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#### Check for updates

## The missing pillar: Eudemonic values in the justification of nature conservation

Riyan J.G. van den Born<sup>a</sup>\*, B. Arts<sup>b</sup>, J. Admiraal<sup>c</sup>, A. Beringer<sup>d</sup>, P. Knights<sup>e</sup>, E. Molinario<sup>f,g</sup>, K. Polajnar Horvat<sup>h</sup>, C. Porras-Gomez<sup>i</sup>, A. Smrekar<sup>h</sup>, N. Soethe<sup>d</sup>, J.L. Vivero-Pol<sup>i</sup>, W. Ganzevoort <sup>a</sup>, M. Bonaiuto <sup>f,g</sup>, L. Knippenberg<sup>a</sup> and W.T. De Groot<sup>a,c</sup>

<sup>a</sup>Faculty of Sciences, Institute For Science, Innovation and Society, Radboud University, Nijmegen, the Netherlands; <sup>b</sup>Forest and Nature Conservation Policy Group, Wageningen University and Research Centre, Wageningen, the Netherlands; <sup>c</sup>Institute of Environmental Sciences CML, Leiden University, Leiden, the Netherlands; <sup>d</sup>Institute of Botany and Landscape Ecology, Ernst-Moritz-Arndt University of Greifswald, Greifswald, Germany; <sup>e</sup>Philosophy, School of Social Sciences, University of Manchester, Manchester, UK; <sup>f</sup>CIRPA, Interuniversity Research Centre in Environmental Psychology, Rome, Italy; <sup>g</sup>Department of Psychology of Developmental and Socialization Processes, Sapienza University of Rome, Rome, Italy; <sup>h</sup>Anton Melik Geographical Institute, Research Centre of Slovenian Academy of Sciences and Arts, Ljubljana, Slovenia; <sup>i</sup>BIOGOV Unit, Centre for Philosophy of Law, College Thomas More, Université Catholique De Louvain, Louvain-la-Neuve, Belgium

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The public justification for nature conservation currently rests on two pillars: hedonic (instrumental) values, and moral values. Yet, these representations appear to do little motivational work in practice; biodiversity continues to decline, and biodiversity policies face a wide implementation gap. In seven EU countries, we studied why people act for nature beyond professional obligations. We explore the motivations of 105 committed actors for nature in detail using life-history interviews, and trace these back to their childhood. Results show that the key concept for understanding committed action for nature is meaningfulness. People act for nature because nature is meaningful to them, connected to a life that makes sense and a difference in the world. These eudemonic values (expressing the meaningful life) constitute a crucial third pillar in the justification of nature conservation. Important policy implications are explored, e.g. with respect to public discourse and the encounter with nature in childhood.

Keywords: nature; biodiversity; eudaimonia; committed action; life history interview

#### 1. Introduction

#### 1.1. Current values in nature policy

The public justification for nature conservation is based on two pillars. One focuses on moral values and rests on the idea that nature has a value of its own, often called 'intrinsic value' (Lockwood 1999). Nature conservationists and environmental philosophers often argue that natural entities have, or should at least be attributed, intrinsic value to provide a solid ethical base for the protection of nature. Although the philosophical discussion about intrinsic value still continues (see e.g. McShane 2007),

<sup>\*</sup>Corresponding author. Email: R.vandenBorn@fnwi.ru.nl

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public surveys show that the intrinsic value of biodiversity is widely acknowledged by the general public (Buijs 2009; Butler and Acott 2007; Grendstad and Wollebaek 1998; Van den Born 2008; Van den Born *et al.* 2001; Widegren 1998), giving this value a stable position in the justification of nature conservation. Stressing the intrinsic value of nature equals an ethical approach to convincing people to act on the basis of their moral convictions.

The second pillar of biodiversity policies is based on instrumental or hedonic value. Here, we can distinguish two branches of justification. The first is based on consumptive pleasure and recreation; nature as a source of pleasure and health. The main message is: being in nature is good for you. The second branch of the hedonic pillar is based on the system-level economic benefits nature provides. Although efforts to apply economic thinking to ecological problems originated 50 years ago (Eser et al. 2014; Gómez-Baggethun et al. 2010), economic arguments in nature policy became truly dominant with the introduction of the idea of ecosystem services. This is exemplified by the enormous policy attention and hopes vested in the ecosystem services and natural capital concepts. The European Union's (EU) biodiversity strategy up to 2020 (European Commission 2011) opens by stating that "Biodiversity (..) is our life insurance, giving us food, fresh water and clean air, shelter and medicine, mitigating natural disasters, pests and diseases and contributes to regulating the climate. Biodiversity is also our natural capital, delivering ecosystem services that underpin our economy" (para. 1). This may serve as a prototypical example of this trend in instrumental argumentation, which also captures the so-called 'cultural ecosystem services' under the economic umbrella (Admiraal, Musters, and de Snoo 2015; Eser et al. 2014). The underlying assumption of stressing the economic value of nature is that this will bring societies to effective action for nature. More in the background, moral values remain to be recognized, e.g. in the statement that "The EU 2020 biodiversity target is underpinned by the recognition that, in addition to its intrinsic value, biodiversity and the services it provides have significant economic value that is seldom captured in markets" (European Commission 2011, para. 2.2). Overall, however, hedonic values continue to dominate the public discourse.

These two pillars can also be seen at the level of the EU member states. Taking the Netherlands as an example, the advisory report of the Council of the Environment and Infrastructure (2013, 34–37) distinguishes between functional (i.e. hedonic) and ethical (i.e. moral) motives. Functional values are derived from the societal services of nature such as health, recreation, production, environmental regulations and knowledge. The report further states that the ethical values are just as important as the functional ones. This is largely positioned as an afterthought, however; the report stresses the benefits of policies that build on nature's hedonic value, e.g. as expressed in the National Nature Policy Plan (Rijksnatuurvisie 2014, 7): "The government is keen to change the image of nature as a factor of nuisance into the image of nature as source of societal and economic development". A recent report produced in the Netherlands for the EU (Dammers et al. 2016) develops four 'storylines' for biodiversity policy development, which narrate and visualize syntheses of values, assumptions and scales. All of them combine hedonic and moral values of nature and humans, but with different emphases. In the storyline of 'Cultural Identity' for instance, we find hedonic values of nature for a Europe of smallscale regions, combined with moral values. The storyline of 'Allowing Nature To Find Its Way' is a large-scale strategy of rewilding, with moral values of nature leading and hedonic values (economic development) in a supportive role. The storyline of 'Going With The Economic Flow' is an image of large-scale capitalism based on ecosystem services, with moral values protected by means of nature parks and additional regulation.

The last one, 'Working With Nature', also combines hedonic (human well-being) and moral values (future generations).

In short, the justification of nature policy seems to rest on the idea that people and society can best be convinced of the importance of nature conservation and motivated to come into action by stressing the hedonic and (more secondarily) the moral values of nature. In the meantime, however, biodiversity in Europe continues to decline (EEA 2015), and biodiversity policies remain a prime example of a policy implementation gap, with a wide discrepancy between claims and actions (Jóhannsdóttir, Cresswell, and Bridgewater 2010; Secretariat of the Convention on Biological Diversity 2014). For industrialized countries, we cannot attribute this to a lack of capacity; what successful biodiversity policies would cost is only a fraction of public spending in other policy fields. What appears to be lacking, therefore, is commitment. In spite of all hopes, these two values do not appear to trigger enough committed action in individuals and governments.

In the background of EU bureaucracy, this realization brought about a call for research on 'alternative ways to value nature', and one of the projects funded was BIOMOT (www.biomot.eu). Considering the limited success of hedonic and moral considerations in inspiring committed action for nature, the BIOMOT researchers quickly intuited that other values must be at stake in truly motivating people. Searching for help in environmental and classic Greek philosophy, *eudemonic* values emerged as a promising candidate. This paper reports the result of the testing and substantiation of this idea. The concept will be further explored in the present section, while Section 2 describes the methods and Section 3 aims to deliver the qualitative proof that eudemonic value indeed plays the key role in energizing and shaping committed action for nature. Building on these results, some policy implications are explored in Section 4.

#### 1.2. Eudemonic value in theoretical literature

Hedonic (instrumental, functional, economic, etc.) and moral (intrinsic, inherent, etc.) values are both recognized and studied in (environmental) philosophy (e.g. Callicott 1999; Hargrove 1992; Rolston 1981) and environmental and social psychology (e.g. Steg et al. 2012; Stern and Dietz 1994; Stern et al. 1999; Berry et al. 2016); humans are supposed to relate to nature in some, often contextual, mixture of these two types of value. Environmental philosopher Muraca (2011), however, argues that the distinction between intrinsic and instrumental values as made in environmental ethics is a poor one and argues for "a greater variety of axiological categories that take into account different moral intuitions about the relations between humans and the non-human world" (378), focusing especially on the recognition of eudemonic (also called relational) value. Bringing these relational values in the sphere of action for nature, Chan et al. (2016, 1462) explain that "few people make personal choices based only on how things possess inherent worth or satisfy their preferences", which we refer to as moral or hedonic values, respectively. Relational values also consider the appropriateness of the relationship with nature, including actions conducive to a good life. The 'good' or 'meaningful' life is the key concept of eudemonic value (see below). As Chan et al. (2016) make clear, relational/eudemonic values are not present in things but emerge out of relationships, i.e. connectedness with other people, with society, with nature and the world. The conceptual distinction between these three values does not exclude interactions, especially in the dynamics of personal lives. However, since our main arguments lie at the collective level (e.g. conservation policies), we concentrate on the distinction without referring to interactions.

Contrary to instrumental and intrinsic values, eudemonic values did not receive much attention in social science or philosophy for a long time. They are still frequently overlooked due to the dominance in the social sciences of hedonic theories such as rational choice theory and theory of reasoned action, weakly complemented by concepts such as social norms (e.g. Elster 1989) that represent moral values to some extent. The notion of eudemonic value has never been completely absent, however, possibly because it commands respect due to its origin in Socrates and Aristotle (Ryan, Huta and Deci 2008). In classic Greek thought, the concept refers to the obligation of every human being to "live in truth to his or her daemon", a kind of inner voice speaking about good or bad (Norton 1976; Ryff and Singer 2008, 1). From Aristotle we derive the idea that happiness is the ultimate goal of human existence. However, even though happiness is a common translation for the Greek term *eudaimonia*,<sup>1</sup> Aristotle's eudaimonic happiness does not refer to superficial satisfaction (happiness as pleasure, which is hedonic value) but stresses the idea of a truly meaningful and well-lived life (Eser et al. 2014; Ryff and Singer 2008). Eudemonic value therefore refers to living a meaningful or worthwhile life (Eser et al. 2014; Muraca 2011) and is concerned with living well, living a complete life or actualizing one's valued potentials targeted at making a difference in the world (Deci and Ryan 2008; Ryan, Huta and Deci 2008). This also resonates with Kaplan and Kaplan's (2009) conceptualization of meaningful action. According to Ryff and Singer (2008), personal growth (i.e. self-realization) and purpose (i.e. meaning) in life are the two pillars of eudemonia (29). Eudemonia includes a long-term perspective (Eser et al. 2014), and as O'Neill (2008) puts it, there is a major difference between life as an endless string of feel-good moments (hedonic value) and as a story with ups and downs in the journey towards being worth living (eudemonic value). The latter characterization allows for an evaluation of the narrative shape of a life which the former ignores.

A meaningful life, oriented towards "continually developing and becoming, rather than achieving a fixed state wherein all problems are solved" (Ryff and Singer 2008, 21), thus also encompasses a drive towards learning and reflectiveness; in the pursuit of living well, a person is "continuously engaged in reflectivity and deliberation concerning his or her actions and aims" (Ryan, Huta and Deci 2008, 144). This is what Aristotle formulates as "realizing one's true potential" (Ryff and Singer 2008, 18). Baumeister and Wilson (1996) propose that people interpret the events of their lives along four specific dimensions: the need for purpose; the need for value and justification; the need for selfworth, and the need for efficacy. This last need involves an essential belief that one can make a difference in external events. An important aspect here is autonomy, closely related to Ryan, Huta and Deci's (2008) self-determination.

#### 1.3. Eudemonic value in empirical research

Asah and Blahna (2013) studied conservation volunteers' motivations and commitment to urban nature conservation action. Results from a survey (N = 322) reveal two forms of commitment: affective and normative. The first factor shows high adherence to items that represent the idea that volunteering is important for their identity, that it is highly satisfying and enjoyable, and that it ties in with reflecting upon their own lifestyle. These items include hedonic elements, but also strong elements of eudemonic value. Normative commitment instead represents a feeling of obligation towards volunteering as "the right and moral thing to do" (Asah and Blahna 2013, 871). Also investigating conservation volunteers, Guiney and Oberhausen (2009) focused on the role of connectedness to nature as motivating action. In their survey among 145 volunteers, learning about nature and connectedness to nature scored highest as motivators for participating in action for nature. They also studied the role of nature in childhood and found that this connectedness to nature began in childhood for most of the volunteers, who became interested in nature through "unstructured exploration" such as "constantly exploring ponds, sloughs, woods, trees, flowers" (Guiney and Oberhausen 2009, 190). In both their survey (N = 145) and interviews (N = 12), reconnection was mentioned; several people were interested in nature at a young age but reconnected to nature as an adult. Finally, Guiney and Oberhausen (2009, 190) report that "making a positive difference to the natural world" appeared to be an important motivating factor for volunteers. All this has little to do with hedonic pleasures or moral obligations, and much with feelings of connectedness with nature as part of a meaningful life, i.e. eudemonic value.

#### 1.4. From values to action

The volunteering literature mentioned in the preceding section already shows that there is a strong connection between eudemonic values and real action. Many scholars emphasize the importance of human values for explaining behaviour (e.g. Axelrod 1994; Stern 2000; Muhar et al. 2017). Values can serve as a "guiding principle in the life of a person" (Schwartz 1992, 37). Therefore, in this paper we consider values as motivating or driving action. Nolt (2006) explains that philosophers often forget that the step from good (a condition or assumption) to ought (an urge or command to act) is not self-evident; it is a step that needs justification, or as O'Neill (1992) writes, it is itself in need of an ought premise. Considering environmental ethics, and in particular action for nature, some iustifications (some ought premises) are more promising than others. Indeed, one of the few promising justifications when it comes to nature-oriented action is the so-called Aristotelian ought, the urge to engage in a project of caring for nature. However, this justification is only acceptable on the condition that one also accepts the underlying idea that doing this is a necessary act of self-transcendence, the urge to connect, necessary to live a life of significance (Nolt 2006, 371–372). This view and this solution refer to the same notions as our idea of eudemonia, i.e. the predominance of the notions of care, selftranscendence, connectedness and significance. This need for a life of significance has been demonstrated to drive action for nature (Molinario 2015). Against this background, as well as based on the volunteering literature, our concept of eudemonic value includes feelings of connectedness. The hypothesis tested in this paper is that committed action for nature is energized and shaped by the way people feel connected with nature as part of a meaningful life.

#### 2. Methods

The data for this paper were gathered in the context of BIOMOT, an EU FP7 project (www.biomot.eu). The results are based on 105 life history interviews with committed actors for nature in seven European countries (Belgium, Finland, Germany, Italy, Slovenia, the Netherlands and United Kingdom).

#### 2.1. Selection and number of interviewees

In this paper, we focus on committed action for nature. 'Committed' means that the actor devotes much more energy, thought and persistence to nature than would be necessary for reasons of job, income, tradition or reputation. The lives of committed actors are 'lives for nature' to a significant degree. Committed actors for nature were selected by first distinguishing between governmental, business or civil society (e.g. schools, nature NGOs and media) actors. Within each actor group, between 8 and 12 highly committed actors were selected per country on the basis of their public reputation, visibility and work. Some interviewees (n = 18) were eventually dropped because they were less committed than initially thought or less focused on biodiversity issues (e.g. more on general sustainability issues). Finally, 105 were included in the analysis as actors committed to nature.

#### 2.2. Interview structure

Both the long-term perspective and the aspect of reflectiveness demand a methodology that gives enough room for the interviewee to include these elements. Life stories can be a good vehicle for people to make sense of their lives (Bauer, McAdams, and Pals 2008, 84). Stories and narratives can be especially useful in conveying the coherence and the meaning of lives (Bauer, McAdams, and Pals 2008, 100), and can therefore play an important role in the scientific study of human behaviour and experience (McAdams 2001). For the interviews, a semi-structured interview guide was used (Flick 2011), followed by a sorting of cards displaying different motivations. The life-history interview preceded the card sorting to create a context in which interviewees are stimulated to ruminate about their motivations. During the interview, the motivations of the interviewee to act for nature conservation were explored in detail. The interviewer and interviewee first came to a description of the main goals that the interviewee aims to achieve with respect to action for nature, subsequently exploring the interviewee's life story in which the roots and development of their main interest is traced back to their childhood and the specific environments of their past, ordered roughly as youth (0-15)years), adolescence and early adulthood (15-25 years) and later life (from 25 years until the present). After each qualitative interview, we asked the interviewee to rank 20 cards describing motivations for taking action for nature. In this paper, we report the findings of the qualitative interviews; the results of the card ranking are reported in Admiraal et al. (2017).

#### 2.3. Data analysis

The interviews were transcribed verbatim and analysed in a three-step procedure, standardized and agreed on by all countries. The first step was to code the interview data descriptively (Punch 2005), in order to mark and describe important passages. Important passages were related to the main themes of the project (e.g. role of nature in childhood, peak experiences) or to themes emerging out of the interviews. The second step was inferential coding, iteratively categorizing the material into more accurate and meaningful units. In this phase of analysis, relationships and patterns in and between interviews are sought, based on the codes applied in the first step of the analysis. Finally, we checked whether these emergent themes and patterns confirmed hypotheses from the literature (see Section 1), e.g. whether interviewees mentioned a drive towards learning. Throughout the second and third steps, we made use of memoing, i.e. "the theorizing write-up of ideas about codes and their relationships" (Punch 2005, 201). In order to standardize this procedure, we discussed this method of working with memos during a coding workshop for the interviewers, and we provided them with literature on this topic. After each country team finished their initial analysis, another workshop was organized

to discuss and compare the findings on the main emergent themes. The goal was to discuss similarities and possible differences between countries, supported by the standardized memoing procedure.

Every country team wrote a report in which the results of their interviews, based on this three-step procedure, were described. The analysis in this paper is based on the results of these seven country-level analyses of interviews. Where necessary, the interview transcripts were checked to confirm interpretations.

We did not analyse possible quantitative differences between gender, sector, age or country. Rather, we focused fully on a qualitative, more 'hermeneutic' analysis of the interviews, aiming to establish a deeper, overall interpretation.

#### 3. Results

#### 3.1. Results of the interviews

In this section, the results of the 105 life-history interviews with highly committed actors for nature are described, starting briefly with their views on nature, the role of nature in childhood and the aspect of connectedness. Second, the role of curiosity and learning is briefly discussed. Finally, the value of a meaningful life is described as revealed through the way interviewees spoke about what motivates their actions. The codes of the quotations refer to the country of the interviewee (UK for United Kingdom, BEL for Belgium, GER for Germany, SLOV for Slovenia, FIN for Finland, ITA for Italy and NL for the Netherlands) and the number of the interviewee, as used in the transcribed interviews.

#### 3.1.1. The role of nature in childhood

The committed actors for nature we interviewed have many different visions of what nature means to them. There is nature as space: as freedom, openness, as the encounter with the truly other, that which makes us fully human. There is nature as species: the wolves, the creatures of the sea, the birds, etc. There is nature as stories: stories of landscapes, stories of people, stories of happiness, and, quite often for our actors, stories of food. One interviewee described how nature meant "*just the openness… I mean contact with nature and losing yourself in it*" (UK3). For other interviewees nature was "*something to have adventures in*" (UK15), being outdoors, being free as a child without parental supervision (BEL11).

One interviewee who grew up in a little village frequently went to a local peatland as a child to hunt with their father, and expressed the importance of this peatland to them as a child as "the emptiness, being desolate, not being distracted by other things, one can sit there quietly and look around (...), thinking about things. When I had personal difficulties, I took a walk in the peatland" (GER17). They later studied peatlands as a scientist and became socially active for the protection of peatlands.

In the early lives of the majority of the interviewees, nature was present to an often astonishing degree: "*I grew up in the forest*", as several of them put it, or as others said "*the indoors hardly existed*" (NL23). Other variations were "*always outdoors*", "*on the beach everyday*" or "*had to be outside all the time*". Many interviewees relate this presence of nature and spending time in nature in their childhood to their later motivations to act for nature (Tanner 1980; Chawla 1998). A German interviewee, active for the protection of old crop varieties, at age 14 independently roamed the area where they grew up, "*sometimes even the whole day*". When asked for the main motivations

behind their committed action for nature, this interviewee responded: "For me it was definitely the wish to get closer to nature and to be active within nature, you know... That has always been my passion. [Growing up] I was outside a lot, ran a lot, went hiking, started to collect herbs and to see, what is this, what is growing there" (GER3).

Most of these children had a high and autonomous drive to connect to nature, much more, for instance, than their siblings. Many interviewees feel this drive has been innate and connected with their earliest memories; "nature has been part of me all my life" (NL33). Although this notion of connectedness was important for their motivations, they were not always specific regarding to what they felt connected: "Nature feels like a part of me" (ITA17) and "I'm connected to the natural world" (UK5). Often this connectedness with nature grew during their lives and ties in strongly with a curiosity for nature and the desire to learn about nature in later life (see Section 3.1.2.). This connectedness and curiosity is often mentioned as the main motivations for their actions for nature. Another large group of interviewees state that the role of nature in childhood is important for their connectedness with nature in later life, but that they were not aware of this connectedness in childhood because they felt like it was normal and beyond question that nature was there.

A general pattern in our interviewees' stories about nature is a 'life spiral': a reconnection with the intense encounter with nature in early youth energizes and directs committed action for nature in adult life, sometimes along a fast or slow but fluent path, sometimes after many diversions, crises and epiphanies.<sup>2</sup> This is true for both actors for whom the notion of connectedness with nature in childhood was more explicitly expressed in the interview, and those for whom it was more implicit and (initially) taken for granted.

#### 3.1.2. Curiosity and learning

Most interviewees were fascinated by nature, sometimes very early on but ever more intensely during their teenage years. Objects of curiosity could be anything: insects, mammals, birds, plants, forests, moors, right up to the working of ecosystems. Guiney and Oberhausen (2009) also found an important role for learning and connectedness, but for many of our interviewees, they were interrelated: knowledge acts as a vehicle to connect them with nature. The desire to know seems to have much in common with the desire to connect, expressed by one interviewee as "when you learn about nature, you are able to enjoy things you did not see before (...) you can experience nature much more deeply" (NL27) or by another as "all species have a relationship with us and the more you learn about this, the richer your world is" (NL15). A German interviewee active in wolf protection stated very explicitly that "the thirst of knowledge is the thing that had pushed me" (GER13). Once curiosity is aroused, it often becomes a lifelong learning process: "I was on a massive learning curve (...) suddenly it was like a whole new world out there which was quite surprising, and after that I just never stopped learning" (UK1). We could detect a pattern in which a connectedness with nature developed in childhood became stronger in adulthood along with a strong curiosity, like for this interviewee: "the curiosity to know about nature has channelled into the study of the wolf" (ITA13).

#### 3.1.3. Meaningful life

The pursuit of a meaningful life is crucial for understanding committed action for nature. Among our interviewees, we distinguish two broad groups of actors, namely those that mention meaningfulness explicitly and those who refer to it implicitly. We start by giving some examples of the first category. One person for whom a meaningful life is a key notion in their life story is a Dutch interviewee. This person lost track of the authentic life course in industry jobs, and to make a difference they made the risky choice to start their own foundation that re-established their connectedness with nature: the "long journey home", and "we do not need nature to be happy but we need nature to be fully human on all levels" (NL17). Other interviewees also talk about making a difference in the world and link this explicitly to living a worthwhile life, noting that working with nature helps to give them a sense of living a worthwhile life "because you're making a difference, you're helping protect it and to keep those good things" (UK3) or that "living a life that is worthwhile...in terms of... making a difference... I spoke of that right at the beginning, wanting to do something... I found the thing that I can do that makes my life worthwhile...I will leave the world in a better place through my actions than I found it" (UK25). Closely related to Aristotle's idea of eudemonia, one interviewee says: "you can only look back on your life... with any sort of sense of worth if you try and live in a way that is worthwhile", and that "this is achieved by always trying to do the right thing" (UK19). The value and justification dimension of Baumeister and Wilson (1996) is also mentioned: "nature conservation and environment are (...) mentally very important to me, they kind of justify living, so that I feel that I am doing something in my life that justifies my being here" (FIN17) and "I want to do something that is meaningful to me and I'm happy that my work is meaningful and in accordance with my values. I'm happy that I have been able to have work in which I can fulfil my own values" (FIN23).

Most interviewees did not mention 'meaningful life' in those exact words, but many implicit references can be found. Interviewees frequently expressed (1) a life-directing desire to make a difference in the world (Deci and Ryan 2008; Ryan, Huta, and Deci 2008; Guiney and Oberhausen 2009); (2) an interpretation of the notion of living a worthwhile or meaningful life in terms of fulfilling one's potential (Deci and Ryan 2008; Ryan, Huta, and Deci 2008; Ryan, Huta, and Deci 2008; Ryan, Huta, and Deci 2008; Ryff and Singer 2008); and (3) an active awareness of the need for actions to fit into the greater life-story (O'Neill, 2008). We discuss these expressions in this order.

The understanding of living a meaningful life as a life-directing desire to make a difference in the world was most commonly expressed in the simple statement of a desire to 'make a difference' or 'do something'. Examples include: "I like to do anything that makes the difference, if I think that that will achieve that or that it will have a good result, then I will put everything into it, everything I've got" (UK1) or "A valuable life is that you add something, that you act significantly" (NL7). People are strongly convinced that making a difference is what they must and can do: "with the certainty that I'm doing something positive for the world, I mean almost a missionary" (ITA7) and "I realized that I can, with other people, change things" (ITA21). Another actor (NL21) did not speak explicitly on this level of reflection, but their actions make clear that the desire to make a difference for nature and sustainability is the central principle of their life, e.g. investing a decade in ecological study and then dropping this immediately after discovering that studying nature does not help nature very much.

The second interpretation of the notion of living a worthwhile or meaningful life was in terms of fulfilling one's potential. For example, for one Italian interviewee nature was neither present nor important up till they were 20 years old. This person did not have any aspirations beyond making money, but a peak experience was a turning point, leading to a realization of the importance of nature and that everything comes from the land: "*I* 

learned the importance of food and the importance of nature, I started to experience thoughts that I never had before, I thus started to open myself..." and "the turning point was that I became aware of my own capacities" (ITA5). Another example is a life story involving a peak experience in childhood, through which the interviewee became aware of nature and the beauty of the sea and the island where they grew up. But during their adolescence and early adulthood, they experienced a period of separation: living in the city, feeling alone and having no contact with nature. At the age of 25, they took a free diving course and became part of the National team, winning many competitions. But they realized that these new friends "don't care about the sea, I mean its condition, the pollution, what was important to them was just having the best performance, winning cups, with no care for all the rest" (ITA21). After this personal crisis, this person had another peak experience that they called a life-changing moment. While underwater, a turtle "was in trouble, she was really big, (...) I carried her on my back and reached my car, it was not easy. Later, I dove with her when she was set free and that moment really changed my life, it awakened the desire to strive for the protection of nature", and "that call to commitment, it was really important, because it raised the awareness of my ability to do something" (ITA21).

This wish to fulfil one's potential demands a high level of reflection on one's personality and behaviour. Ryff and Singer (2008, 22) note that having a reflective stance towards life plays an important role in achieving happiness through active engagement in life. Interviewees refer to always being able to question themselves and become true to their potential: "the meaning of life to me is to evolve and to be always able to question oneself and to have a better behaviour for the collectivity and for oneself" (BEL2) and "it [his work] has been great…because the work has been a stimulus for me to develop as a person and become more true to myself and my potential" (UK25). When asked for their main motivations, an interviewee active in Slovenian nature protection referred clearly to this idea of fulfilling one's potential, going back to the ancient Greeks and their idea of excellence: "but first be an excellent person yourself and then you will be able to make the right decisions" and "do good things, avoid bad things, or contribute so that when you die, you and your community, or the circle you can influence, will be at least a little bit better that it was because of your existence" (SLO21).

A last aspect of meaningful life refers to the notion of having a high consciousness of life's plan (Bauer, McAdams, and Pals 2008): "You have to make choices", "I am always thinking, I always ... have a plan" (NL30) and "I would like to (..) ask myself about my existence and how to raise it to a higher level, ethical, and in terms of quality of existence" (SLO21). This consciousness can be a struggle, but is recognized by the interviewees as important: "It was a part of my alternative way of thinking that came about at some point that I don't have to think about having a career (...) why should I try to live up to other people's expectations and live according to norms that are created by other people (...) So that's what I thought of (...) I realized, I do have choices. I acknowledged that I don't need to worry, that I can throw myself into this situation and that it was like jumping into the unknown (...) It was quite an important process" (FIN17).

#### 4. Conclusion and policy implications

Before we draw our conclusions and give some policy recommendations, we first reflect briefly on our methodological choices.

As a consequence of our sampling approach, which involved finding both highly visible and highly committed actors for nature, the sample is not spread perfectly over countries, age and gender. As a result, our sample might not be fully representative for all highly committed actors, for instance by possibly missing some less visible actors. However, the robustness of the main patterns in our findings across all our interviewees, including across countries and sectors, was striking, which gives us confidence that the core findings of this paper, i.e. the importance of nature in childhood, connectedness with nature and eudemonic values, are applicable for highly committed actors for nature in general.

Further support for the robustness of our findings is the fact that they were confirmed by the quantitative card sorting exercise (reported in Admiraal *et al.* 2017). This card sorting showed that the top ranking motivations for nature action aggregated into two groups: (1) living a meaningful life (*living a worthwhile life* and *curiosity and learning*) and (2) moral values (*future generations* and *value in itself*). This confirms that eudemonic values play a crucial role in motivating nature conservation action, whether these motivations are elicited through qualitative or quantitative methods.

Despite ongoing efforts to motivate politicians and the public in Europe for nature conservation, biodiversity continues to decline. The existing discourse, in which moral and especially instrumental arguments for nature conservation are used, appears to be insufficient to motivate committed people into action for nature, because these arguments are not in concordance with their main motivations. This study shows that non-hedonic values have a crucial role to play: 'a meaningful life', including being connected to nature and making a difference in the world, and 'curiosity and learning' are very important drivers for committed action for nature. These values are called relational values (Chan et al. 2016) or eudemonic values (Deci and Rvan 2008; Eser et al. 2014; Ryan, Huta, and Deci 2008) and are substantially different from instrumental and intrinsic values. While our results focus on highly committed actors, Chan et al. (2016, 1463) refer to a broader group when they note that "the usual framings of instrumental and intrinsic values fail to resonate with many lay-people and decision-makers". It is therefore important for nature organizations and policy-makers to address these eudemonic values when keeping committed people motivated or trying to motivate people into action for nature. Under the condition of feeling connected to nature, most often developed strongly in childhood, meaningful life is a strong driver for action. Connectedness to nature is a crucial building block for action for nature.

This brings us to nature conservation policy. We strongly believe, given the findings of this study, that nature conservation policies should be immediately grounded in three – not two – foundational values. We are willing to protect nature because: (1) nature is meaningful in the lives of people and communities; (2) nature has its own right to exist; and (3) nature brings with it many socio-economic benefits, such as ecosystem services (De Groot *et al* 2016). But how can nature conservation policy, in which the economic discourse is currently so dominant, take this new pillar of eudemonic values into account? We present three policy recommendations, inferred from our results. First, nature conservation policies need to contribute to reforming and upscaling nature education from passive-indoor to active-outdoor modes of learning in order to connect children to nature as early as possible in their (often urbanized) lives. Existing initiatives from organizations such as schools and day care already contribute to this development and must be fostered. Second, nature conservation policies should facilitate connections between people and nature, and not hamper them, as is often the case now. And third, we need a new public discourse on nature, in which instrumental rationality is less dominant,

and in which a new language of engagements and connections is unlocked. Since governments do play important roles in the emergence, maintenance and dissolution of public discourses, they have a task here as well. Below, we briefly elaborate upon each recommendation.

#### 4.1. Building connectedness: encounters with nature in childhood

Committed actors for nature cannot simply be 'bred'. But there is a basic prerequisite, a childhood feature that stands out as essential for basically all committed actors in our study: the intense, mainly unsupervised encounter with nature in childhood. Previous studies have shown that individual experiences during childhood are essential for the development of a relationship with nature, and for inspiring action for nature later in life (Chawla 2009). Access to nature for children is crucial, especially when more and more children are growing up in urban areas, making encounters with nature increasingly rare. This urbanization process, together with parents' current obsession with perceived 'danger', prevents children from roaming freely in nature without supervision (Louv 2005), while our study confirms that such experiences are of utmost importance for building connectedness with nature (e.g. Burgess and Mayer-Smith 2011). Although we acknowledge that this is particularly true for highly committed actors, the above studies cover all actors and not only committed ones. Therefore, nature education - as part of nature conservation policy - should be reformed from overly passive indoor curricula towards active forms of engaging children (and adults) with nature outdoors. This is already practiced on a small scale, but this study shows the need for a huge upscaling effort in Europe, if not worldwide.

#### 4.2. Building energies for nature: autonomy/role of government

In current society, a general trend towards decentralization exists; governments increasingly transfer decision-making power and responsibilities to sub-national authorities, organizations and even individuals (Arts, Buijs, and Verschoor 2017; Lemos and Agrawal 2006). Such delegation leads to new actor coalitions in policy making, including nature conservation policy (Buijs, Mattijssen and Arts 2014). Citizen initiatives are becoming more important for public policy-making, and governments could - or maybe even should - take an active role in stimulating such initiatives (Mattijsen et al. 2016). Our study reveals that highly committed actors for nature show high levels of autonomy while acting for nature. To facilitate 'a green energetic society', as Hajer (2011) terms it, government should, therefore, enable such 'green champions' to play a leading role in these transformation processes instead of limiting them through rigid and bureaucratic rules (Buizer, Arts, and Westerink 2015). Of course, regulations will always remain necessary to protect nature against unrestrained market forces, excessive human densities and so on. Yet, within these limits, there is a need for governments to support practices in which humans and nature can meet one another, and to incorporate such possibilities in social practices and communities. It is therefore crucial that governments become much more responsive to what motivates its citizens (Hajer 2011). Part of that should be, in light of the findings of this study, the facilitation of practices that strengthen citizens' connectedness, meaningfulness and pleasure related to nature instead of prioritizing economic incentives for changing human behaviour towards nature (Shove 2010). Besides the aforementioned active-outdoor modes of nature education, it is important to integrate these nature policy considerations into other policy sectors, such as

the greening of urban areas and industrial sites, connecting health policies to nature conservation, supporting nature-inclusive agriculture, and abolishing rules, regulations and adverse incentives that hamper such developments.

#### 4.3. Building public language

Public discourse is completely dominated by 'rational', economic language. Languages, stories, narratives, framings or imageries of connectedness with nature, are instead relegated to the private domain. The instrumental or hedonic pillar brings forth its own language, with words like natural capital, markets, ecosystem services, value-added production, cost-benefit analysis and profits, a language with which policymakers feel familiar and comfortable. Although such instrumental discourses have their own merits for nature conservation policy, our results highlight the importance of the third pillar addressed in this paper, which requires another language. Hence, in order to bridge the implementation gap, we need a public discourse that does not crowd out personal commitments (Neuteleers and Engelen 2015) but fosters them, makes them part of public life, and in doing so multiplies them. This will not be easy, and research into the languages used by committed actors in green citizen initiatives will be helpful to get a better insight into the words and languages that foster connectedness and commitment and unlock eudemonic values.

To conclude, besides a moral and an instrumental pillar, we need to include a third pillar into the justification of nature conservation and its policy domain; a pillar based on eudemonic values. In order to close the gap between current intentions and efforts to conserve biodiversity, and the commitment to really implement the principles, goals and targets of nature policy, said policy should resonate much more with the motivations of citizens. The main conclusion of our large empirical study in Europe is that committed actors for nature devote their time and energy to nature because they feel connected to it and because it gives meaning to their life. Moreover, (re)building this missing pillar is not only crucial to keep the highly committed actors motivated, but may also inspire people and communities to reconnect with nature. These values should therefore be recognized, acknowledged and strengthened by both nature organizations and governments.

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#### Notes

1. 'Eudaimonia', derived from Aristotle, is used in philosophical texts; we use the more common spelling 'eudemonia' in this paper.

2. Peak experience or environmental epiphany is "an experience in which one's perception of the essential meaning of their relationship to nature shifts in a meaningful manner" (Vining and Merrick 2012, 497).

#### ORCID

W. Ganzevoort D http://orcid.org/0000-0002-1421-9893

M. Bonaiuto D http://orcid.org/0000-0002-4543-5329

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