

Abstract

Ecosystem services are the provisioning, supporting, cultural, and regulating processes which sustain healthy life on planet earth. While the full values of these services are rarely accounted for through traditional market transactions, the values are nonetheless critical to understanding the tradeoffs involved in natural resource management decisions. Ecosystem service valuation (ESV) tools offer one means for natural resource practitioners to navigate real world management decisions, but there is little research on the use of those tools in practice. **We analyze how ESV works in practice, and offer recommendations for improving the ESV process while engaging stakeholders.**

Frenchman Bay Case Study

The Frenchman Bay Partners (a group of stakeholders interested in an ecologically, economically, and socially healthy and sustainable future for Frenchman Bay) hosted Ecosystem Service Valuation workshops in 2014 – 2015 for the business communities in Bar Harbor and Hancock. The purpose of the event was to get a sense of the tradeoffs which members of the business community face when considering ecosystem services by rating ecosystem services in scenarios of varying environmental quality. The present case study explores the participant experience at these workshops.

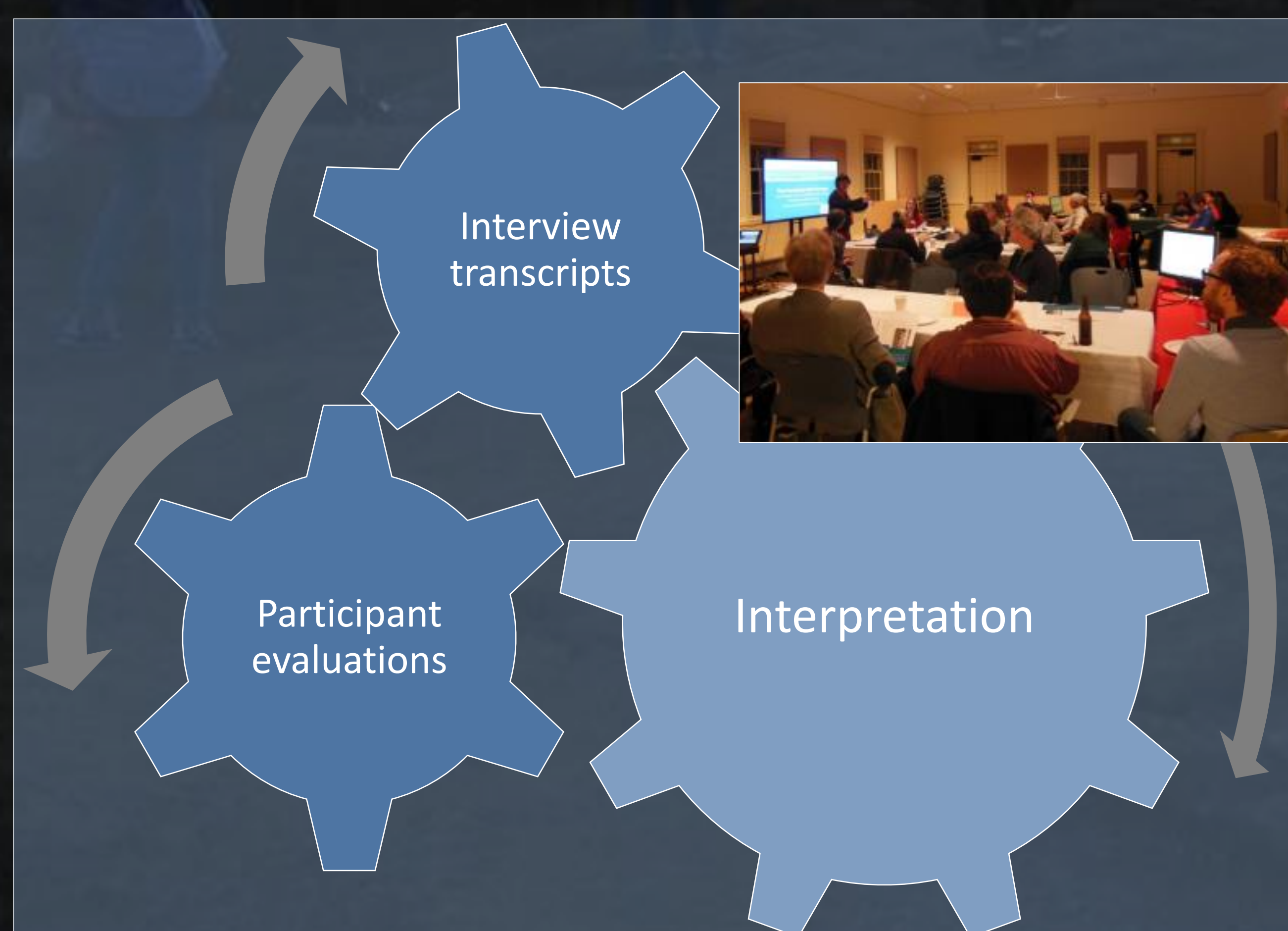


Figure 1. Parallel convergent mixed methods: We analyzed participant evaluations and interview transcripts independently, then compared our findings. To ground-truth the trustworthiness of our interpretations, we both cross-referenced them with our workshop observation notes and other researcher observations.

Interview Findings



Figure 2. Interview codes and themes: The image above depicts the process, from recording and transcription to coding and interpretation. The eight hexagons visually group similar code frequencies together by color; the numbers in parentheses are the total mentions across all interview transcripts. Each of the codes and sub-codes (e.g. under “Process Challenges”: lack of transparency/clarity, concept of ecosystem services as difficult to define, and confusion about the purpose of the valuation activity) lent themselves to the interpretation of themes representative of the participant experience, shown through the arrows above.

Thematic Findings

Participants expressed a **need for explicit organization and signposting** throughout the engagement process
“I don’t know what the goal had been for that particular activity.”

Participants expressed a **desire for more sensitivity to nuance** in the rating system; the numerical tool felt like a constraint to many.
“I like choices that are bigger, maybe six to ten choices if you’re going to have to rank something...not something so narrow because it’ll align to suit your results.”

Interpersonal connection and **networking was a value-added outcome** of the workshop:
“I thought the whole of that was very positive and, and a chance to reiterate and interact with people socially as well as uh, during the session itself.”

Need for greater transparency between presenters and participants:
“I thought it was not very clear, to be honest. I think that the explanations, that there was a lot going on with the algorithms behind the scene that weren’t very um, easy for me to understand.”

Recommendations

Provide participants with more background on ESV before and more direction during the valuation process. ESV is not something we do or think about on a daily basis, so additional guidance may be necessary.

Emphasize that ESV is one way of understanding tradeoffs fully. ESV using numerical ratings captures relative (rather than absolute) values.

Practice makes perfect. A practice run-through of the process before the actual valuation activity may be a way to instruct, streamline, and avoid confusion.

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