvas that can be filled with meaning and as ontological multiples where we are not just talking about different interpretations, but rather different versions of the same object. To move towards a more fruitful scientific discussion about integration as a feasible goal in marine and coastal zone planning, it is these contextually dependent nuances that must be recognised. This need becomes even more apparent if we acknowledge that the 'intangibility' of integration allows it to easily be seen as an inherently and intuitively positive idea that is highly difficult to argue against. It is akin to Weaver's 'God term', a term that, if we can 'make it stick (...) can validate almost anything' (Weaver 1953, p. 212). On the flip side, fragmentation thus becomes a 'devil term', a term imbued with negative connotations. And in the same way that it is difficult to argue against integration, it is equally difficult to be in favour of fragmentation. Seeing integration not as a move away from fragmentation, but rather as managing a differentiated network of actors, as well as recognising the different 'degrees of integration' and their placement within a system of differentiated integration provides perhaps a more neutral standpoint.

Furthermore, although when theorising integration as a continuum, it must be seen as having definable endpoints where it is either fully integrated or not at all, in practice these endpoints do not exist. This means that we cannot realistically envisage a planning system that sits at either end of the continuum. Therefore, to be 'fully integrated' is, as such, not an attainable goal, arguably regardless of within which dimension we are attempting to achieve integration. Despite this, however, we usually talk about 'integrated' planning, thereby implying a final state.

The drive towards more integrated planning can be seen as a process of institutionalisation. Institutionalisation, however, does not have an end point. Rather, it is a dynamic, fluid and ongoing process (Zilber 2008), and although institutions can be highly rigid and stable once they have reached



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a point where they are taken for granted, this does not mean they are not prone to swaying due to changing ideological winds or external jolts. Institutions exist naturally as part of the world in which they operate. They exist alongside a potential myriad of competing understandings, meaning systems and realities, and are affected by changes in their surrounding environment. For this reason, they need to be continuously reproduced and readjusted (Zilber 2012). As such, they are forever a work in progress.

The same also holds true for integration. With integration being a blank canvas onto which different meanings can be imposed, and with the many different interpretations representing different ontological realities, we cannot realistically talk about integration as one definable concept without it becoming too vague to have a practical purpose. Furthermore, with integration as an ideal being intimately tied to not just the changing political climate but also normative understandings, either the meanings imposed on it or the goals it is meant to fulfil will change over time. As such, becoming 'integrated' is not an achievable goal. Seen in this light, it might even be possible to argue that the continuous strive for 'integrated planning' shares more in common with modernity's aforementioned rationality and 'pursuit of 'unity'' (Crook 1990, p. 53) rather than the more decentralized and pluralistic condition of today, and is as such an anachronism itself.

Whilst the focus of this paper has been the way the concept is used in the scientific discourse, the latter point about a changing political climate links to the practical relevance of a greater clarification of the concept. Science and policy influences each other and scientific knowledge can underpin various policy decisions and influences political debate (Wesselink et al. 2013). If integration continues to be framed as the antithesis to fragmentation or if the goal is to become 'integrated', this arguably renders integration as an unobtainable goal that provides 'political kudos, but little management content' (Chircop and Hildebrand 2006). If integration remains lacking in 'management content', it can potentially be co-opted by parties with vested interests and be used to preserve the status quo. There is also the danger that a drive towards evermore integrative practices due to political ambitions of becoming 'integrated' perhaps can lead to 'over-integration', potentially causing inefficiencies and unidirectional integration (Bornemann 2016). In both cases, there is a danger that integration becomes a tool used to further unsustainable practices. An important note here is that whilst this is discussed in relation to coastal and marine planning, the arguments made here also carry relevance for planning in general. Integration is a central topic in many different arrays of planning, whether it be transport, public health, energy and climate planning, etc.

This shift from seeing integration not as a final goal and an end in and of itself, but rather as a means towards more sustainable planning of ocean and coastal areas allows us to move the focus of our attention away from theoretical endpoints, degrees of integration and within which dimensions integration is to take place. This, along with the preceding point of integration being the act of managing a distributed network, gives a sense of action and fluidity to the concept. Recognising this fluidity will, in turn, provide a more fruitful steppingstone for answering the questions of what, how and why concerning integration.

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Declarations

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