

ID	Reviewer Name	Country of residence	Affiliation	Government Representative	Chapter	From Page (start)	From Line (Start)	To Page (End)	To Line (End)	Comment	Answer
45	Bob Watson	United Kingdom	N/A	No	Ch. 4		3		5	Self evident statement	Thank you this has changed for the SOD.
46	Bob Watson	United Kingdom	N/A	No	Ch. 4				6	8 The message seems to suggest ILK is always relevant – not true	Thank you this has changed for the SOD.
47	Bob Watson	United Kingdom	N/A	No	Ch. 4		9		12	An obvious statement – this is true of any evidence/information not just values. The paragraph is important but needs expansion on the theme of power asymmetries, vested interests and corruption	Thank you this has changed for the SOD.
48	Bob Watson	United Kingdom	N/A	No	Ch. 4		13		17	Biophysical, economic, socio-cultural valuation studies have not been conducted where nature's contribution to people is most at risk, nor where the potential benefits to poor populations is the greatest. Lacking use of valuation studies locally, may in part be explained by the low participation of researchers local to the study site.	This is a good observation, we will see to what extent this can be evidenced by the reviewed literature.
49	Bob Watson	United Kingdom	N/A	No	Ch. 4		18		20	Explain what you mean, e.g., is it where data is available? Explain 'blindspots'	Blindspots and brightspots are better explained in the current version of the document.
50	Bob Watson	United Kingdom	N/A	No	Ch. 4		21		23	Yes – and provide examples where it has been successful at a local, national, regional and global scale.	Examples are provided in section 4.2 of the current SOD.
51	Bob Watson	United Kingdom	N/A	No	Ch. 4		24		26	Again – please explain and give examples	Examples and explanation is provided in section 4.2 of the current SOD
52	Bob Watson	United Kingdom	N/A	No	Ch. 4	United Kingdom	27		30	Agree fully	Thank you!
53	Bob Watson	United Kingdom	N/A	No	Ch. 4		31		33	Im not sure what you are trying to tell me	This has been improved in the current draft and a box to support the message has been developed.
54	Bob Watson	United Kingdom	N/A	No	Ch. 4		34		36	This needs specific examples	This is now exemplified through specific decisions: et. protected areas, PES, certifications schemes, development projects.
55	Bob Watson	United Kingdom	N/A	No	Ch. 4		37		43	I agree but it implies that unless the processes are deliberative and fully inclusive and the full range of values are assessed, the decision-making is flawed – while this may be true, even partial valuation studies have utility – certainly better than none. I cannot think of one example in the UK or US while I was a science policy advisor when the conditions suggested in this paragraph were achieved. We need to discuss the real world with all its limitations – imperfect as it is.	This has been incorporated in the current narrative of the chapter and the SPM.
56	Bob Watson	United Kingdom	N/A	No	Ch. 4		44		48	Give examples where the values were different and what the implications were.	This is assessed now for specific decisions eg. protected areas, PES, certification schemes, development projects where the effects of missaligment with values is showcased.
152	Kris Wyckhuys	Vietnam	Chrysalis consulting	No	Ch. 4	29.	868	29	872	Yes, national legislation, international agreements and economic incentives have indeed been instituted following Rachel Carson's Silent Spring. Yet, while they may have been successful in phasing out organochloride pesticides, they have largely failed to halt the chemical intensification of agriculture (and the associated burden on the environment). Pesticide use continues to increase globally (Bernhardt et al., 2017) and recent work has shown how the pesticide toxicity loading of US farmland has increased 50-fold over the past 25 years (DiBartolomeus et al., 2019). Hence, one comes to wonder if the measures that have been instituted since 1962 are really effective / sufficient?	The text has changed to focus more on values and valuation and links to decision-making. The focus on pesticides has disappeared from the current text and the comment is no longer relevant.
153	Kris Wyckhuys	Vietnam	Chrysalis consulting	No	Ch. 4	30.	891	30	893	There's a rapidly growing body of evidence that agro-chemicals do not necessarily raise crop yields, impact upon biodiversity, are not essential to ensure food security, and routinely drive down farmers' incomes. Even in non-flowering agricultural crops, their use impacts countless biota, incl. pollinating bees (Calvo-Agudo et al., 2019 PNAS). More often than not, there are numerous ecologically-based alternatives to pesticides and chemical fertilizers. Hence, one may consider rewording 'agro-chemical subsidy schemes are re-evaluated' to 'agro-chemical subsidy schemes are re-evaluated and suspended, where possible'.	The text given is provided as 'examples' – reevaluated is of course a first step towards further decisions, taken at national level

154	Kris Wyckhuys	Vietnam	Chrysalis consulting	No	Ch. 4	30.	891	30	893	Under the pollution rubric in target 8, I see an emphasis on 'excess nutrient'. Yet, there's ample work showing that current rates of usages of synthetic pesticides are of equal if not greater importance than nutrients (e.g., Bernhardt et al., 2017). In many systems, the use of these products can be drastically reduced without even affecting crop yield - Lechenet et al. (2017) Nature Plants. Hence, shouldn't pesticides equally be specifically listed and prioritized?	Thanks, good point, but he quoted text is based on the Aichi targets which is the source of evidence here -- it is not up to us to change their wording...
155	Kris Wyckhuys	Vietnam	Chrysalis consulting	No	Ch. 4	4.	108	4	109	Invasive species problems surface and continue to longer, not only due to 'not taking adequate care' but also because we are not paying sufficient attention to tailor-made / nature-based solutions. Scientifically-guided biological control can 'root out' invasive species problems, and provides a desirable, safe and environmentally-sound alternative to other measures (e.g., Heimpel & Cock, 2018 Biological Control; Wyckhuys et al., 2018 PeerJ).	This is out of the scope of our assessment and it is more relevant to the IAS ongoing assessment.
158	Yannis A. Phillis	Greece	Technical University of Crete School of Production Engineering and Management	No	Ch. 4	4	105			Pollution is rather narrowly defined. Thermodynamic considerations should be made and the irreversibility of pollution ought to be presented briefly.	Pollution is now used as a simpler example, which doesn't require to define in depth the extent of the concept.
159	Yannis A. Phillis	Greece	Technical University of Crete School of Production Engineering and Management	No	Ch. 4		16	455	566	This chapter, among others, discusses power and decision making. I have spoken to many environmentalists in Greece and Ecuador. They often feel powerless when faced with such behemoths as the World Bank, IMF, European Central Bank or foreign governments which often impose policies with negative environmental effects. For example, Greece is forced to sell out some of its resources to serve its enormous foreign debt, marginalizing large numbers of its citizens in the way. Ecuador is destroying Yasuni tropical forest to extract oil to service its \$19 billion debt to China. China demands to be paid in cheap oil which then it sells at a profit on international markets. I think this kind of modern colonialism has tremendous environmental repercussions and should be discussed in the context of power and decision making.	We address this in the current section on Power and Knowledge, which also runs through the chapter as a thread.
164	Michael Bordt	Canada	None (Member of SEEA EEA Technical Expert Committee and Editorial Board)	No	Ch. 4	92	2286	92	2286	The above-highlighted concern is addressed somewhat in Figure 4.14 and somewhat in the accompanying text. However, this is an important point and should be highlighted in other chapters (e.g., Ch. 3)	This is a comment for other chapters. Chapter 3 also addresses the valuation scope of ecosystem accounts.
181	Thorkil Casse	Denmark	Roskilde University, Department of Society and Globalisation (ISG)	No	Ch. 4	1.	13	17		While the idea seems correct: 'in part be explained by the low participation of local researchers to the study site' another problem could be more to the point. We are lacking real global valuation studies and studies asking about the quality of protection. Why does India manage to protect the environment better than Vietnam? The answer could well include other aspects than pure valuation techniques.	Thank you for the suggestion, the scope of the chapter focuses on valuation, but we do try to identify other factors in the current version of the chapter that lead to better integration of values in decisions and to improved outcomes on justice and sustainability.
182	Thorkil Casse	Denmark	Department of Society and Globalisation (ISG)	No	Ch. 4	1.	27	30		Sentence is unclear. The version on p. 46, line 1364-1365 is better	Thank you for the comment, the text has been changed.
183	Thorkil Casse	Denmark	Department of Society and Globalisation (ISG)	No	Ch. 4	7.	188	7	189	In general the figures throughout the chapter are complicated.	Thank you for your comment. We are working to improve all figures.
184	Thorkil Casse	Denmark	Roskilde University, Department of Society and Globalisation (ISG)	No	Ch. 4	65.	1679	65	1680	In the box under credibility, different important aspects are mentioned, valuation aspects are too uncertain and decision-makers do not have sufficient training in valuation methods. What if important stakeholders, transforming nature into agriculture, infrastructure etc, simply do not accept the valuation techniques? If legislation and policing are weak, like in Indonesia and in relation to transformation of peak land into oil palm plantations, these important stakeholders do not have to accept any kind of outside valuation techniques. As long as the get the approval from local authorities.	there is a publication bias against valuation studies that are not accepted by authorities. But in principle this kind of lacking credibility is acknowledged in Section 4.2.2.3

185	Thorkil Casse	Denmark	Roskilde University, Department of Society and Globalisation (ISG)	No	Ch. 4	74	1934	74	1936	In many poor countries, indigeneous stakeholders are these transforming nature. Big stakeholders might not be present. In some cases, however, indigeneous stakeholders could still decide to protect, since those villagers around national parks are better off. In these sites infrastructure, roads, water, electricity, schooling, are provided by national parks or private hotels to ensure facilities to tourists. The villagers located far from the national parks or private parks express low degree of well-being, because of lack of infrastructure. This kind of phenomenon happens in poor countries facing absence of a state. Outcomes are quite different in countries where the state is present, like in Indonesia. I am currently writing an article on Madagascar and well-being of villagers close or far from protected areas, including private forest areas.	We thank the reviewer for this experience. The role of institutional context for valuation is also addressed in Section 4.3.
249	Miles Richardson	United Kingdom	University of Derby, Nature Connectedness Research Group	No	Ch. 4	44	1291	44	1291	There's little literature from psychology in this chapter, and themes from previous chapters don't seem to appear. The UK Governments 25 Year Environment Plan includes a policy on re-connecting people with nature and a population measure of nature connection is within revised Government statistics to inform decision making: https://www.gov.uk/government/statistics/monitor-of-engagement-with-the-natural-environment-mene-thematic-reports-nature-connection-index-and-technical-notes-and-guidance	Thanks – we may need to be clearer on the scope of this subsection in what is covered here and what (e.g. education) as reflected in this comment is covered in Ch. 5 and 6.
283	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	6	184	7	188	This strong statement should be supported by some references.	The text has been changed, the comment is no longer relevant.
284	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	9	274	9	279	In order to define 'scientific evidence', I believe that there may be more authoritative sources than Wikipedia	The text has been changed, the comment is no longer relevant.
285	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	10	280	10	285	I think using this language at the beginning of the chapter may be misleading for the reader. In particular, these lines are in sharp contrasts with approach undertaken in the previous chapters of this Values Assessment. Furthermore, the statement is highly questionable and this should be acknowledge already here: there is a whole literature within the STS tradition that questions the idea of the neutrality of science, underlining the how science and society are strictly intertwined and co-produced (to cite one of the most famous examples of this: Jasanoff, S. 2004. States of Knowledge: The Co-Production of Science and the Social Order, Taylor & Francis). In sum, I suggest to radically reconsider this approach and take account of the social dimension of science.	The text has been changed, the comment is no longer relevant.
286	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	19	582	19	582	I would remove "our" from this sentence.	Thank you, this was done.
287	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	20	606	20	608	It is important to acknowledge that scholars like Blaser (2014) have conceptualized this in terms of different "ontologies", rather than simply "knowledges". Blaser, M. (2014). Ontology and indigeneity: On the political ontology of heterogeneous assemblages. Cultural Geographies, 21(1), 49-58. doi: http://dx.doi.org/ezproxy.ub.gu.se/10.1177/1474474012462534 .	Thank you for suggesting Blaser. We have considered his work
288	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	24	731	24	734	It would be fair to add here that the concept of resilience has been highly criticized within the social sciences (e.g. Cote, M., & Nightingale, A. J. (2012). Resilience thinking meets social theory: Situating social change in socio- ecological systems (SES) research. Progress in Human Geography, 36(4), 475–489; Olsson, L., Jerneck, A., Thoren, H., Persson, J., & Byrne, D. (2015). Why resilience is unappealing to social science: Theoretical and empirical investigations of the scientific use of resilience. Science Advances, 1(4).)	very useful comment. I totally agree as I criticize myself the term resilience. We have considered the citations and reworked the text.
289	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	25	739	25	740	It is not clear what is meant here by clash between knowledge and values: are not these two inextricably intertwined? Perhaps it could be reformulated in terms of "knowledge and interests" (or "values and interests".)	totally agreed and has been changed in the current draft.
290	Matteo De Donà	Sweden	University of Gothenburg	No	Ch. 4	25	741	25	741	The term "land-altering" seems too narrow: "ecosystem-altering" could be more suitable.	The text has been deleted in the SOD. The comment is no longer relevant.
358	Droz Layna	Japan	School of Global Environmental Studies	No	Ch. 4	75	1955	75	1958	What theory?	theory of change is now used to frame the assessment and introduced in chapter 1, and detailed for the purpose of chapter 4 in section 4.1.

433	Syed H. Raza	Malaysia	Media Project on Conservation Environment & Nature MPCEN	No	Ch. 4	10	293	10	303	Values can influence evidence or they may overlap especially when it comes to onground survey involving people. Either values should be defined first before doing the survey to avoid influence or basic awareness & education program should be run so that people can speak freely without involving values.	Thank you for your comment! This is addressed more specifically in Ch. 2 and 3 which precede this one.
434	Syed H. Raza	Malaysia	Media Project on Conservation Environment & Nature MPCEN	No	Ch. 4	44	1309	46	1352	Developing the details for the data base, it can be regionalised or it can be prioritized for most Climate affected Ecosystems. Giving priority to those communities worst affected by climate change. Focusing on areas where climate change is shwoing devastation.	Thanks for the suggestion, the database as we have it did not allow for conducting this kind of analysis for the SOD.
442	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No	Ch. 4	91	2459	91	2460	across income groups allows to study the distributional consequences of biodiversity loss or conservation. Ebert (2003) has shown, that the non-market benefits of conservation are distributed pro-poor (pro-rich) if and only if the income elasticity of willingness-to-pay is lower (larger) one. The limited currently existing evidence suggests that for most goods and services people receive from nature the income elasticity of willingness-to-pay is indeed below one (Drupp et al. 2018, Chiabai et al. 2011, Jacobsen and Hanley 2009). Thus, current empirical valuation studies suggest that biodiversity loss is disproportionately harming lower-income households (Nurmi and Ahtiainen 2018, Drupp et al. 2018). Or put the other way, the non-market benefits of biodiversity conservation are distributed in favor of lower income households (Nurmi and Ahtiainen 2018, Drupp et al. 2018). References: Chiabai, A., Trivisi, C. M., Markandya, A., Ding, H., and Nunes, P. A. (2011), Economic assessment of forest ecosystem services losses: cost of policy inaction. Environmental and Resource Economics, 50(3), 405-445. Drupp, M.A. (2018), Limits to Substitution between Ecosystem Services and Manufactured Goods and Implications for Social Discounting. Environmental and Resource Economics, 69(1): 135-158. Drupp, M.A., J.N. Meya, S. Baumgärtner and M.F. Quaas (2018), Economic Inequality and the Value of Nature. Ecological Economics, 150, 340-345. Ebert, U. (2003), Environmental goods and the distribution of income, Environmental and Resource Economics, 25(4), 435-459.	Thank you very much for this well-supported perspective. These are indeed important points to make concerning valuation methodologies and we are taking them into consideration in that section of the chapter (4.2). In this section on outcomes, we are focusing on specific decisions or interventions, falling into the following themes: protected areas, payments for ecosystem services, sustainability certification, and big infrastructure projects (i.e., mining and dams). Evidence for the same point made in this comment (that biodiversity loss or conservation may disproportionately impact lower-income households) has also been found within these themes, and we do discuss these implications for distributional justice, but not with these specific references, since they do not pertain to the four focal themes.
443	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No	Ch. 4	102	2820	102	2822	Convergent validity studies for benefit transfer confront the estimated values with the actually survey values, to identify under which conditions which transfer methods perform best. An overview can be found in Kaul et al. (2013). These convergent validity analyses suggest that using simple unit value benefit transfer but adjusting for mean income already substantially reduces transfer errors (Czajkowski et al. 2017; Meya et al. 2018). There is a need for more convergent validity analysis in particular to understand under which conditions simple adjusted unit transfer performs reasonable well compared to sophisticated meta-regression function transfer and structural benefit transfer approaches. References: Czajkowski, M., Ahtiainen, H., Artell, J., & Meyerhoff, J. (2017). Choosing a functional form for an international benefit transfer: Evidence from a nine-country valuation experiment. Ecological Economics, 134, 104-113. Kaul, S., Boyle, K. J., Kuminoff, N. V., Parmeter, C. F., & Pope, J. C. (2013). What can we learn from benefit transfer errors? Evidence from 20 years of research on convergent validity. Journal of Environmental Economics and Management, 66(1), 90-104. Meya, J.N., Drupp, M.A., and Hanley, N. (2018). Income inequality and the international transfer of environmental values. Kiel Economics Working Paper, No 2017-03. Updated working paper.	Thank you for your comment. This annex is no longer part of the chapter, the comment is no longer relevant.

444	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No						You might want to complete the picture for Europe: "In the EU benefit transfer is regularly applied to estimate environmental cost under the EU water framework directive and the EU marine strategy directive. Traditionally, the largest field of applied cost-benefit analyses in European countries is the transportation sector (OECD 2018), where the cost-benefit ratio for public investments in the traffic infrastructure is estimated as part of the planning process. Droste and Meya (2017) provide a case study for Germany using benefit transfer to account for environmental cost of a river deepening." References: [OECD 2018] Atkinson, G., Braathen, N.A., Groom, B. and Mourato, S. (2018), Cost-benefit analysis and the environment: further developments and policy use. OECD Publishing: Paris. Droste, N., & Meya, J. N. (2017). Ecosystem services in infrastructure planning—a case study of the projected deepening of the Lower Weser river in Germany. Journal of environmental planning and management, 60(2), 231-248.	Thank you for your comment. This annex is no longer part of the chapter, the comment is no longer relevant.
445	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No	Ch. 4	102	2812	102	2812	methods. Maybe the following lines (particular focusing on structural benefit transfer methods), can be helpful starting point: Regarding transfer methods several studies indicate that transferring functions is more accurate than simply transferring values (e.g. Kaul et al. 2013). Economists have developed several methods for function transfer ranging from statistical (e.g. Rosenberger & Loomis 2000) to theory-based ('structural') approaches (e.g. Smith et al. 2002; Baumgärtner et al. 2017). While the former is the dominant approach but often misses a structural micro-economic foundation, the latter is hardly applied in policy (Johnston et al. 2018). Recently, Newbold et al. (2018) showed that traditional, non-structural approaches to benefit transfer often do not satisfy basic requirements for internal consistency. Moeltner (2019) has shown, that restricting meta-regressions to follow basic microeconomic principles produces more efficient estimates than models that are purely specified by statistical fit. However, so far structural benefit transfer approaches require advanced microeconomic skills, that render them often unsuitable for practical policy analysis (Phaneuf and Requate 2017: 685). An exception is Baumgärtner et al. (2017), who developed a generic model for the valuation of pure public goods, such as the existence value of biodiversity, and derive a set of ready-to-use benefit transfer factors. In particular, they show how to control not only for differences in mean income, but also in income inequality, the price level and the level of the environmental good. References: Baumgärtner, S., ..., and M.F. Quaas (2017), Income inequality and willingness to pay for environmental public goods. Journal of Environmental Economics and Management, 85: 35–61.	Thank you for your comment. This annex is no longer part of the chapter, the comment is no longer relevant.
446	Jasper Meya	German	German Center for Integrative Biodiversity Research (iDiv) and Department of Economics, University of Leipzig	No	Ch. 4	102	2830	103	2839	Another application of benefit transfer in the context of the EU water framework directive (deepening the Weser river estuary in Germany) and infrastructure planning is provided by Droste, N., & Meya, J. N. (2017). Ecosystem services in infrastructure planning—a case study of the projected deepening of the Lower Weser river in Germany. Journal of environmental planning and management, 60(2), 231-248.	Thank you for your comment. This annex is no longer part of the chapter, the comment is no longer relevant.
456	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 4	16	274	16	279	Wikipedia is not a reliable source. There must be better sources for defining scientific evidence.	The text has changed. The comment is no longer relevant. Thanks for highlighting this.
457	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 4	26	568			"Most people assume that there is one knowledge system - their own." Is that true? Is there a reference for this statement?	The text has been changed to address this comment and provide evidence.
458	Alastair Johnson	United Kingdom	Department for Environment, Food and Rural Affairs (Defra)	No	Ch. 4	27	596	27	598	"In the Keeyask case study, a value of 'more hydro dams are needed to fulfill energy demands' (Keeyask, 2012) is indicative of consumptive-economic valuation over ecological or other types of valuation." - I can't follow why the phrase 'more hydro dams are needed to fulfill energy demands' is indicative of consumptive-economic valuation. Surely it's indicative that people need energy!	This has been reworded.

459	Alastair Johnson	United Kingdom	Department for Environment, Food and Rural Affairs (Defra)	No		39	895	39	904	Needs correcting. Suggest: "An example of the progress in mainstreaming the accounting of negative and positive effects of development on Natural capital and the associated Ecosystem Services, is the UN System of Environmental and Economic Accounts (SEEA) which includes the Experimental Ecosystem Accounts (EEA). The SEEA is a framework used to integrate economic and environmental information in order to understand key links between the economy and the environment. The links include flows between the environment and the economy (materials, regulating services etc.), flows between the economy and the environment (air pollutants, effluent etc.), environmentally-related economic transactions (environmental protection expenditures, environmental taxes). The framework also provides for the recording of environmental assets such as subsoil assets and ecosystems. Some elements of the framework are now established as an internationally agreed standard, with formal definitions, classifications, accounting rules and tables needed for the production of internationally comparable statistics and accounts."	This has been addressed in section '4.2.4 Mainstreaming valuation at national policy level' of the Second Order Draft
460	Alastair Johnson	United Kingdom	Department for Environment, Food and	No	Ch. 4	94	2345			"Natural Capital Protocol" - reference?	The Natural Capital Protocol is now referred to in chapter 3.
486	Henry Mcghie	United Kingdom	Individual	No	Ch. 4					I think this chapter would benefit from a section on working with attitudes and values. I was surprised there isn't an overview of work of S Kellert, built on by Kellert and EO Wilson. Kellert's work is very relevant as it was about exploring different attitudes, and underlying values, as a means of understanding human relationships with nature. This work is overviewed in The Nature of Life, and was very influential. It is relevant as it was used to explore human-wildlife conflict, and in different countries and social groups. Should be included in chapter 4.	This comment is important but out of the scope for this chapter. It has been shared with Ch. 2 where it is more relevant and provides conceptual basis for our chapter.
487	Henry Mcghie	United Kingdom	Individual	No	Ch. 4					this chapter would benefit from including work of T Crompton and colleagues, on values and frames in conservation	This comment is important but out of the scope for this chapter. It has been shared with Ch. 2 where it is more relevant and provides conceptual basis for our chapter.
488	Henry Mcghie	United Kingdom	Individual	No	Ch. 4		1102			worth noting that the importance of a range of institution types, including museums and other cultural institutions, was recognised as key to achieving the Paris Agreement in Workbook for Paris Agreement at COP 24. There is quite a lot of literature on the potential of museums and others to play a part in climate change governance that should be largely transposable to biodiversity	Interesting comment, it was considered but cannot be comprehensive on all types of existing institutions, as we operate with a rather tight word limit for the document.
489	Henry Mcghie	United Kingdom	Individual	No	Ch. 4	90.	2437			why not also peace and partnership as in the SDGs?	We have scaled back the specificity of outcomes tracked, to account for anything that is being measured related to human or environmental well being. We are now allowing different categories of outcomes to emerge from the evidence base, and "peace" arises in terms of conflicts, while "partnerships" is a common social outcome measured in terms of the formation or strengthening of community organizations or feelings of social cohesion.
490	Henry Mcghie	United Kingdom	Individual	No	Ch. 4	91.	2447			worth noting that education is not restricted to school but refers to lifelong learning, specify somewhere what education for sustainable development is	As noted above, we have moved away from using any predetermined framework for outcome types and are just reporting what has been measured. We don't have many outcomes related to education. However, there is a box in this chapter on education as it relates to values of nature.
498	Patricia Koleff	Mexico	CONABIO	No	Ch. 4	4	105	4	108	Pollution is not only consequence of incomplete recycling of 'waste' and the use of agrochemicals, it is also a consequence of production and consumption habits.	This has been changed and pollution is not further described, only presented as an example.
506	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 4					If the only considered information is the one written and systematized, where are the voices and experiences of other actors?	The evidence considered has been expanded considerably for the Second Order Draft. We've taken new approaches to include a wider set of voices: case studies drafted by other stakeholders, inclusion of contributing authors, ILK dialogues...
507	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 4					What is the timeline for the proposed actions in the chapter?	This is no longer relevant in the current version of the chapter
508	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 4					What about illegal decision making? How to keep record of them, reflect about them and solve them?	This is a very important comment, we've discussed how to address it but we have not found a systematic way to do it. Some elements of this are discussed in the outcomes section through specific types of decisions.

509	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 4					Which are the items that are keeping track of the processes? Gender? Ethnicity? Is the correlation analyzed?	The question is not clear. But we do tackle how values of minorities tend to be obscured and the role of valuation in making them visible for decision-making. However we don't tackle this by ethnic group or gender as the reviewed evidence rarely distinguishes among these categories.
510	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 4					Implicit values are discussed, how to make awareness exercises of those values choosing who's going to lead them when there are hegemonic discourses and power cooptation?	We try to provide options for bridging worldviews (when there are conflicts) but we don't provide a normative approach to this given the nature of the assessment.
511	Dolores Amelia Arreguín Prado	Mexico	Latin America Youth Biodiversity Network Mexico	No	Ch. 4					How are blindspots going to be identified when informatino sources and the analysis perspective is 70% based in Europe?	The analysis performed was global. Blindspots have been identified in the current version of the document using this global review, and identifying that scientific literature on valuation has gaps in given countries and regions.
535	Juan Manuel Frausto	Mexico	Fondo Mexicano para la Conservación de la	No	Ch. 4					Consider the interaction between the individual and the different interest groups towards the decision making processes.	This has been addressed to an extent in Ch. 1 through the decision-making typology.
563	Raquel Jiménez Acosta	Mexico	Reforestamos Mexico A.C.	No	Ch. 4					Decision making occur at different scales, will you have study cases that represent examples of every scale with diverse actors (government, private sector, ILK)?	The cases presented in the outcomes section present the complexity across scales. They will be highlighted more for the final draft of the chapter.
564	Raquel Jiménez Acosta	Mexico	Reforestamos Mexico A.C.	No	Ch. 4					Specialized terms such as power raltions and institutions are used, is a glossary including those terms (beyond the definitions provided within the text)?	A glossary has made available as part of the Second Order Draft for the whole assessment
565	Raquel Jiménez Acosta	Mexico	Reforestamos Mexico A.C.	No	Ch. 4					About the methods to identify literature, it may be good to have a section explaining how it was done, e. g. the language processing and text analysis.	This is now done across the sections. For the final report, depending on the second round of external comments and the word extension we will introduce a methods section at the beginning of the chapter.
590	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 4					Productive sector can be a good ally when integrating the successful experiences because they can make emphasis in the associated values.	Thank you for the comment!
591	Mónica V. Alegre González	Mexico	CONABIO	No	Ch. 4					Standing in front of problems of insecurity, health and economic wellbeing, the values associated to biodiversity tend to disappear. It is important to find a way to easily explain the interrelations of the biodiversity values with the needs in health, poverty, etc. The challenge is to explain values as something understandable by decision makers, they are aware of them when they see how health or society wellbeing can be affected.	Thank you for the comment! We'll try to make improvements in communication.
613	Jasmin Hundorf	Mexico	Coordinator bei Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 4					How to apply/implement valuation studies? Based on the experience at TEEB (which is a facilitation process and not a study) decision makers and people at communities are tired of studies developed with/about them.	This is tackled more in Ch. 6 on operationalization of valuation for transformation.
614	Jasmin Hundorf	Mexico	Coordinator bei Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 4					Experience in enforcement: How to find a balance between science and what is actually needed in real life? Sometimes what matters the most is to have an exercise where an intersectoral dialogue is facilitated about values of nature and the possible actions that could be practical in the productive sectors.	This is addressed by some methodologies e.g. deliberative. But also it is addressed in the outcomes section by identifying some arenas for negotiation.
615	Jasmin Hundorf	Mexico	Coordinator bei Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 4					How dialogue with the 'non-scientific world' about the multiple values concept and non economic valuation? Non economic valuation is still poorly known outside the scientific circle.	We have tried to improve the language. But also, part of this effort will come after the assessment. Getting the word out once it is approved.
616	Jasmin Hundorf	Mexico	Coordinator bei Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 4					Integrate more practical cases. GIZ could provide data from local to national scale, case about TEEB and the way this proect was used in public policy.	Specific cases were reviewed in e.g. TEEB and ValuES databases but the experiences don't report on 'valuation uptake' or on the full valuation process, they also don't report on their outcomes. They focus on either one or the other, so it was difficult to recover them as evidence that document the full process.
621	Lizzeth Moreno	Mexico	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	No	Ch. 4					Could it be possible to identify if there are any 'building blocks' (things that could be repeated within other contexts) in the 'bright spots' reported?	Great suggestion! we've tried to do that for the Second Order Draft and will continue improving this for the final draft.
627	Lucía O. Almeida Leñero	Mexico	Ecology and Natural Resources Department,	No	Ch. 4					¿Are you thinking about producing a guide on how to make decisions?	This is not part of the scope of the assessment.
628	Lucía O. Almeida Leñero	Mexico	Ecology and Natural Resources Department, UNAM	No	Ch. 4					You need to clearly explain the reason for selecting "success cases".	We've moved away from this concept and into the idea of selecting studies in section 4.2 that show valuation uptake, and in section 4.4. that go in depth in cases where evidence shows theres enough literature to document the process of valuation-decision-outcomes
632	Georgina Cabrera	Mexico	CONABIO	No	Ch. 4					Political will is the central issue to be able to produce change in decision-making. Thus, its necessary to emphasise the need for a change in cosmivision at all levels of government.	This has been considered in the Second Order Draft.
643	Rafael Calderon Contreras	Mexico	Licenciatura en Estudios Socioterritoriales, Universidad Autónoma Metropolitana, Unidad	No	Ch. 4					Why aren't you using the life framework to classify values and valuation?	The analysed evidence releavaant to this chapter does not document 'life frameworks'. This comment is more relevant to Ch. 2

664	Adriana Carolina Flores Díaz	Mexico	CENTRUS, Universidad Iberoamericana	No	Ch. 4					IPCC distinguishes between two types of knowledge (that which is useful and that which is useable), this may be a useful categorisation for IPBES to consider. Another interesting reference are the books of Humberto Maturana (biology, cognition and epistemology).	Thanks for the suggestion.
665	Adriana Carolina Flores Díaz	Mexico	CENTRUS, Universidad Iberoamericana	No	Ch. 4					How are knowledge systems related to value-systems?	This is a comment relevant for Ch.2, it has been forwarded to them.
688	Patricia Koleff	Mexico	CONABIO	No	Ch. 4					The chapter should be more tightly linked to its general objective.	The narrative has been improved in the SOD, and we'll continue to improve it for its final version.
689	Patricia Koleff	Mexico	CONABIO	No	Ch. 4					With the current proposed methodology for the chapter it is unclear how this will provide evidence to assess well being, justice, sustainability as these are multifactorial issues with different timeframes	We've improved the methodology and the current outcomes section tries to tackle this issues.
690	Patricia Koleff	Mexico	CONABIO	No	Ch. 4					With regards to the focus of the key questions of knowledge and power: the questions are descriptive but its difficult to understand how to transform into actions. Please include questions that help the reader think about actions, that not only describe an unequal distribution of power, but how to address it. The "lessons learnt" must be useful for the transformations necessary to reach a sustainable future.	We are addressing this now in the outcomes section of the chapter. Lessons learned will also be derived from each section in the final version of the chapter.
696	Patricia Koleff	Mexico	CONABIO	No	Ch. 4	4	105	4	108	Pollution is not only consequence of incomplete recycling of 'waste' and the use of agrochemicals, it is also a consequence of production and consumption habits.	This has been considered and the text has changed now.
708	María Azahara Mesa	Mexico	Sustainability Sciences Department, Colegio de la Frontera Sur, Mexico	No	Ch. 4					The question "Who holds power?" must be redefined: "Who is allowed to, or who has the possibility to ever be in power?"	We've rearranged the section. This is addressed in a different way in the introduction now.
765	Tania Alhelí Cruz Mejía	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					How is the interaction between knowledge, values and decision making visualized and analyzed?	This is reflected in the current Second Order Draft introduction and it is analysed throughout the sections of the chapter.
766	Tania Alhelí Cruz Mejía	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					Is there any kind of interaction/inclusion of citizen science programs, with which of these programs?	This was not considered for the chapter as there aren't any citizen science programs on valuation that have lead to particular decisions (to our knowledge).
777	Eduardo García Frapolli	Mexico	Ecological Economy Laboratory, IIES, UNAM	No	Ch. 4					I think it is not yet clear how to link the values and power of local communities and cultures with the national scale (UN) that only represents countries.	We will try to improve these cross-scale connections in the second order draft.
784	Ariana García Galván	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					I consider is it very relevant to have a chapter about valuation in decision making since to some extent it is there where the future actions that will be taken are decided.	Thank you!
785	Ariana García Galván	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					I consider that the time and effort that will be dedicated to the development of the database about study cases should be valued, since it seems like a big challenge and at the end it may be only partially covered.	Thank you!
788	Jaritz García García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					If having evidence determines the use of information, is there a proposal for getting involved with groups that are not very permissive with outsiders (some indigenous communities) in order to also take into account their values?	This is not targeted in specific in this chapter but Ch. 3 which looks into specific methods (including e.g. participatory methods) provides a better take at how different methods can allow taking into account values of different groups.
795	Salma Citlali Martínez	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					Think of a strategy to avoid a simplistic text analysis (machine learning).	This has been considered, we don't base our analysis solely on machine learning. We conducted different types of reviews for the SOD relevant to each section of the chapter.
808	Ernesto Alonso Villalvazo Figueroa	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					It would be good to make simpler figures that better explain the whole process that the chapter intends to follow.	Agree we will work on that for the final draft.
818	Mariana Machado García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					How is the subjectivity of people, that is to say, the values they hold, articulated in national policies? Particularly, how are different values (economic vs intrinsic) resolved? For instance: if in Mexico each community value the same good, how will the president make a decision for the whole nation taking into account these values, and avoiding to supplant some values over others?	Although relevant, we couldn't find enough evidence on broad individual values in individuals in positions of power. We therefore can only present conflicts between values and stakeholders which is what is documented in the literature.
819	Mariana Machado García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					How do decision makers learn about all these diverse values?	Not clear what the comment is.
829	Erandi Rivera Lozoya	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					Visibilise conflicts of interest between different actors in decision-making processes, at different (temporal and spatial) scales, scopes (socio-economic, political, management) and organisational levels (individual, family, private sector, government).	Not clear what the comment is.
836	Aline Pingarroni	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					One suggestion (although it may be too difficult): it would be interesting that the diagram of the conceptual schemes integrate the drivers of biodiversity loss (those identified in the global assessment).	Noted, we will work on figures for the final draft of the assessment.

843	Manuel Maass	Mexico	Transdisciplinary Socio-Ecosystem Management, IIES, UNAM	No	Ch. 4					The conceptual scheme should not only be focused on humans. Non-humans also have power (albeit unconscious), that would affect the process described (eg natural hazards, climate, ecosystems..).	This was considered for the second order draft. E.g. nature was considered as a stakeholder in the analysis of protected areas		
844	Manuel Maass	Mexico	Transdisciplinary Socio-Ecosystem Management, IIES, UNAM	No	Ch. 4					Decision-making and implementation are two different things. This is why handling uncertainties is crucial, this can be done through strategies such as adaptive management, precautionary principle.	Thank you for the comment. This is noted.		
850	Alejandro Torres García	Mexico	Academic Workshop IIES Morelia, Mexico	No	Ch. 4					The definition of "institutions" is mixing up different types of interactions. I propose talking about formal and informal "interactions" (rather than institutions). Informality is also a difficult term that needs to be carefully defined.	The term has been defined for clarity and to avoid these confusions.		
1036	Tomas Declercq UNEP	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 4	33		926	927	The Indonesia deep case mentions 'Promotion of PES by international organisations somehow setting up euphoria on this instrument' Strong statement, so can this be verified? Is it also international cooperations/multinationals promoting PES? We at TEEBAgriFood Indonesia have recent anecdotal information on this as well...	We didn't develop this 'deep case' further in the SOD. The comment is no longer relevant.		
1037	Tomas Declercq UNEP	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 4	52		1528		"Improvements have been made since the TEEB project" Reformulate to: "Improvements have been made since the TEEB initiative was launched in 2008"	Section 4.2.4 Mainstreaming valuation at national policy level. Reference to TEEB has been clarified here.		
1038	Tomas Declercq UNEP	Belgium	HILDE EGGERMONT - Belgian National Focus Point - collated comments BELGIUM	No	Ch. 4	59		1606		"Table TEEB Recency (year): "no quite recent/2013" FYI Website is being updated in 2020 with recent TEEB Secretariat post 2013 - 2019 applications.	The TEEB database was not analysed in the SOD, opting instead for an analysis of plural valuation methods through Web of Science. See Data Management Protocol DOI: 10.5281/zenodo.4071756 for possible follow-ups.		
1048	Adelle Blair	Antigua and Barbuda	Government of Antigua and Barbuda - Ministry of Tourism and Investment	Yes	Ch. 4	5		129	5	138	By proposing to focus on conservation (protecting species from extinction, maintaining and restoring habitats, enhancing ecosystem services and protecting biodiversity) rather than the avoidance of damage is a reactive approach to the "worldwide deterioration of nature" noted in line 71. I believe that unless the approach is more proactive then we will always be trying to restore habitats etc. I fully take the points mentioned in chapter 5 regarding transformational change and governance systems. However, this approach suggests a throwing up of hands in the air....which in essence defeats the whole purpose!	The text has been deleted in the SOD. The comment is no longer relevant.	
1049	Adelle Blair	Antigua and Barbuda	Government of Antigua and Barbuda - Ministry of Tourism and Investment	Yes	Ch. 4	25		739	25	748	"Knowledge system - a body of propositions that are adhered to, whether formally or informally, and are routinely used to claim truth" (Pascual et al 2017); you refer to "held knowledge" in this document. Therefore, rather than examine how power influences knowledge, it should be an examination of how power influences decision-making. Knowledge will most times be held but the lack of power limits the extent to which that knowledge can be articulated. In most cases in my experience, "power" is that which works structurally (line 475). A clearer definition of knowledge then?	The text has been deleted in the SOD. The comment is no longer relevant. But the comment was considered to draft the new version of the text.	
1188	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	8		237		8	244	This sentence gets at some of the ambiguity I feel about the relationship between this chapter and the rest of the report, or this chapter and the previous chapter. If decision-making can take place without explicit valuation procedures (and my suspicion is that it usually does) then what precisely is the relation between understanding environmental values and decision making? Are you going to argue that decision making should include valuation? I would like to have this clear by this point in the chapter. I am also unclear whether you are only talking about group or social decision making processes, or if you are also going to talk about individual decision making. I do think it is valuable and interesting to focus on multi-stakeholder decisions as most of the conservation literature seems to be about individuals. However you might want to highlight and justify this particular focus. I mean, the background unstated assumption driving this report seems to be that it is aimed at things that businesses need to do, like compensation, ecosystem service valuation and participative consulting on impacts. I don't see why you don't just make that explicit.	We try to clarify better the scope of the chapter in the introduction of the current SOD. Regarding taking a multi-stakeholder approach, this is the scope of the assesment and we have to address it. The assesment also doesn't aim at things that businesses need to do and we hope this is better explained in the current version of the chapter.

1189	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	9	245	9	247	This partly addresses my point above but I find it vague. Value articulation was defined in Chapter 2 as "many different ways and languages (Martinez-Alier, 2001, 2009), ranging from narratives (e.g., stories about a landscape or a place – (Drenthen 2009), performances, practices, art (e.g., landscape paintings Klaver, 2012); writing about 'nature' – (Murphy et al., 1998) to more explicit articulation expressed in decision-making processes, as preferences and judgments as well as in other formal valuations and appraisals that inform collective decisions (Centemeri, 2015)" in contradistinction to embodied values. So are you here trying to say that embodied values may be sufficient for multistakeholder negotiation? Or are you specifically using "articulation" here, differently from Chapter 2, to mean only formal valuations and appraisals, so that what you are saying is that maybe informal articulations are adequate for decision making? Note also, and I find this important, that this definition from Chapter 2 defines decision making processes as a kind of value articulation, which makes this null hypothesis here in this chapter meaningless.	The text has changed, we hope the introductory text is clearer now. We will also pay attention for wording consistency across chapters.	
1190	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	19		19	582	This sentence needs more contextualization or sign-posting. I have no idea why here you have suddenly started talking about the State. Before getting to this sentence it would be useful to know why conceptions of the State are pertinent to this discussion.	The text has changed for the SOD, the comment is no longer relevant.	
1191	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	20		20	591	Your willingness to draw on both discursive analytical traditions and concepts, and to use AI to deliver a "theory" of power in decision making is not necessarily entirely bad, but its weird. It suggests that within the chapter itself you have widely differing standards of evidence.	These inconsistencies have been addressed in the current version of the Second Order Draft.	
1192	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	24		705	24	717	Here you seem to be suggesting that TEK and values are synonyms. Are they? Are science and values synonyms? Were you trying to argue that in ILK systems, values are not disarticulated from knowledge like they supposedly are (but aren't) in the Western science tradition? I did not see you actually articulate that argument. If that is what you are trying to say it could be much clearer.	the reviewer is right. it was confusing. we tried to address this in the SOD and will continue doing this in the next stages.
1193	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	25		746	25	748	So, is the goal of this chapter (or the report as a whole), to provide mechanisms by which indigenous and other value orientations towards nature can be used to resist land use change, resource extraction, and other actions led by the more powerful actors in society (companies and states)? Are you explicitly looking for, or seeking to develop, a way by which all values can be made equal in or via decision-making? This remains unclear to me, and though I appreciate the quality of the writing here (as opposed to Chapters 1 and 2), I still have an uneasy feeling that it doesn't all gel and fundamentally I don't know what this is all for. This makes it difficult to evaluate as a reviewer. As in previous chapters you seem to just be dumping into the chapter every aspect of conservation and the environment considered by social scientists to be important. While its great that biodiversity and conservation actors are paying attention to social science literature finally, I think that the report can achieve a higher quality and a better impact if its aims are clear and explicit.	totally right!! we left out all this part from the SOD as it was more relevant for chapter 5. so now they are dealing with these aspects.
1194	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	25		761	25	764	Same issue with articulation in your hypothesis as in the previous hypothesis (p 24 705). Why are you using different review and synthesis methods here than were previously described? (I prefer this approach as better suited to the material.)	Now, this part has changed quite a lot and it's located after 4.4., just before 4.5. Every piece of the chapter follows its own process to collect evidence.
1195	Meredith Root-Bernstein	Chile	Musée de l'Homme, Paris, France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	30		891	32	894	So, in this table value articulation mainly means working out the implementation costs of things that states have committed to? In your desire to fit everything into one report I feel that you alternate between highly reductive and excessively broad interpretations of your terms and concepts. Also, surely a pluralistic definition of the values that need to be articulated would be on the level of "the cost is irrelevant, its a moral imperative" and values of that kind. Your language here implies to me a focus on monetary values.	Interesting critique – the text is meant as example of what countries report in their NBSAPS on these various targets. We are working on a clearer narrative and clearer language to improve the document.

1196	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	75	1956	75	1958	What theory? What author? Please provide a citation.	We moved away from this approach. The comment is no longer relevant.
1197	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4	75	1970	75	1971	What is "the binary"? What does this mean? Please rephrase.	detailed explanations of the relevance of power for valuation uptake, and specifically in the context of ILK, are discussed now in Section 4.5 with new wording.
1198	Meredith Root-Bernstein	Chile	France; INRA AgroParisTech, Paris, France; Institute of Ecology and Biodiversity, Santiago, Chile; Center for Applied Ecology and Sustainability	No	Ch. 4			75	1950	Why is this section here? It would make more sense earlier in the chapter where you were talking about ILK and values.	conceptual approaches to valuation are now addressed in chapter 1,2 and linked in Section 4.1 introducing chapter 4.
1333	Elisa Peresbarbosa Rojas	Mexico	Workshop IPBES - Veracruz, Mexico	No	Ch. 4					The document talks about decision-making in an institutional level, however, the individual decision making could have a relevant impact in collective decisions, and it should also be considered in the text.	Thank you, this has been considered to the extent that the evidence is available tracking the role of individuals (and their values and valuation) in collective decisions and their outcomes.
1383	Susanne Raum	United Kingdom	Centre for Environmental Policy, Imperial College London	No	Ch. 4	General				You've probably seen this recent paper already, but just in case you haven't, it might be of interest: Incorporating environmental costs of ecosystem service loss in political decision making: A synthesis of monetary values for Germany. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0211419	Thank you for the suggestion
1386	Javier Cabello	Spain	Dept. Biology and Geology, Program in Applied Sciences to the Environment, Andalusian Center for the Evaluation and Monitoring of Global Change (CAESCG), University of Almería	No	Ch. 4	41	1215	41	1216	It's worth developing somewhat the case of Ecuadorian constitution. This constitution incorporates the rights of nature, focus on the integral respect to nature, its maintenance and the regeneration of its cycles and evolutionary processes (art. 71-74). This proposal is framed in a context in which government management is oriented towards compliance with the principles and rights of "Good Living" or "Sumak Kawsay" (i.e. the quechua word used to refer the ancestral cosmivision of life) (art. 14), being the interculturality and harmonious coexistence with nature the major ones. The constitute introduces a shift in the vision of nature, understood in the wester culture only as a provider of resources. The constitution promotes a more comprehensive approach of nature, defining it as "the space where life takes place" (art. 71). In addition, art. 14 recognizes the right of the population to live in a healthy and ecologically balanced environment that guarantees sustainability and good living (Sumak Kawsay).	Thanks for these suggestions. The SOD no longer refers to the Ecuador case specifically -- maybe this comment is relevant for Chapter 6 that has more on constitutions
1437	Neville H McClenaghan	Ireland	Galway-Mayo Institute of Technology (GMIT)	No	Ch. 4	66	1681	66	1683	Think this statement needs to be expanded to help provide context to Reader.	See SOD Section 4.2.3. Valuation Atlas. This is tackled there now.
1453	Melissa Vogt	Australia	UNSW, Australia	No	Ch. 4	16	476	16	476	Provide rationale for using Arts and Tatenhove power definitions of power. Consider the power cube Gaventa 2006 also, perhaps most relevant for the chapter 6 discussions. Examples of application for more complicated situations are available in chapter 12 of sustainability certification schemes: outcomes for society and the environment.	The power cube from Gaventa was considered for the SOD.
1454	Melissa Vogt	Australia	UNSW, Australia	No	Ch. 4		477		485	Refer to dispositional, relational and discursive power in these lines but in chapter 5 (pg. 14, line 436-440) it is material, institutional and discursive power. It isn't an obvious discrepancy but the literature basis for the power section pg 14/15, lines 450-566 does not easily explain or lead to the reason for the three power types classified in chapter 5. It is only stated that these three types of power will be referred to with a reference.	These categories of power have been considered for the SOD.
1524	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 4					The chapter focuses on public body level decisions - most of the decisions made on the use and conservation of natural resources and consumption are made by individuals and households. One reason for valuation is to understand better how their value nature and resource to e.g. potentially design policy instruments to change the behaviour. This microlevel decision making is not discussed properly.	We tried to discuss this better in the current section on values revealed by current institutions (at local level) and also to an extent in the Outcomes section.

1525	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 4	10		10	304	Evidence of the use of valuation studies in decision making could be found in grey literature, how is it covered?	We covered gray literature to an extent in some of the boxes presented in the chapter. Still, most evidence comes from academic literature given the mandate of the assessment, the accessibility of the authors to the literature, and the limitations to analyse literature in other (shared) languages by the authors.	
1526	Finnish National IPBES panel (Finland)	Finland	Finnish national IPBES panel (Luontopaneeli)	No	Ch. 4	67		1716	67	1716	Evidence of the use of valuation studies in decision making could be found in grey literature, how is it covered?	grey literature is not covered systematically at global level due to lacking referenced databases. Grey literature is covered in a targeted way through a review of NBSAPS Section 4.2.4.1, and reviews in selected regions, countries in Section 4.2.4 Mainstreaming valuation at national policy level.
1611	Maria Isabel Rodriguez Valero	Belgium	Lancaster Environment Centre, Lancaster University	No	Ch. 4	33		940	33	941	Values of nature can be revealed from national institutions and policies for natural resource extraction, that is true, but also from law. Law is the foundation where national institutions and policies must rest. Every country has a hierarchy of laws, starting with the Constitution where the values of nature will be set: who is in charge of protecting the environment, are there special institutions or bodies charged with this, how are natural resources distributed, are they res nullius or res communis? Recommended literature Boyd R.D. (2012). The Environmental Rights Revolution, UBC Press. Besides the Constitution, Environmental Protection Laws will stipulate whether the country abides to general environmental principles such as the polluter-pays, precautionary, prevention, rectification at source. This Law may also require for special institutions to be set such as Environmental Agencies. This will also reveal the values of nature for that country. Even in more specific laws like criminal procedures ones, we may find the obligation to develop specific Environmental enforcement institutions such as police, prosecutors or even courts. In the end, it is the legal balance between exploitation and protection of resources that must shape policies and institutions. The value of nature through law is a very important element that should be introduced I believe.	Yes, laws also reveal values. However, laws are often general and need to be interpreted for specific conflicts to enable any precise estimation of the value of nature
1612	Maria Isabel Rodriguez Valero	Belgium	Lancaster Environment Centre, Lancaster University	No	Ch. 4	36		1023	36	1023	Winge (2017) reference is missing	Reference has been added
1613	Maria Isabel Rodriguez Valero	Belgium	Lancaster Environment Centre, Lancaster University	No	Ch. 4	41		1207	41	1230	As stated above, values of nature may be found along the whole legal system of a given country. The fact that a country does not explicitly state it in one of its laws like Bolivia for instance, does not mean that values are disregarded. Brazil and Mexico have extensive legislation addressed to prevent, remediate and compensate for environmental damage. I believe there are also nature values there, just in a different manner. Other legislation that could be considered is the one that develops Aarhus principles: access to environmental information, public participation and access to courts. The role of environmental authorities and their powers and independence also sheds a light on the values of nature for a country. This section could benefit from an extensive analysis of how law values nature. Considering that each country will have from 10 to 50 different laws related to biodiversity it is certainly necessary to reflect on this. In addition, the granting of personal rights to animals or environmental entities is just a tiny bit of how law understands the value of nature, plus there are scholars exceptic to the idea. To remain objective I believe the report needs to go deeper and not just present one legal vision.	We appreciate the comment but a full legal analysis is way beyond the scope of our text. The specific example referred to in this comment is no longer in the text, but a broader take on legislation has been taken to the extent possible in the SOD.
1614	Maria Isabel Rodriguez Valero	Belgium	Lancaster Environment Centre, Lancaster University	No	Ch. 4	64		1664	64	1664	Information source for EU and European countries:	We did not find any specific EU valuation Databases. The TEEB database was not analysed in the SOD, opting instead for an analysis of plural valuation methods through Web of Science. See Data Management Protocol DOI: 10.5281/zenodo.4071756 for possible follow-ups.
1615	Maria Isabel Rodriguez Valero	Belgium	Lancaster Environment Centre, Lancaster University	No	Ch. 4	39		1109	39	1109	Maybe worth considering also the role of administrative authorities/the judiciary? Some countries like Brazil, Mexico, Angola, India, US, and in general all the EU member states stipulate the legal obligation to compensate harm to the environment. Although parties will have to present their valuation in accordance with domestic rules, it will ultimately be either the administrative authorities or the judge deciding on what harm is to be remedied/compensated and how. Would it be worth to understand what is their role on the types of values later reflected in local instruments?	Thanks for the suggestion, the comment was considered and across the chapter, including to an extent in the new section on values of nature revealed by local and national institutions, as well as in the current section on uptake of ILK in decisions, policy and planning

1671	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 4					Chapter 4 - It would be suggested to break the first guiding question in two questions: (1) the role of knowledge in decision-making; and (2) the role of power in decision-making. The latter should also analyse what further motivations/interests feed the power i.e., decision-making and policy design are not frequently defined by knowledge.	Thank you, this has been noted and consider in a different structure on the power section for the second order draft.
1688	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 4					Chapter 4 - Guiding questions. It would be suggested to break the first guiding question in two questions: (1) what is the role of ancestral knowledge in decision-making; and (2) exploring the role of power in decision-making.	Thank you, this has been noted and consider in a different structure on the power section for the second order draft.
1689	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 4					Chapter 4 - Guiding questions. It would be suggested to also include questions such as the following: What type of hegemonic values have an influence on the way the police exercise their power? At the end, who do impose rules and values on instruments and practices at national level? By using what type of procedures?	We try to address some of these aspects in the current version of the chapter by identifying the type of knowledge considered in valuation uptake, or recognizing the type of values reflected in outcomes assessed from decisions.
1690	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 4					Chapter 4 - Knowledge and Power. It would be suggested to also evaluate gaps in information about the interaction between predominant values and power.	This will be highlighted as a gap as there seems to be lacking evidence on this aspect.
1691	Rosendo Ahue Coello (Tikuna People: Magütá); Gloria Erazo; Andrea Cárdenas.	Colombia	Organizacion Nacional Indígena de Colombia (Onic)	No	Ch. 4					Chapter 4 - Cases. It would be interesting to analyse cases related to food sovereignty in terms of power relations exercised by multinational corporations.	Thank you for the suggestion. A section on agrobiodiversity has been incorporated which relates to this topic.
1699	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4					Chapter 4 - General comment. The role of knowledge would seem to be analysed only on the first section of chapter. It would be suggested to emphasise that role across chapter given its pivotal function on decision-making and valuation.	The role of knowledge is now analysed across sections and a synthesis is presented in the final section of the chapter.
1700	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4					Chapter 4 - General comment. It would be suggested to include experiences or cases aimed at design communicative strategies for decision-making of daily life (not only for policy planning). That is important given the crucial role of social groups on real changes of attitude to achieving societal goals for sustainability.	This is an interesting comment but is beyond the scope of the chapter.
1701	Marta Díaz	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4					Chapter 4 - Guiding questions. It would be suggested to break the first question in two questions: (1) the role of knowledge in decision-making; and (2) the role of power in decision-making. Both of those questions lead to also analyse the effect of dominant interests on decision-making processes.	This has been taken into consideration while drafting the new introduction of the chapter.
1702	Marta Díaz, Felipe Guerra, Viviana Moreno, Miguel Bedoya, Dora Estrada	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4					Chapter 4 - We would like to propose PNNC (National Natural Parks of Colombia) as a deep case study aimed at analysing the interplay of factors discussed on chapter 4, based on particular cases and from a systemic viewpoint. That would take into account interactions between knowledge (including ILK), power, institutions, types of valuation, decision-making, and outcomes. If chapter's authors agree, we could arrange and write this case like potential contributing authors.	Case studies were taken into consideration based on available documented evidence on 'outcomes'. The case of PNNC was not identified as one of those cases. We are sure this is a very interesting case as many other around the world, however given our limitations in time and space we had to follow a criterion for selection of cases.
1718	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4					Chapter 4 - Methods. It would be useful to also review cases about decision-making in enterprises and individuals (e.g., citizens). Their decisions have a huge impact and are also based on values.	This is correct, we have added content on business ecosystem accounting and also ecosystem certification.
1719	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4					Chapter 4 - Values implied in decision making institutions. Great contribution of chapter 4: understanding institutions as formal and informal norms, which define social relations and individual behaviour. That is also relevant from the viewpoint of policy sciences.	Thank you!
1720	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4					Chapter 4 - Guiding questions. It would be suggested to include the following questions: In the context of decision-making, what is the relationship between knowledge and safeguarding the interests of political, economic and cultural sectors? What is the degree of interaction between power (i.e. force correlations from the perspective of political theory), knowledge and particular interests on decision-making?	The second question has been considered for the restructure of the current draft. The first section is beyond the scope of the chapter according to the scoping document.

1721	Felipe Guerra	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4								Chapter 4 - Gaps in knowledge and data. It would be recommended to emphasise that frequently decision-making is based on a [total] lack of information of personal values and collective cultural values of nature.	This is highlighted in the current version of the document.
1735	Viviana Moreno	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4								Chapter 4 - Guiding questions. It would be useful to include questions such as the following: How has been valuation studies outcomes used on decision-making? That is relevant due to many studies taking place on Colombian national parks have supported proposals for including protected areas into the IUCN green list.	This is considered in section 4.2 of the current version of the chapter.
1736	Viviana Moreno	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4								Literature review. It would be interesting to analyse how local initiatives have contributed to the maintenance of values/benefits of nature. Local initiatives such as natural reserves of civil society, silvopastoral systems, organic production, sustainable entrepreneurship. Furthermore, it would be interesting analysing: Have those initiatives received support in terms of resources, training, market chains, etc.?	Some of these initiatives are reflected in the outcomes section through ICCAs, PES (community based) and some elements for the review on agrobiodiversity.
1743	Miguel Bedoya	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4								Chapter 4 - Conceptual scheme. It would be suggested to take into account the concept of urban ecosystem services.	The concept of 'ecosystem services' is considered in general. 'Urban ecosystem services' is too narrow for the scope of the chapter and assessment.
1750	Margarita Roza	Colombia	Parques Nacionales Naturales de Colombia (PNNC)	PNNC is part of the Colombian state	Ch. 4								Chapter 4 - Outcomes of valuation. It would be helpful to classify results by spatial scales including local, regional, national and global levels.	This is a good suggestion. We will see if this is possible toward the final version of the document.
1801	Tomas Declercq	Belgium	UNEP, but comments in personal capacity	No	Ch. 4	33			926			927	The Indonesia deep case mentions 'Promotion of PES by international organisations somehow setting up euphoria on this instrument' Strong statement, so can this be verified? Is it also international cooperations/multinationals promoting PES? We at TEEBAgriFood Indonesia have recent anecdotal information on this as well...	We didn't develop this 'deep case' further in the SOD. The comment is no longer relevant.
1802	Tomas Declercq	Belgium	UNEP, but comments in personal capacity	No	Ch. 4	52			1528				"Improvements have been made since the TEEB project" Reformulate to: "Improvements have been made since the TEEB initiative was launched in 2008"	Section 4.2.4 Mainstreaming valuation at national policy level. Reference to TEEB has been clarified here.
1803	Tomas Declercq	Belgium	UNEP, but comments in personal capacity	No	Ch. 4	59			1606				"Table TEEB Recency (year): "no quite recent/2013" FYI Website is being updated in 2020 with recent TEEB Secretariat post 2013 - 2019 applications.	The TEEB database was not analysed in the SOD, opting instead for an analysis of plural valuation methods through Web of Science. See Data Management Protocol DOI: 10.5281/zenodo.4071756 for possible follow-ups.
1869	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	1			27	1		30	seems to be a word or two missing.	Thank you, the text has changed now.
1870	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	16			16		444		This key point as it is currently written is quite broad and isn't well supported by the section that follows. A bit more specificity would be helpful. Are you trying to express here that the analyses of power can help us to understand the dominant values held and how those dominant values become articulated?	Yes, we were trying to express how power analysis can help us to understand the dominant values. but it's true that it's a general statement. We had added some evidence and discussion in the current version to solve this.
1871	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	18			523	18		526	Would be helpful to include the appropriate citation when introducing this example. Based on the text in the remainder of the paragraph it seems like it might be Nadasdy 2005.	The specific example has been deleted in the SOD, but the Nadasdy reference has been kept
1872	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	18			532		18	544	Two points here: 1) the first sentence is a much more clear point than what is currently key point #1 (lines 443-444). And 2) seeing as how this text supports key point number 1, consider moving this text up or alternatively, re-organize the order of the key points to reflect the text in this section (section 4.2).	This was considered in the restructure of the text.
1873	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	19			568	19		572	You may find the work of Miller & Munoz-Erikson (2018) would help with the framing of this section on knowledge and knowledge systems. Here is the full reference: Miller, C. A., & Munoz-Erikson, T. (2018). The rightful place of science: designing knowledge. Tempe: Consortium for Science, Policy & Outcomes.	thanks for the recommendation. we included it in the SOD as we have found this work very useful

1874	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	19		19	572	this is an interesting choice of examples, including some that aren't very clear what they are referring to: 'alternative knowledge'? And is traditional different from ILK? And the choice to include positivist is interesting as that usually used to describe a particular philosophical orientation or theoretical perspective.	Thank you for this comment. We are still in the work of harmonizing the working across the text also to match approved IPBES language.	
1875	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	20		618	20	624	Reo (2011) would be helpful in drawing key connections here. Reo, Nicholas J. "The importance of belief systems in traditional ecological knowledge initiatives." International Indigenous Policy Journal 2.4 (2011).	thank you for suggesting Reo. we have considered his work
1876	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	22		651	22	654	Sheremata (2018) provides another nice example with regards to relational values that could be drawn upon here. Sheremata, M. (2018). Listening to relational values in the era of rapid environmental change in the Inuit Nunangat. Current opinion in environmental sustainability.	thank you for suggesting Sheremata we have considered its work
1877	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	39		1111	39	1113	Why use the term (agro)ecosystem here in this sentence? It leads the reader to believe that there will be a narrow scope. I immediately wondered why there wasn't mention of community-based forestry or fisheries. So of course I was pleased to see that one of the case studies was based on fisheries. Accordingly, it would be helpful to update this sentence to better reflect the scope of this section.	we hoped that the (agro) would indicate that we're interested in all natural + managed ecosystems, but that may not work for all readers. This has been addressed
1878	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	39			39		Sheremata, M. (2018). Listening to relational values in the era of rapid environmental change in the Inuit Nunangat. Current opinion in environmental sustainability.	Thanks for the suggestion, it will be considered while developing the SOD
1879	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	40		1149	30	1171	Is all of this text just a placeholder and describing what will be done in the next draft? This was never quite made explicit and may be a null issue in the next version.	Yes indeed, it was a placeholder.
1880	Steven M. Alexander	Canada	Fisheries and Oceans Canada	Yes	Ch. 4	16		450	23	694	Overall there is lots of good and important content in sections 4.2.1 and 4.2.2. However, the overall structure and flow still needs some massaging. This will help to tighten up and clarify the key points for each paragraph. While it won't be easy, and likely not straightforward, it will also be helpful to consider if there is any content in one section that belongs in the other. Finally, I was left wondering whether the section on knowledge should be introduced first considering the sub-section on power so often referenced knowledge. Alternatively, perhaps these two sections might be better if organized into three sections. That way the first introduces the concept of power, key factors, and considerations; the second introduces knowledge and knowledge systems, and the third discusses the intersection of the two.	The reviewer is totally right. That was the same that the cochair told us and I also concluded that. so we eliminate quite a lot of this section to follow a better structure
1885	Kowarsch, Martin	Germany	Mercator Research Institute on Global Commons and Climate Change (MCC), Berlin	No	Ch. 4						Somehow missing: review of studies on how assessment processes (GEAs) actually treat or respond to divergent values (e.g., Kowarsch, Martin; Flachsland, Christian; Garard, Jennifer; Jabbour, Jason; Rioussat, Pauline (2017): The treatment of divergent viewpoints in global environmental assessments. Environmental Science and Policy 77: 225–234. doi:10.1016/j.envsci.2017.04.001)	Thank you for the suggested citation, we will take it into consideration.
1942	Masayuki Sato	Japan	Kobe University	No	Ch. 4	100.		2711	104	2884	It may be useful to introduce the benefit transfer applications by each type of ecosystem resources. For example, Barrio and Loureiro (2010) in Ecological Economics (vol. 69, pp.1023-1030) can be referred as application for forest resource. Econd Environmental and Resource Economics, 32, pp.223-250. Brander et al. (2006) in Env and Dev Econ can be introduced for Wetland resource.	Thank you for the suggested citation, we will take it into consideration.
1971	Guadalupe Yesenia Hernández Márquez	Mexico	Second ILK Dialogue on Values, Oaxaca, Mexico	No	Ch. 4						A suggestion for the authors is to explore the impacts of the ILO 169 commitment, how many countries are involved in this commitment and if it has had a real impact at different levels for protecting indigenous and local communities lands as.	Thank you for the suggestion. But there is no clear connection between ILO 169 commitment and values or valuation. It seems beyond the scope of the chapter.
1972	Guadalupe Yesenia Hernández Márquez	Mexico	Second ILK Dialogue on Values, Oaxaca, Mexico	No	Ch. 4						Explore other international initiatives, from the World Bank, the International Law Commission and others that recognize the importance of indigenous people conserving and staying on their lands.	This was explored to an extent in current section 4.3 considering role of global IPLC institutions on revealing values.
1973	Guadalupe Yesenia Hernández Márquez	Mexico	Second ILK Dialogue on Values, Oaxaca, Mexico	No	Ch. 4						Explore how was the process and impact of NGO's such as PODER in Mexico, or human rights networks in both senses - good/bad, helping indigenous peoples to defend their lands.	This is an interesting comment. However, again, it is beyond the scope of the chapter. We address social impacts in the outcomes section based on specific decisions regarding nature which reflect values or have involved valuation.
1974	Yin Lun	Mexico	Second ILK Dialogue on Values, Oaxaca, Mexico	No	Ch. 4						The policy making process for solving conflicts has follow the process of struggle, negotiation, and finally, the achieved cooperation.	Thank you for the comment. We somehow try to reflect on this through the 'issue cycle' presented in section 4.3

2090	System of Environmental-Economic Accounting (SEEA)	N/A	System of Environmental-Economic Accounting (SEEA)	N/A	Ch. 4					The introduction to the SEEA in Chapter 4 provides a useful starting point for considering the role of environmental-economic accounting in the IPBES process and highlights the potential for monetary values to be reflected in accounts and utilized in decision making. The broader potential for the SEEA to frame the integration of ecological and social data into decision making in both monetary and non-monetary terms is yet to be explored.	Thank you, the content on SEEA will be further developed in the SOD and the final draft of the document (considering the approval of UN SEEA upcoming chapters).	
2147	Fischer, Markus	NA	MEP/Bureau	No	Ch. 4					There is a conceptual framework for this chapter. While this is a good idea in principle, it lacks integration: why don't the other chapters also have CFs? How does the Ch4 CF relate to the IPBES CF?	The conceptual framework has been taken out to align with the overall approach of the assessment and to other comments from the MEP and Bureau, and we now present an introduction with some conceptual basis (but not a conceptual framework for the chapter).	
2171	Rovshan Abbasov	NA	MEP/Bureau	No	Ch. 4					How Decision-making Institutions differ in developing and developed world? There should be more discussion about that. There should more about political and religious, also gender problems of design making processes.	Literature linking values and valuation to decision-aming which highlights distinctions from the global north and south is scarce. However discussions in the current version of the chapter do try to highlight some of these issues as they become relevant from the evidence.	
2210	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	1	18		1	19	I find the comment on POWER very interesting,	Thank you!
2211	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	2	35		2	36	Is there a contradiction? perhaps giving it monetary value does not make it a commodity?	The text has changed, the comment si no longer relevant.
2212	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	3	59		3	59	"the top-five direct drivers of biodiversity" please list them and put the source of information (1) loss of habitat 2) direct exploitation 3) climate change; 4) pollution; and 5) alien species. The global assesment)	Thank you! This has been considered in the SOD
2213	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	3	83		3	83	use assesment instead of "synthesis report"	This has been considered in the SOD
2214	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	4	108		4	111	This statement should be reviewed. in Patagonia the production of pears and apples are being exterminated by fracking for gas and oil. The owners of small farms do not have any chance of negation because the country's global policy responds to pressures from the energy industry. It is not an individual decision due to the emendation of consumers, it is a global policy taken on the basis of powerful companies. Reference Svampa M. 2018 Chacra 51. Ed Sudamericana	The text has changed, the comment si no longer relevant.
2215	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	5	133		5	139	The temporal scale is not clear since a decision taken in months is clearly influenced by history and power that also operates in rapid scale	Time is considered across diferent sections of the current version of the chapter.
2216	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	5	157		6	159	Are mining, infrastructure, agricultural expansion and urbanization, the "traditional sense" of development? Are we using this definition of Development? Although this could fr "the traditional". My opinion is that we have to use a better definition of development.	The text has changed, the comment si no longer relevant.
2217	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	6	163		6	164	The sentence; Many use decisions may only involve one actor and thus no distributional decisions would be necessary. is not clear	The text has changed in the current verison of the document.
2218	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	6	182		6	183	It is not clear why "knowledge-to-action chains" start with denial, blaming others and conspiracy theories instead of scineitfic data. Need clarification	This has changed, this text is no longer in the chapter.
2219	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	8	230		8	231	Policy Implementation Gap. Why in upper case?	Thank you, the text has changed, the comments i no longer relevatn.
2220	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	8	249		8	253	The explanation that it is a null hypothesis here is out of place. Either the explanation is put as an initial concept (it would be VERY good that this chapter had an initial section of the concepts it uses) or it is assumed that the reader knows that it is a null hypothesis	The text and structure of the chapter has changed. This is integrated now in a section on hypothesis for lack of uptake in section 4.2.
2221	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	9	262		9	264	This hypothesis is very interesting and should go well at the beginning of the chapter	The text and structure of the chapter has changed. This is integrated now in a section on hypothesis for lack of uptake in section 4.2.
2222	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	10	300		10	300	"less ideological policy making" ideology should be well differentiated from the ILK, because many times the ILK is not based on the evidence.	The text has changed, the comment was addressed.
2223	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	10	306		10	311	I do not understand how the chapter text interrogates IPBES itself in these questions, the chapter should explain what happens with ipbes, analyze its values if it were necessary not to ask about it.	The text has changed. The comment is no longer relevant.
2224	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	10	322		10	322	1.5.1 Evidence from literature screening using artificial intelligence. This is very interesting but as an evaluator I lack the knowledge to be able to correctly evaluate this part. I read it and it seems very interesting, but I do not know if it's okay or not.	Thank you for your comment!
2225	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	12	371		12	371	gender would be interesting to be in the list	Thank you, we will try to showcase gender better as a variable in the final version of the document based on what the evidence shows. So far, evidence analysed in the chapter has not been very explicit about this.

2226	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	13	379		13	380	"These results have been widely discussed but rather subsumed by the scientific biological research" EXCEPT the ETHNOBIOLOGICAL approaches	The comment does not match the line numbers, we were unable to link it back to the specific text.
2227	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	14	392		14	393	the predominance of conventional economic values is a SAD but TRUE situation.	Indeed, thanks!
2228	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	14	414		14	415	if the papers are only in English there must be a bias towards the geographical location of the data	There is, this is now reported on the valuation atlas section.
2229	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	16	461		16	461	the figure here is duplicated. Only with the institutional highlighted	The figure has changed in the SOD.
2230	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	18	518		18	518	expressions of knowledge express. Wordy with expression try a synonymous	Done. we corrected it.
2231	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	18	520		18	521	there is no knowledge that is free of power relations, but this does not mean that these relations are necessarily repressive. BRIGHT and CLEAR, very interesting concept	many thanks!
2232	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	20	593		20	593	Most people assume that there is one knowledge system – their own. GREAT! Very clear and funny and true!	Thank you for your comment!
2233	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	20	601		20	602	the question of who holds the power and who produces the knowledge upon which decisions are based on, is essential	Thank you!
2234	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	21	628		21	629	the romanticizing of indigenous knowledge; and the all too frequent decontextualization of indigenous knowledge", it is very interesting that in this chapter it is argued that not all ILK is perfect and unquestionable, typical of the "guilt of whites as conquerors.	We have been careful not to romanticize ILK. thanks
2235	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	21	630		22	649	Very clear descriptions and concepts	thanks!
2236	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	22	652		22	653	ILK communities have a close relationship with their landscape and therefore care, protect, and honour those relationships. NOT ALWAYS, Vicuña poachers are indigenous and let the species go into danger of extinction. In case you need information on that, I can send you some papers. ALSO the people recovering the species and using in a sustainable way are indigenous, and sometimes poachers and guardians live in the same town	Thank you for the comment! Very interesting!
2237	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	23	671		23	671	First Nations. There must be a definition and in case is homologous to other term already used, is preferable to use only one term. First nations is equal to indigenous communities?	yes, it is equivalent. but they themselves don't use the term indigenous communities but First Nations People. so we wanted to keep it the way they themselves name
2238	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	24	706		24	706	Share TE Kwith "outsiders;". Some references to biopiracy should be made with examples	thanks. we eliminated this section in the SOD. The comment is no longer relevant.
2239	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	25	727		25	727	better NCP instead of Ecosystem services, just to use the IPBES concepts	Thanks! it has been changed.
2240	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	26	768		26	769	especially when it comes to saying 'no' to a project that is undesirable by local and Indigenous communities. PLEASE use examples with mining where the NO is very strong and sometimes win	this is very important, and it is now addressed in section 4.4
2241	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	27	793		27	793	There is a very interesting book "Chacra 51" in Spanish that describe the conflict in an area with fruit tree production in Patagonia, which is then used for fracking	Thank you for the recommendation!
2242	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	28	814		28	814	somewhere in this point it is important to point out the unequal appropriation of the NCP in relation to gender.	A good point, but it is a huge topic as such. Efforts have been made to review the literature considering gender (which is not always explicitly stated) but further efforts need to be made towards the Final Draft of the report.
2243	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	29	875		29	876	IPLCs construct different 875 understandings of values of nature. It seems fundamental to me to point out that in the Western world it is also crossed, by different values of nature. For example, there is a whole line of thinking based on Buddhism that suggests compassionate conservation, which is very spiritual but not indigenous and is a different value from the monetarist extractivist that characterizes the West.	Interesting comment -- but not at this point in the text where we preview what is in the IPLC section. This is also better introduced by Ch. 1 which introduces ILK and IPLC values for the whole assessment.
2244	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	34	976		34	977	we can estimate how we as society value nature when we design and implement these policies and institutions. In this chapter we talk about power, but here with the example of the mining company, "we as society" is used, which is not true. Most people do not want pollution from a mining company, and it is governments and companies that negotiate. Therefore, it is preferable NOT TO USE the first plural person in this kind of analysis.	The example has been deleted. The comment is no longer relevant
2245	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	35	1005		35	1006	These estimates suggest that coal mining and coal combustion are uneconomic activities when external costs are considered. VERY CLEAR and precise	Thanks!

2246	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	38	1075	38	1075	Fig 4.5 is not clear. The case of Norway is not an example as clear as the previous ones, it should be written with more explanation	We'll work towards improving the message of the example towards the final draft. The figure however comes from a paper, we will evaluate the need and capacity to develop a new figure for the final draft.
2247	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	38	1091	38	1094	In conclusion, where there is a conflict of interest in Norway between national legislation and local development interest, politically dictated administrative practice and precedence has implicitly valued nature interest lower than local development interests, which in turn have been subordinate to energy sector interests THIS IS CLEAR	Thanks!
2248	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	39	1114	39	1114	I didn't know that the ISDS existed ... that's horrible! and very difficult to defend against big companies	Indeed! Thank you for your comment.
2249	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	44	1276	44	1276	Motivation must be associated also to education and environmental "marketing"	This has become a sub-section in the current text.
2250	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	44	1297	44	1297	policy interventions, also INCLUDE EDUCATIONAL interventions in formal and informal education schemes	It has been addressed in a subsection in the current SOD. But more can also be seen in the current version of Ch. 5.
2251	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	44	1304	44	1304	Finally, schools are included in this chapter. I think it is important to highlight the role of education	Thanks!
2252	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	46	1348	46	1348	A database will be developed. Are you thinking that this database includes papers in languages other than English?	This was considered but the capacity of the authors working on this section did not allow it.
2253	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	50	1441	50	1441	What are exactly ""blindspot reviews"?	See SOD Section 4.2.5.1 «A large systematic review effort of research literature in Web of Science on ecosystem service and nature's contributions to people was carried out. Our aim was to evaluate the extent to which published research literature on valuation of ecosystem services and nature's contribution to people (ES(NCP) is documenting uptake by stakeholders for informative, decisive or technical policy design purposes."
2254	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	53	1529	53	1531	algorithm for the "valuation geography review" must be explained in detail	Please see the Data Management Protocol DOI: 10.5281/zenodo.4071756 where this is explained in detail now.
2255	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	54	1576	54	1576	Valuation of ecosystem services, I suggest using NCP instead of ES	Throughout section 4.2 we refer to ES/NCP as it is reflected in the literature and the assessment overall.
2256	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	60	1637	60	1637	Blindspot review. It is well defined here at the end of the document. PASS this definition to the beginning of the document when it is first used.	See Executive Summary and SOD Section 4.2.5.1 for explanation of the review. «A large systematic review effort of research literature in Web of Science on ecosystem service and nature's contributions to people was carried out. Our aim was to evaluate the extent to which published research literature on valuation of ecosystem services and nature's contribution to people (ES(NCP) is documenting uptake by stakeholders for informative, decisive or technical policy design purposes."
2257	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	62	1672	62	1672	potential databases for non-academic (grey) literature on valuation of ecosystem services and biodiversity. . sources that are not in English are not used	systematic searches at global elve were only conducted in English due to lack of human resources in Section 4.2. Foreign language manual searches were tested in Japanese and Norwegian using Contributing Authors from those countries.
2258	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	72	1822	72	1822	use ecosystem service valuation methods (UESV). Is it possible to use UNCPV	through section 4.2 we refer to uptake of ES/NCP. Also the term UNCPV is not used in the literature
2259	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	76	1969	76	1969	It is crucial in literature reviewing to be clear about the blind spots when the claims about contribution to knowledge are made. CLEAR and concise.	we thank the reviewer for supporting our approach.
2260	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	77	1979	77	1980	a critical re-visioning of colonialism and history. IS TOO LATE IN THE CHAPTER this must be in the beginning	we have moved this section forward in chapter 4 and introduced a subsection: 4.2.6 Uptake of ILK in decisions, policy and planning
2261	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	79	2054	79	2066	this interesting paragraph must go along with the ILK description of the principle, it has a lot of overlap with that text	detailed explanations of the relevance of power for valuation uptake , and specifically in the context of ILK, are discussed in Section 4.5.
2262	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	80	2094	80	2118	These descriptions are rather anthropological and are not directly related to the values at stake. I think it is important to hold the mother idea of the values of nature as a central point	Different value concepts and life frames - living from, living in, living with and living as nature - are addressed now in Chapter 2. We now base discussions on these concepts. The text also has changed to provide a better presentation of the evidence.
2263	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	81	2135	81	2136	the moose, swill choose by its own volition, to give up its life for the hunter. THIS IS A VERY INTERESTING IDEA, It can be contradicted by some western hunting practices such as the "canned lions".	we thank the reviewer for their support for this example.
2264	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	82	2158	82	2158	again he becomes very anthropological and loses a little the central point	Different value concepts and life frames - living from, living in, living with and living as nature - are addressed now in Chapter 2. We now base discussions on these concepts. The text also has changed to provide a better presentation of the evidence.

2265	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4	88	2355	88	2356	Ecosystem accounts capture a (limited) portion of plural values. However, the system of ecosystem accounts, when considered together, captures a number of dimensions of values. SEEMS CONTRADICTIONARY	The valuation scope of ecosystem accounts has been clarified and detailed in SOD Box: Public Natural Capital Accounting and policy uptake at the national level in Section 4.2.4.3
2266	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4					In general the chapter is very heterogeneous with moments of fluid reading and moments of difficult comprehension. It may be a very early time for this, but there is a lot of overlap between the material written by different authors and some concepts that are repeated. The extension of the chapter is already very long when there are still points to complete. The final part of the chapter is very "raw", I think you have to work more before making it available to the reviewers. More than 100 pages for a chapter seems a bit excessive, specially in this state of development Deep editorial work of the entire chapter is needed	We tried to reduce overlap in the second order draft. The extent of the chapter is provided by IPBES guidelines AND we are trying also to work on a more fluid and synthesized version of the document.
2267	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4					Gender is mentioned only ONCE in the text (an another time in a footnote). In values and decision making, the voices of women should be highlighted. Values and decisions are strongly influenced by gender, I guess. I think it should in addition to gender issues, include what is emerging (friday strike) among young teenagers (Greta), as values that are not willing to negotiate. It is interesting.	Thank you, we will try to showcase gender and youth better as a variable in the final version of the document based on what the evidence shows. So far, evidence analysed in the chapter has not been very explicit about this. Perhaps it will need to be highlighted as a gap.
2268	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4					In the end of the text, it is not very neat and there are texts that seem directly extracted from an anthropology book that must be worked in relation to values of nature.	We have improved the section 4.5 now to address this.
2269	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4					In the key messages of Chapter 4 says that "The large increase in monetary and non-monetary 'valuation' literature of the past is often what is technically feasible, rather than what is most needed." I think it is very important to determine what is "most needed" and what are the reasons of that need. Likewise, who defines what is "most needed"? and what is the role of southern local scientists (LAC and Africa) in determining these agendas.	We can present option of what is needed for what objectives, but cannot provide a normative perspective on this. We hope to provide some insights on this that can be brought up into the Summary for Policymakers
2270	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4					It seems that THE science is produced in the North and in the South, the most valuable thing is the ILK exclusively. Is important to recognize the existence of an endemic science of the South, which is generally little reflected in international documents.	Yes. And to avoid these geographical generalizations or tendencies in citation practices. We've tried to move away from this perspective that only the North does research.
2271	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4					The chapter says "The global distribution of (biophysical, economic, socio-cultural) valuation studies have not been conducted where nature's contribution to people is most at risk, nor where the potential benefits to poor populations is the greatest", but does not relate it to the difficulties that scientists from the south experience when trying to move out the boundaries of the scientific agendas from the north (which give the money to do research in the south). Values play an important role here, as north values encompass money to finance science.	Difficulties from scientists to step out of the box in the global South, can only be included if it is reported in the evidence (so far it isn't), also it goes beyond the scope of the chapter.

2272	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4						It seems to me that at the beginning of the chapter there is a certain "naivety" and little relation with the power that is one of the points of the chapter. For example when it says "Pollution is a consequence of incomplete recycling", it would be necessary to clarify that pollution is very unequally distributed in the world and that clearly there are countries that would never mess within its borders but do it in distant places, for example. This is clearly seen in Figure 4 of the Global Assessment SPM. "Development pathways since 1970 for selected key indicators of human- environment interactions, which show a large increase in the scale of global economic growth and its on the nature, with strong contrasts across developed, developing, and least developed countries"., it would be necessary to clarify that pollution is very unequally distributed in the world and that clearly there are countries that would never soil within its borders but do it in distant places, for example. This is seen with absolute clarity in Figure 4 of the Global Assessment SPM. "Development pathways since 1970 for selected key indicators of human-environment interactions, which show a large increase in the scale of global economic growth and its on the nature, with strong contrasts across developed, developing, and least developed countries". Also, there is a relation between "Invasion of alien species" and international trade of goods.	The text has changed, the example of pollution has been taken out. And power is now presented in a more complete way in the introduction and final section of the chapter.
2273	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4						In "the conceptual scheme for the chapter", there are some sentences that are confusing and wordy, which must be rewritten or divided into two or three sentences like "Knowledge and the multiple ways of knowing are ultimately linked to power and the cultural, political and religious contexts of societies, but provide a partially independent perspective on what is at stake in any decision, both in terms of 'prospects (...)' or the likely consequences of different decisions on outcomes of concern, and in the articulation of values that are involved across important stakeholders".	The figure has changed in the SOD, and will continue to change for the final version of the document.
2274	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4						This part of the chapter needs an editing that makes it accessible. A clear description is needed of the concepts "maintained values" and "articulated values" and how they relate to each other with some case examples..	The text has change, the section has been edited.
2275	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4						4.2 Power is well explained, it is precise and synthetic. The three authors, Elena, Sara and Agnes are very didactic and fluid. Also very clear presentations of ILK and related ILC matters	Thank you!
2276	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4						The case studies included in the 4.3.3. "Values of nature derived from national policies and legislation" point are very well presented and clear and consistent.	Thank you for these comments, we have retained them in the SOD
2277	Bibi Vilá	NA	MEP/Bureau	No	Ch. 4						I think it would be important to include case studies of pastoralism, most arid lands have grazing systems that are absent from literature environmental analyzes. Usually grazing systems, are closely related to ILK and they are in danger. (Ref Vilá B. 2018. In the brink of extinction: Llama caravans arriving to the Santa Catalina fair, Jujuy. Journal of Ethnobiology, 38(3): 372–389).	Thank you for the suggestions
2520	Gorucu Ozden	NA	MEP/Bureau	No	Ch. 4	67	1736		69	1755	To overcome the difficulties on valuation internalization of externalities as a blindspot in this matter to be clarified more if possible. This is not sufficient here	See SOD Section 4.2.2 Hypotheses for valuation uptake blindspots and brightspot for an extensive discussion of blindspot hypotheses.
2692	Edward Gregr	Canada	University of British Columbia	No	Ch. 4	4.1	5	129	5		There are hints at aspects of a typology here, but does not tie explicitly to the typology introduced in Ch 1.	The current version of the chapter tries to link better with the decision making typology presented in Chapter 1. Connections between chapters will also tried to be improved towards the final draft.
2693	Edward Gregr	Canada	University of British Columbia	No	Ch. 4	4.4.4	52	1531			First mention of Typology, and here it is a Typology of Purpose	See section 4.2.5 of the SOD Uptake of valuation - evidence in published literature/ 4.2.5.1 Background. Purpose typology is introduced, and detailed definition references in Data Management Protocol DOI: 10.5281/zenodo.4071756
2694	Edward Gregr	Canada	University of British Columbia	No	Ch. 4	4.3.2	30	891			EIA first mention in Table 4.2. Suggest it be included in the introduction to types of decision making closer to the front.	In the SOD we have indeed given EIA a more prominent place in section 4.3
2779	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	3	49	3	49		Instead of 'Drivers of drivers', do you mean 'Direct drivers'?	The text has changed, the comment is no longer relevant.
2780	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	3	75	3	75		Indirect drivers can be both natural and anthropogenic.	The text has changed, the comment is no longer relevant.

2781	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	11	318	11	318	It is mentioned here that Natural Language Processing and Text Analysis Techniques will be utilised to extract information. However, isn't this approach restrictive as it is limited to generic representations? Also, isn't there a risk of implicitly introduced bias too?	Thank you for your comment, we selected a sample of documents to analyse in depth and have two levels of analysis avoiding generic representations.
2782	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	21	625	21	635	After some research, we have found some information that would be useful to this section. Specifically regarding the six 'faces' of Traditional Ecological Knowledge (TEK): management systems, cosmology, culture and identity, ethics and values, factual observations as well as past and current land uses.	The comment is not clear. We couldn't address it.
2783	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	27	811	27	812	We feel this line (referring to institutions and governance systems) - "They are the underlying causes of environmental change that are exogenous to the ecosystem in question" is not very accurate. Please revisit.	This text has been changed, the sentence no longer occurs
2784	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	30	891	30	891	The role of institutional and coordination modalities that are common across all SDGs must be mentioned as a precursor to the table. For example: at the UN Conference on Environment and Development in Rio de Janeiro in 1992, countries across the globe were asked to develop national sustainable development strategies through National Councils on Sustainable Development. It is also important to note that the role of parliaments is critical for SDG implementation.	Thanks for this suggestion -- of course environmental policy history starts even before the Rio conference -- we focus here on the 2020 CBD agenda as it has just been completed and discussion on next steps is ongoing.
2785	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	50	1474	50	1486	This paragraph is very confusing and convoluted. Please revisit and rewrite for greater clarity.	Thanks for your comment. This is no longer relevant as the text has changed.
2786	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	57	1579	57	1579	What does the term 'use purposes of valuation methods' mean? It is unclear by the context.	See section 4.2.5 in the SOD Uptake of valuation - evidence in published literature/ 4.2.5.1 Background. Uptake of valuation is introduced and defined in detail in Data Management Protocol DOI: 10.5281/zenodo.4071756
2787	Habiba Al Marashi	United Arab Emirates	Emirates Environmental Group	No	Ch. 4	71	1813	71	1814	It is important to mention here that biophysical valuation consists of a 'cost of production' perspective. Also, this approach assesses value based on the intrinsic properties of objects by measuring underlying physical parameters.	biophysical methods are sampled by ch3 and ch4 including cost-based methods. The caveats of these methods are further explained in Ch. 3
2812	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				The chapter focuses on how the areas of knowledge creation are linked to the areas of decision-making, but it is in a state of progress inferior to the rest of the analyzed chapters, it is very confusing, its scope and structure are not understood. It stays halfway between a message addressed to the academy and a message addressed to decision-making, it has that ambiguity. The main message of this chapter must be carefully calibrated. Its message seems to be addressed more for the academic field than for management.	Thank you for your comment. We hope the current version of the document is improved.
2813	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				The chapter seeks to make an interesting conceptual and bibliographic contribution. Its way of presenting the evidence that emerges from the literature is clear, using different methods and sources in a structured, transparent and triangulated way. However, contradictory parties are found, such as when the phrase "more scientific and less ideological policy making" is mentioned but immediately after that, it raises questions about power in decision making, and it is emphasized that all knowledge is political and reflection of power relations. It follows a very post-structuralist line, in the style of Foucault, and is very extensive in it, but it also contains parts that reflect more positivist positions. These tensions in the chapter, of an ontological and epistemological nature, add to the lack of clarity of the chapter.	We have tried to work on some of these tensions, also restraining the post-structuralist approach, we hope the current version of the chapter addresses some of these issues.
2814	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				In general there is a lack of concreteness. As an example, the importance of making in-depth analyzes of power relations stands out (since power relations create what are the values, rules, institutions and ways of knowing that dominate, page 19), but it does not say how to research power, how to analytically separate it from values and knowledge, for example. At the same time, it is very clear what is intended to be done with the analysis of power in the valorization process. In that sense, it is necessary to define what is considered as 'desirable states' in power relations. In other words, it is not enough to know who is in power, who produces legitimate knowledge, etc., if there is no clear idea of how it should be.	We agree, we have tried to improve this in the current section 4.5 and further improvements will be made by linking this section to the results emergin from previous sections of the chapter.

2815	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				A strong point in the chapter is the identification of a set of databases worldwide (linked to decision making), not only subscribing to academic literature.	Thank you!
2816	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				Regarding the section dealing with artificial intelligence, the chapter seems to consider that it must explain all the content for the construction of the information generated. The great power of these methods is the ability to combine qualitative and quantitative information, and their ability to learn. The algorithms are totally context dependent. It is dangerous to use algorithms indiscriminately, so it is considered important to make explicit the criteria for their construction. The text indicates, among other things, approximate paths from machine learning; but no decision-making processes (linked to the object of study) that are applying these approaches are indicated.	Thank you, the methodology has been improved. we don't only use artificial intelligence. We actually reviewed the papers systematically and the methodology for the section is now described in the relevant Data Management Report
2817	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				The number of cases addressed in depth are very few and very dependent contexts, which raises the question of how useful it is then to include that approach.	We've tried to address this by having a mixed approach of in-depth cases and systematic literature reviews in the chapter.
2818	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				It is not clear how traditional ecological knowledge (TEK) is incorporated, the contributions do not reflect the state of the art today. On page 20, TEK is defined as "... founded on shared beliefs, philosophy and values", but not all TEK systems are so consistent. It seems that it ends up ignoring the differences (or diversity) that may exist within each group. This ends up being reductionist and counterproductive. Although it is sought to gather the knowledge of this group (local or indigenous communities), it treats them as a uniform mass, and in a very essentialist way (page 21).	The reviewer is totally right!! not all TEK systems are consistent and we fell in a big contradiction: diversity vs reductionist. we considered it for the SOD, and will continue this endeavour for the final draft. We will also consult with our contributing authors who work on those topics to review specific sections of the chapter to spot these issues.
2819	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				The document includes the co-creation of knowledge, but does not consider how to make that co-creation occur.	Thank you for your comment, mor on this is methioned in this version of the chapter but this is better addressed in Ch. 5 and 6 of the assessment.
2820	Matilda Baraibar; Miguel Carriquiry; Lydia Garrido; Néstor Mazzeo; Ana Laura Mello; Laura Piedrabuena; Manfred Steffen; Micaela Trimble; Cristina Zurbiggen	Uruguay	South American Institute for Resilience and Sustainability Studies	No	Ch. 4	General				Finally, on page 9 Wikipedia is used as a source for the definition of 'scientific evidence'. It is advisable to support the definition with other references.	We've addressed this, the comment is no longer relevant.