A Teleological Approach to the Wicked Problem of Managing Utría National Park

Nicolás Acosta García, Katharine N. Farrell, Hannu I. Heikkinen, Simo Sarkki

ABSTRACT

Utría National Park is a remote biodiversity hotspot in Colombia. It encompasses ancestral territories of the Embera indigenous peoples and borders territories of Afro-descendant communities in El Valle. We explore environmental value conflicts regarding the use of the park as a Wicked Problem that has no clear solution. Juxtaposing how the territory is perceived by different communities, we employ Faber et al.’s heuristic of the three telos of living nature to search for deficiency in the third telos, service, which we take to be symptomatic of Wicked Problems. Based on field data encoded using the three-tele heuristic, concerning how the respective communities would like to use the park area, we find deficiencies in the third telos and develop recommendations regarding how these might be addressed.

Key Words: Wicked Problems, Utría National Park, Colombia, Teleology, Value Conflicts, Indigenous peoples, Afro-descendant communities, Protected Areas

1 INTRODUCTION

Ecotourism in tropical biodiversity hotspots, where massive species extinctions are expected if there is no effective protection (Myers et al. 2000; Bruner et al. 2001), is seen as a way to reconcile conservation with development by turning it into a profitable service (Orams 1995). With this logic in mind, Colombia is actively promoting tourism to its exceptional wealth of internationally relevant protected areas. These cover nearly 17 million hectares, roughly 15% of the country’s total area, and span all five of its diverse bioregions. The study presented here explores contemporary challenges and opportunities associated with the management of one
of these areas, Utría National Park, which is located along the northwest Pacific coast of Colombia, and is promoted as a prime ecotourism destination (DNP 2007, 2008).

Despite Utría being currently a relatively peaceful place, it is no stranger to conflict. On at least two occasions in the past twenty years the local Afro-descendant and Embera communities have taken control of parts of the park to support demands for better public services. The area has seen a number of incidents related to Colombia’s armed conflict, including kidnappings, forced displacements and the presence of both military state and armed non-state actors. There is also a weak link to the international drug trade and soft forms of resistance, such as non-compliance with park rules, are ongoing. Like many similar areas throughout Colombia, Utría is inhabited by communities whose environmental values are not necessarily compatible with those of either ecotourism or conservation. On that basis, it can be expected that existing conflicts, in and around Utría, may worsen if ecotourism projects are pursued without sufficient attention to the interests and needs of local actors. Since it is almost inevitable that such projects will proceed, a key question becomes, how might they be pursued without exacerbating conflict.

We address that question here by conceptualising contemporary management of Utría National Park as a Wicked Problem (Rittel & Weber 1973), viewed from a teleological perspective (Faber et al. 1995, 1996). This provides us with a conceptual basis for exploring how the different self-understandings of environmental place (Farrell & Thiel 2013) of three key stakeholder communities – the local Afro-descendant community, the local Embera indigenous community and the National Park Administration – can be considered together and compared with one and other. Our objective is to explore how environmental value conflicts between these communities might be avoided, or, where present, constructively resolved. We do this by drawing attention away from conflict and onto the ways in which the
studied communities are related to each other through their shared use of Utría’s territories and resources.

In order to achieve this shift in focus, we employ a teleological heuristic developed by Faber et al. (1995, 1996), in which they identify three fundamental purposes (or tele, singular telos) that serve the wellbeing of all living organisms, human beings included. These are: 1. self-maintenance, development and self-realisation; 2. replication and renewal; and 3. service to other species or the whole of nature. Faber et al. (1995, 1996) argue that deficiency in the third telos – service – is a basic feature of industrial societies, which leads to an imbalance in the impacts that humans have on nature and on each other, due to over-emphasis on the first two tele – self-realisation and renewal. We understand this characteristic of imbalance to be symptomatic of Wicked Problems (Rittel & Webber 1973; Farrell 2011), which, having been brought about by modernisation, cannot be resolved through further modernisation. Linking this to the history of colonisation, we extend the interpretation to the management of Utría National Park.

We find that at least three aspects of managing Utría National Park today fit well with the definition of Wicked Problems. Firstly, the Park area is linked to global trade and international industrialised capitalism through resource extraction. Although ‘meta-industrial’ in the sense of the word as proposed by Salleh (2009), i.e. with limited integration into the global industrial economy, all the local communities in Utría take part today, to some extent, in trade. Secondly, in spite of limited growth in ecotourism in recent years, its promotion by local entrepreneurs and the National Government (DNP 2007, 2008) directly links Utría to the contemporary global economy. And third, the very idea of ‘national parks’ can be understood as a direct response to environmental problems created by industrialisation (West et al. 2006;
Robbins 2004), especially when linked to global conservation discourses arising in industrial societies (Heikkinen et al. 2010), as is the case with Utría.

We use Faber et al. (1995, 1996) three-tele heuristic to study the management of Utría National Park as a Wicked Problem because it shifts attention away from the search for solutions, which is presumed to be futile for Wicked Problems, and onto unpacking the complexity of relationships between the stakeholder communities and their shared environment. In this way, we replace study of the irresolvable problem of how best to manage ecotourism in the park with study of how of the park, as environmental place, is constituted through the relationships between the stakeholder communities making use of it (Farrell 2008).

We build our argument in three steps. First we provide support for our claim that the management of Utría National Park is a Wicked Problem. Second, we explain our criteria for applying the three-tele heuristic as a set of deductive research categories. And finally, we assess the data collected using that heuristic, exploring the degree of balance across tele in each of the stakeholder communities studied. Ecotourism serves throughout the text as a transversal link between the various economic activities and sectors included in the study.

To the best of our knowledge, Faber et al.’s (1995, 1996) heuristic has not been applied empirically in this way before. In developing criteria to guide this application we hope to also provide some concrete points of reference for future research that shifts the focus in environmental value conflict analysis away from articulated values and onto processes of value articulation (Farrell 2007). Whereas direct relationships between conflicting values may be identified, for example, by building inductive interpretations based on reference to empirical data (Puhakka et al. 2009), approaches based on reference to discourse draw into the frame relationships between the differing objectives of respective actors (Hajer 1995).
Along similar lines, we complement here study of conflicts between articulated environmental values with data concerning underlying purposes. In this way we propose a new approach to the study both of environmental conflicts and of Wicked Problems, intended to provide insights into how it may be possible to simultaneously achieve long-term sustainability and peaceful coexistence of groups with different environmental values (Ives & Kendal 2014).

2 UTRÍA, A PLACE OF ENVIRONMENTAL CONFLICTS

Utría National Park is part of the Chocó bioregion in Colombia. It is located in the northwest, near the border with Panama (see Map 1), in an area considered a biodiversity hotspot (Myers et al. 2000). The park, which was established in 1987, covers an area of 54,300 hectares, and is designated by the national environmental authority as a high priority for conservation. It was founded ‘[…] [w]ith the objective to preserve the flora, fauna, scenic natural beauty, geomorphological complexes, historical or cultural manifestations, for scientific, educational, recreational or aesthetic purposes […]’ (DO 1987, p. 6) and is currently under the jurisdiction and administration of the Ministry of Environment.

The area combines an exceptionally high rate of precipitation (>10,000 mm per year), a series of gulfs and bays, and a mountain range, with some of the world’s most productive and biodiverse ecosystems, such as coral reefs, mangrove forests, rainforests and river estuaries. The area of the park overlaps with territory of the Embera indigenous community, and both the area and natural resources around the park are used by local Embera and Afro-descendant communities (PNN 2006). Currently, both local communities depend, to varying degrees, on agriculture, fishing, forestry, hunting, tourism and conservation. The National Park itself

1 Original text translated from: ‘[…] [C]on el objeto de conservar la flora, la fauna, las bellezas escénicas naturales, complejos geomorfológicos, manifestaciones históricas o culturales, con fines científicos, educativos, recreativos o estéticos […]’
relies on tourist entrance fees, international cooperation funds and a small budget provided by
the central government which is, however, insufficient to allow the park authority to control
the area (PNN 2006).

2.1 Utría’s Wickedness

In order to justify our proposition that the management of Utría National Park is a Wicked
Problem, it is necessary to look back in time. Although information about the precolonial
period of the region is limited, studies suggest that prior to arrival of the Spanish the area
served as a corridor for indigenous communities moving between Ecuador, Colombia and
Panama along the rivers of the tropical rain forest (CCGLR 2007; Ulloa 2004; OREWA
1995). Although Colombia was first colonised during the 16th century, Chocó was not under
Spanish control until the mid-17th century (Ulloa 2004; Jimeno Santoyo et al. 1995;
Colmenares 1975). For the Spanish, Chocó was an area of strategic interest, as the San Juan
Isthmus provided an interoceanic link between the Pacific Ocean and the Caribbean Sea
(Jimenez 2002; Meza 2010). Spanish colonist mined gold for export to Europe using the slave
labour of Africans forcibly brought across the ocean by Europeans as part of the Atlantic
triangular trade that lasted for centuries, throughout the latter period of European
industrialisation (CINEP 1998; Tovar Pinzon 1997). The presence of African slaves, in
particular, substantially disrupted the Embera’s use of the region (Ulloa 2004) and studies
suggest that they started to settle, during the 17th century, in the lower and middle parts of the
river basins, including within the area now associated with Utría National Park (CCGLR
2007; Jimeno Santoyo et al. 1995). At the same time, escaped slaves also began to settle along
the Pacific Coast in remote areas (Meza 2010), including around the area now associated with
Utría National Park. While escaped slaves had no rights during the colonial period, there was
some acknowledgement by settlers of both the territorial and human rights of indigenous
peoples, and the Embera were able to make use of the resources of the area with minimal
restrictions. In 1810 a revolution took place in Colombia, ousting the colonial Spanish
governors and resulting in establishment of an independent Colombian state. Although the
human and civil rights of Colombia’s enslaved population were not fully recognised at that
time, slavery was abolished shortly after independence, establishing the basis for the
descendants of escaped and freed slaves to also make claims to use the resources of the park
area.

We take the historical moment of the 1810 revolution as the point in time when the idea of
Utría National Park became possible, and also as the time when the current composition of
contestations concerning the disposition of the park began to take shape. At that time escaped
and freed slaves, the Embera and the Colombian revolutionary elites all had reasons to claim
rights to make use of the area. What makes their contestation a Wicked Problem is the
composition of interested actors, which depends directly on the ways in which European
industrialisation influenced the coming into being of Utría National Park. More specifically,
we identify not Utría National Park itself, but rather its management as the Wicked Problem
in question. This is based, in the first instance, on each of the three stakeholder communities
having a differently constituted but equally legitimate claim, under Colombian law, to make
use of and manage the resources of both the park and residual off-park benefits. Secondly,
their respective claims, rooted in three completely different relationships to the history of
global industrialisation, are not mutually exclusive, making it impossible to define a 'correct'
answer to the question of how best to manage use of the park today. Instead, as with all
Wicked Problems, there are a variety of more or less acceptable solutions, the quality of
which can be measured only through reference to the respective interests and values of the
communities of stakeholders involved in contesting the problem.

3 USING FABER ET AL.’S THREE-TELE AS AN ANALYTICAL HEURISTIC
Our reading of Faber et al.’s (1995) heuristic, which has guided the organisation and analysis of the comparative data presented here below, is motivated by their interpretation of Aristotle’s notion of entelechia, which literally means “‘having an aim (telos, pl. tele) in itself’ or ‘having its determination in itself’” (Faber et al. 1995, p. 45). They base their approach on the claim that there is advantage to using teleological instead of mechanical reasoning when exploring problems of sustainability, because teleological reasoning seeks to understand events in terms of their relationship to the future, or causa finalis, instead of looking only at the past and present, or causa efficiens. The presence of entelechia presupposes that the object or process in question will tend toward a particular state. It can be extended to the idea of human intention, in general, and so also to values, in so far as these are understood to be embedded within more general value systems, from which entelechia are derived. Faber et al. develop a teleological taxonomy of three basic life sustaining behaviours of living organisms, on the basis of which, in combination, they propose, all actions of living nature can be understood to be motivated: (1) self-maintenance, development and self-realisation, which encompasses an organism’s basic needs for food, protection, shelter and the fulfilment of its full potential; (2) replication and renewal, which serves to ensure continuation of the species and its evolution and; (3) service to other species or the whole of nature, including e.g. serving as food for other organisms, which ensures the ongoing relevance of the organism type for its context or habitat. They identify excessive attention to the first and lack of attention to the third telos with the ability of industrialised human societies to impose human interests onto the living nature around them and specifically relate this to the presence of ecologically problematic imbalances between human and non-human nature in industrialised settings.

By using their three-tele heuristic we are able to sidestep the wickedness associated with managing Utria by avoiding debate regarding whose interests should prevail and why.
Building on Farrell’s (2008, 2011) reading of Marcuse’s (1964) position on technology as ideology, we focus not on the technical but instead on the teleological question of how these conflicts are created and recreated through purposive relationships between the different communities, with respect to the park area. This allows us to replace discussion of conflict in terms of dissent and disagreement with discussion of opportunities, synergies and complementarities. Faber et al.’s (1995; 1996) heuristic helps us to ‘break the fourth wall’ of Wicked Problem solving by providing us with a set of deductive categories for encoding teleology. Data collection and analysis are organised to relate each party’s teleological perspective to the others’ in a way that is comparative but does not require commensuration (Farrell 2007:23). Using the tele in this way, we are able to develop a set of interpretations of how the underlying purposes of one community are related to those of the others, and to explore how each of these is supporting or hindering the potential of the Utría community, as a whole, to use the park together, harmoniously, avoiding conflict while achieving sustainable management of ecotourism in and around the park area.

Faber et al. (1995, 1996) posit that a living organism is viable when its own entelechia are balanced and in harmony with the living nature around it. This state, where all three tele are present and have more or less equal emphasis, provides us with our logical point of reference for using the three-tele here as a heuristic. Based on our reading of their arguments we presume: (i) that each telos can be independently identified, and that, in so far as it is present at all, it is present in a relatively stable way, in its own right; (ii) that all three tele are, nonetheless, clearly related with one and other, enjoying at least some degree of overlap; and (iii) that the relative intensity of emphasis on each of the three is more or less balanced in a viable living organism. For the purpose of our present analysis, we aim simply to identify the presence or absence and relative emphasis of attention to each of the three tele, among the three stakeholder communities studied: always with a view to the empirical domain of
ecotourism. These data, in turn, provide us with the basis for conducting a preliminary analysis of the potential for avoiding escalation of conflict in the region, based on the assumption that balanced emphasis of attention across the three tele, across the three stakeholder groups, would both help to deescalate conflict and favour sustainable management of ecotourism.

3.1 Field data collection procedures

Primary data reported upon here were collected during interviews and field observations in January and October 2015. The first author spent a total of 2 months living in the area and conducted 32 thematic interviews with a total of 50 people, sometimes in groups, mostly with individuals. As shown in Table 1, most respondents were members of either the Afro-descendant community of El Valle, who live beside Utría National Park or the Embera community of Alto Río Valle-Boroboro reservation, whose territories include the park area. Both communities, and the park, are situated within the legal municipality of Bahía Solano. Data concerning the perspective of the Park Administration was drawn from interviews and official publicly-available documents. All but two of the interviews were recorded and consent for the use of interview content was secured in all cases.

Informants from the Afro-descendant community were selected for interview based on their links to the eco-tourism sector and to productive chains connected to it, with most of them deriving at least part of their basic income from this activity. This criterion was not applied to the selection of informants from the Embera community: on the one hand, because their participation in eco-tourism is, on balance, rather limited and on the other, because the terms for securing permission to interview members of this community included a degree of self-selection on their part, in keeping with the preferences of these informants. Informants were
strategically selected, so far as possible, in order to provide good coverage of the main
etourism activities underway in the area (Robbins 2004), with the distribution of interview
informants by activity type, being as follows: tour guides (n=4), transportation (n=2), artisans
(n=3), hotel services (n=5), Park Administration (n=3), boat drivers (n=4), fishermen (n=2),
restaurant owners (n=2) and local authorities (n=3), members of the Emberá community
(n=22). Of the 50 informants, 15 were female and 35 male. However, we have not
disaggregated response data based on gender for the present study.

In order to develop a general picture of the relationships between and concerns of these
communities, with respect to their rights to use natural resources, the interviews were not
limited exclusively to the theme of the Utría National Park (cf. Marcus 1995). Rather, the
park was included as one theme, among others, presented for discussion, in an effort to elicit
data concerning the respondents’ general views regarding local realities and concerns
(Heikkinen et al. 2016). The following nine key themes, drawn from a previous scoping
study, were used to structure the interviews, through which we sought to identify respondents’
main concerns about the area: family history, tourism, transportation, infrastructure, public
services, governance, national park, presence of governmental agencies and armed conflict.
Recorded interviews were transcribed verbatim and all interview data were analysed using the
N-VIVO software programme to conduct content analysis (Krippendorff 2012; Bernard
2011). We structured our analysis through reference to Faber et al.’s (1995) three-tele, which
provided the three core deductive categories used to sort these data. Every transcribed
interview was reviewed and its content classified into these categories (Hsieh & Shannon
2005). To perform this sorting, transcribed and in some cases annotated interview data were
partitioned into category-relevant utterances, which were then assigned to one or more of the
three tele. Each utterance consists of documented words expressed by a respondent or found
in an official statement, which make reference to something, describe an action of someone,
or refer to a specific event (Habermas 1979). Our analysis is mainly based on the narratives of the informants, complemented by reference to field observations, official statements and related academic literature. The source data employed are not the intentions or activities of the informants but rather their utterances concerning attention to those intentions and activities. An overview of the key concepts employed to execute this encoding is presented in Table 2.

[TABLE 2]

3.2 Developing Criteria in order to use the three tele as a Heuristic

Telos 1: Self-maintenance, Development and Self-realisation

In order to better reflect collected data, we partitioned data for this telos in two parts: (i) self-maintenance; and (ii) development and self-realisation. We define the former as the search for a livelihood, shelter, food, sustenance and income, which can be done by individuals or in community. Utterances assigned here relate to the economic sectors of the communities, including, agriculture, tourism, fishing, forestry, hunting and conservation. A typical encoded reference would be: ‘We do line fishing and also do drop line fishing. The drop line fishing is where we put a thousand or two thousand hooks attached to the line. We also have [something] called lifters, [which are] rafts with a fishing line about 15 fathoms long. Attached to those lifters we tie a stone to the fishing line so the current does not take it away [. . .]’.2

---

2 Translated from: ‘La [faena la] hacemos a línea de mano y la hacemos también a espinel. Espinel es el que le ponemos mil o dos mil anzuelos con una cantidad de sedal que utilizamos. También tenemos [algo a lo que le] decimos alzadera, unas balsas con sedal, unas 15 brazas de largo. A esas alzaderas le ponemos la piedra como para que agarre el espinel y no lo deje que la corriente se lo lleve [. . .]’.

3 From this point forward, all original texts are in local vernacular Spanish and were translated into English by the first author, who is native Spanish speaker, in collaboration with the second author who is a native English speaker.
We define the second part of this telos, development and self-realisation, as having to do with development of the individual or the community, directed toward realising its full potential. Data encoded here include references to public services that influence the development and the self-realisation of individuals, such as, education, sanitation, healthcare, infrastructure and security.

Telos 2: Replication and Renewal

Again, based on the composition of collected data, we also partitioned this telos in two parts: (i) replication and (ii) renewal. Under the former we include utterances concerning human sexuality and biological reproduction, and the maintenance of kinship ties; under the latter, utterances concerning social norms and customs of the community. We take these latter utterances to reflect the basis for institutions and for recreating community, over time, as they are passed down from generation to generation (Berger & Luckmann 1991; Nanda & Warms 2014). Encoded utterances related to renewal included, for example: ‘[for] vegetables, we are in a group of women, [called group] of the yards that gives one [seeds] to sow, to have one’s yard, to take one’s daily bread, one’s vegetables. The tomato, for example, is sown in this way for one’s own consumption’

Telos 3: Service to other Species or the Whole of Nature

We have assigned utterances to this telos based on their attention to the service that human beings may provide to the ecosystems they are using. According to Faber et al. (1995) emphasis on this telos ensures the ecological relevance of a given organism and also provides for maintenance of the ecosystem, which supports realisation of the first and second tele. Here we include reference to two types of attention: (i) direct concern with providing service to

---

4 Translated from: ‘[para] la verdura, estamos en un grupo de mujeres, [llamado grupo] de las azoteas que le dan a uno pues [las semillas] para sembrar, para tener uno su azotea, su pan coger, su verdura. El tomate entonces ya uno lo siembr y para el consumo de uno.’.
other species and (ii) utterances concerning service related patterns of human behaviour.

Utterances of the first type have more of an instrumental focus on maintaining the productivity of the whole of nature whereas those of the latter type are more related to social practices and taught and learned behaviours. Here, we encoded, for example, for the latter category, utterances such as: ‘we go to schools, we give talks to children about caring for the turtles, why we should conserve the turtles, about littering [. . .], all of which is a threat to the turtles.’

3.3 Putting the pieces together: Applying these criteria to the field data

Utterances were assigned to tele categories based on their object of signification - Afro-descendant, Embera or Park Administration - to serve as representations of the collective understanding of the respective stakeholders’ teleological disposition, with regard to Utría National Park. Based on the logic of the three tele heuristic, where balance across all three tele is presumed to indicate viability, we considered, for each interview, whether or not its utterances suggested a balanced attention across the three tele in the signified community. Based on the numbers of encoded utterances in an interview, interviews were assigned, based on the community signified in the utterances, and their tele encodings, to one of seven telos weighting categories (see Table 3). Category assignments were based on reference to a quartile interval of ±25% around the value that would indicate balanced attention across the three tele: the mean number of utterances across all tele, pertaining to a specific stakeholder community. For example, the interview with respondent #10 yielded 49 encoded utterances, based upon which a total of 29 Telos 1 flags, 9 Telos 2 flags and 11 Telos 3 flags were

---

5 Translated from: ‘Nosotros vamos a los colegios, le damos charlas a los niños sobre el cuidado de las tortugas, por qué hay que conservar las tortugas, sobre la tirada de la basura [. . .] que todo eso es una amenaza para las tortugas.’

6 Compound utterances, with more than one community signified, were treated, for encoding purposes as two separate utterances.
Among those utterance where the Afro-descendant community was the signified object, the signification distribution was 20 (Telos 1), 18 (Telos 2) and 14 (Telos 3); in this case the Telos 1 count was above the balance interval, the Telos 2 and 3 below and so the interview was assigned to the category Single Telos 1 emphasis. For respondent #22 the distribution was 27 (Telos 1), 21 (Telos 2), and one (Telos 3). With Telos 1 and Telos 2 above the balance interval, and Telos 3 below, this interview was assigned to the category Telos 1,2 emphasis. For informant #4, the distribution was 31 (Telos1), 19 (Telos 2), 10 (Telos 3). In this case, with Telos 1 above the balance interval, Telos 2 within it and Telos 3 below, the interview was assigned, due to its imbalance, to the category Single Telos 1 emphasis. As can be seen in Table 3, there is a strong tendency across the interviews to identify concern with Telos 1 and/or Telos 2. However, these interview specific data cannot be easily compiled to give an aggregate representation. In order to develop a better sense of the overall tendencies and to crosscheck these results, we conducted the same assessment taking all utterances together (see Table 4). These aggregated data, which produce the same results as the interview specific data, help to guide our analysis in the following pages. However, these data, alone, are insufficient to support our argument and so we complement them also, with a review of ratios between utterances across the tele, which directly juxtaposes the levels of attention expressed by our informants, and with reference to our experience in the field and to literature, in order to build our discussion.

[Table 3]

4 A TELEOLOGICAL PERSPECTIVE ON UTRÍA’S WICKEDNESS

A predominance of utterances associated with the opportunities and limitations that respondents experienced in their political, economic, spatial and social circumstances, can be

---

7 In the event of two tele being addressed in a single utterance, this utterance was assigned more than one telos flag.
understood to reflect a general emphasis of attention on telos 1, self-realisation. Based on the
encoded data, the main concerns reported by the informants are as follows. For the Afro-
descendant community, there is concern about the need for major investments in the port and
the airport of the region, in order to give a lift to the local economy. For instance, one Afro-
descendant informant stated: ‘one of the demands made here, so that it is possible to provide
an efficient service of tourism, is the need for infrastructure projects that would provide
logistical support, hence the airport [. . .], so we can say that this is an area suitable for
ecotourism, and the different branches of tourism, ethno-tourism, agro-tourism. We need to
meet basic standards.'

For the Embera community, a major concern is food security, as they have seen the fish and
game populations diminishing in recent years. For example, an Embera informant stated that,
‘[. . .] with respect to the animal population; it has decreased. As the [human] population has
grown that of animals decrease, as the [human] population grows the number of fish also
decrease.’

These concerns were also linked by respondents from both communities with the desire to
expand commercial trade. While the park itself is seen as a source of income and livelihood
for all three stakeholder communities, a main concern of the Park Administration is a lack of
funds for its activities, as stated by one of our Park Administration informants: ‘[. . .] the only
thing missing [for management] is that the budged assigned by the State is insufficient to hire
the personnel required in order to perform our assigned activities [. . .] [with respect] to the

\[8\] Translated from: ‘Una de las exigencias que acá se planteaba para que acá se pudiera prestar un servicio
eficiente de turismo, se planteaba en su momento que tenía que generarse obras de infraestructura que
brindaran como ese apoyo logístico, entonces el aeropuerto, [. . .] para que podamos decir que esto es una zona
apta para el ecoturismo, en las diferentes ramas del turismo, el etnoturismo, el agroturismo bueno. Necesitamos
tener condiciones básicas.’

\[9\] Translated from: ‘[. . .]según la población de animales, ha disminuido. Según ha crecido la población los
animales disminuyen, según va creciendo la población los peces van disminuyendo también.’
management plan, which is our navigation chart for the coming five to ten years.\textsuperscript{10} This is complemented by statements from the other two communities that the park could do more to benefit them. We also found concern about security, associated with the armed conflict in Colombia, among all three communities.

As regards to the first part of the second tele, replication, three key factors mentioned in both the recorded interviews and the reference literature (DA 2012; DSP 2011; DANE 2010; Meza 2010) point to a relatively strong emphasis on this telos. Among respondents from the Afro-descendant community there is a perceived need for increasing the local labour force available to work in agriculture and fishing. In addition, the availability and improving quality of healthcare access in the region, along with other factors, has led to drops in infant mortality rates and associated increases in population. Finally, among the Embera community there is a trend toward migration into Afro-descendant community towns, where children are able to complete their secondary education. With respect to the second aspect of this telos, renewal, the collected data indicate that emphasis on this telos is related to the perceived ineffectiveness of current institutions, of both the state and the communities, in setting and enforcing rules. For instance, informants from the Afro-descendant community expressed concerns about their ethnic-territorial administrative body, the Concejo Comunitario, losing its legitimacy, and about the ineffective management of some public agencies. However, informants from both the Afro-descendant and Embera communities found that the Embera’s ethnic-territorial administrative body, Cabildo, has retained its capacity and autonomy, as is reflected in the statement of this Emera informant: ‘[. . .] speaking about the environment, that is what we [Cabildo] oversee today. Since our own government was constituted, everything is

\textsuperscript{10} Translated from: ‘ [. . .] lo único que falta [para el manejo] es que el presupuesto del estado no nos da como para contratar suficiente personal, que es lo que necesitamos para desarrollar las actividades que son misionales [. . .] [en relación a] los planes de manejo que son la carta de navegación de unos cinco a diez años’.
managed by the rule of our own government, all the fauna and all the forests.\textsuperscript{11} However, concerns were also expressed by Embera community respondents regarding the \textit{Cabildo’s} effectiveness and its focus on the wellbeing of individuals.

Ecotourism, which has attracted investment from the central government into the region, was also mentioned in relation to increasing attention to preservation of the scenic natural beauty of the area. However, this was closely linked also to telos 1, by the informants who mentioned, for example, a recent revival of mixed cultural expressions based in the heritage of the Afro-descendant community (cf. Jaramillo 2006), with presentations of traditional Afro-descendant folk songs, which was being offered commercially as part of the regional tourism experience. Informants from the Embera community also expressed attention to culture, although mainly in terms of their concerns about the loss of traditions, such as clothing and architecture, and a general consternation among the elders that the youth are introducing Spanish words into the Embera language, which they attribute to the public educational system. Finally, there was recurrent attention among all three stakeholder communities to the social importance of the Park Administration as an actor responsible for promoting and contributing to good relations between the communities and to the formal rules concerning rights to use Utría’s resources, which are set and enforced by the Park Administration.

As regards the third telos, service, here we have encoded utterances concerning attention given to conservation initiatives, as they reflect human effort invested to serve other species and living nature, including, for example the following statement of an Afro-descendant informant: ‘A very recent organisation is friends of Tundó [river], which is a community organisation. We are 15 people. The mission of this organisation is to take care of Tundó

\textsuperscript{11} Translated from: ‘[…] hablando en la parte de ambiente, todo eso es lo que nosotros miramos, hoy día. Desde que se conformó el gobierno propio es manejado bajo la regla del gobierno propio, toda la fauna, todos los bosques’
River [. . .] so they [neighbours] understand the importance of mangrove ecosystems, [. . .] the
goal is that once we have an organised platform to look for support from NGOs [. . .] these are
very large projects where we will need support from NGOs and local organisations.12
However, unlike data concerning attention to the previous two tele, we find almost no
reference to exclusive attention to the third telos. Mention of conservation projects is related,
for example, to income generating activities such as ecotourism, private donations and
financial transfers from the state, all of which reflects links back to realisation of the first
telos.

[TABLE 4]

Taking a closer look at the relative emphasis of attention across the tele, as presented in Table
4, the encoding and categorisation reflect how attention to each of the three tele is related to
attention to the other two, within the universe of utterances documented in this study. In the
case of the Afro-descendant community, strong emphasis on the first telos has the effect of
lowering the relative intensity of documented attention to the other two. Here the ratio of
encoded references associated with the first versus the second tele is nearly 2:1, and between
the first and the third nearly 4:1. While use of the three-tele as a heuristic to organise these
data is still a new approach, these results are consistent with the position expressed by our
informants: ‘but as I’ve told you, [. . .] although everyone is out for themselves, that’s not the
way of doing things. You get more [working together] than with each individual working for
themselves. Because, no one is going hand money to you if it’s just you [. . .] if you are in

12 Translated from: ‘Una organización muy nueva que se llama amigos de Tundó, es una organización
comunitaria. Somos 15 personas. La misión de esta organización esta fundada en cuidar el rio Tundó [. . .] para
que ellos [vecinos] entiendan la importancia de estos ecosistemas de manglar [. . .] la meta esta en que en el
momento en que tengamos la plataforma organizada buscar apoyo de ONGs. [. . .] Estos son proyectos muy
grandes donde si vamos a necesitar apoyos de ONGs y organizaciones locales’
group, it is better than individually”\textsuperscript{13}. Here the informants’ position reflect that their community has moved, in recent years towards, more individualistic behaviour (cf. Rappaport 1979, p. 165), working in community mainly to realise first telos.

In data collected from interviews with the Embera community, the first and second tele are given more or less equal attention, with the ratio of encoded utterances being nearly 1:1. Among all encoded data, the ratio was nearly 5:1 for attention to both the first and to second tele as compared with attention to the third. Although it is not possible to say, based only on these data, why the ratios are so unbalanced, this is at least partly related a preoccupation with food security, related to the first telos, and concerns about the loss of traditions and ways of the Embera, related to the second. These concerns were linked to population growth by respondents but it is likely that they are also related to the proximity of other communities, which are also growing, and to the borders and restrictions applied on the Embera community’s use of the park area by the presence of the Afro-descendant community and the Park Administration.

Data regarding the tele emphases of the Park Administration show a lower degree of overall variability, with roughly 5 utterances giving attention to the first telos for every 3 giving attention to the third. However, these data also repeat the balance of emphasis between the first and second tele observed in the responses of the Embera community informants, with attention given at nearly a 1:1 ratio across the two categories. Here the pull toward the first two tele appears to be related to concerns about limited funds for administering park management activities, while the better overall balance reflects the Park Administration’s official duties, or formal entelechia, which explicitly oblige it to pursue realisation of all three tele.

\textsuperscript{13} Translated from: “[. . .] pero como le digo, [. . .] como que cada quien esta por lo de uno, a penas y asi no se consiguen las cosas. Uno se consigue mas asi [trabajando juntos] que haciendo individual. Porque individual a nadie le van a regalar plata [. . .] si uno esta asi en grupo, se va mejor que asi individual.”
5 WORKING WITH UTRÍA’S WICKEDNESS

In the management of Utría National Park, based on current Colombian and international law, the local Afro-descendant community, the local Embera community and the Park Administration all have legitimate claims to rights of use. The ability of each community to realise its rights depends on both the ecological limits of the system and on the actions and decisions of the other two communities. While there is a broad consensus in favour of continuing ancestral practices of resource use, subject to good standards of sustainable use, there is no universal standard against which it may be judged what precisely that means. In light of the region’s recent history, misunderstandings on this point could turn quickly into conflicts. By using Faber et al.’s (1995) three-tele as a tool to explore how each of these three communities uses and relates to the park area, we are able to develop some propositions regarding the potential for achieving what we would call, following Barry (1999) an environmentally virtuous shared use of the park by all three of the studied communities.

The three tele heuristic allows us to analyse and process an array of data concerning the contesting visions of these three communities in an orderly and, we hope, also coherent manner. Based on reference to informant interview responses and to field notes approved for referencing in this paper, we have applied a comparative analysis of the teleological emphases of the three respective stakeholder communities studied. The results suggest a general deficiency in attention to the third tele, service, across all three communities. Recalling Faber et al.’s (1995; 1996) proposition that industrialised human societies, and we would argue also Wicked Problems (Farrell 2008; 2011), are characterised by insufficient emphasis on the service tele, we advance the normative proposition that fostering balanced attention across all three tele might constitute a means for side-stepping the Wickedness of potential environmental value conflicts, related to the expansion of ecotourism in and around Utría National Park. These results provide us with a logical basis for developing recommendations
regarding how it might be possible to avoid exacerbating conflict while also enhancing sustainability.

While we find this application of the heuristic has promise, we also encountered some limitations. For example, we had problems with the assignment of categories, because distinctions sometimes implied a level of knowledge concerning respondents’ views on, for example, the nature of human potential, which was beyond the scope of our study. We also found it necessary to expanded the concept of renewal to include attention to social norms and customs, which, although based on our interpretation of Faber et al. (1995, 1996), is not explicitly discussed by them in this way. In addition, our choice to focus on encoding utterances, which was intended to help ensure that the encoding reflected not only our understanding of the heuristic both also the understanding of our informants, nonetheless limits the scope of our interpretations to what was said, leaving aside what might have been meant. And as is always the case with empirical social research, we must presume that both our presence in the field, and our efforts to collect data compatible with the three-tele heuristic have had some effect on responses.

Nonetheless, we are encouraged to draw some inferences from these results. First, and foremost, based on the proposition that strengthening attention to third telos, could help to support the achievement of a flourishing (Muraca 2011) coexistence between the three stakeholder communities, we are optimistic about the possibilities for developing sustainable ecotourism in and around Utría. This would imply, for example, a combination of education within the respective communities, enriching understanding of their own environmental impacts, with dialogue between the communities, concerning the effects that their actions have upon each other and on the viability of the park. In keeping within the logic of Faber et al.’s (1995) position, changes in the tele are not to be understood as atomised but as holistic. So, we may expect an enhanced emphasis on self-realisation, for example, to be accompanied
by reduced emphasis in service, as was observed by Singh (2006) in the Nicobar Islands, following the collapse of the local economy after the tsunami of 2004. But we may also anticipate that enhanced emphasis on service, in a society lacking in balance across the tele, might bring balance about.

6 CONCLUSION

In this paper we have aimed to identify potential for deescalating conflict while pursuing the sustainable management of ecotourism in the area in and around Utría National Park in Colombia. Our arguments are based on empirical study of the perspectives of three local stakeholder communities: local Afro-descendant communities, the local Embera indigenous community and the official state Park Administration. We have argued above that a Wicked character of this park management problem can be traced to the colonial historical context from within which the conflicting use rights claims of these three communities have arisen. In place of focusing on the value conflict regarding how best to use Utría, which, being Wicked, is presumed to be irresolvable, we have looked into the underlying purposes that motivate stakeholders’ attitudes towards the park area (Farrell 2008; 2011). Using Faber et al.’s (1995; 1996) concept of the three tele of living organisms, where telos 1 is the purpose of self-maintenance, development and self-realisation, telos 2 that of replication and renewal and telos 3 that of service to other species or the whole of nature, we have sidestepped the trap of looking for a concrete specific solution to an unsolvable problem by focusing attention instead on the teleological question of the degree to which the three stakeholder communities can be understood to be flourishing together, with each other and with the park. As predicted by Faber et al. (1995), we found consistently low emphasis on the third telos among all three stakeholder-communities. Following through on this logic, we propose that fostering attention to the third telos could help to deescalate present and avoid future conflicts related to ecotourism in and around the park area because it would increase the degree to which the
needs of both the other two communities and of the park area itself are included within the
entelechia of each of the three stakeholder communities. We also anticipate that there may be
some associated risks, as fostering attention to the third telos could reduce the resources
available for the other two tele in already marginalised Afro-descendant and Embera
communities.

Despite it reflecting a Eurocentric logic, we find that framing the sustainable management and
expansion of ecotourism in Utría National Park as a Wicked Problem has provided us with a
coherent and historically contextualised basis for exploring how it may be possible for
Colombia to protect this ecological hotspot while at the same time respecting the rights and
interests of the local and regional stakeholders living within and from the park area. By
combining this framing with an innovative application of Faber et al.’s three-tele heuristic, we
have been able to develop the following concrete advice for the governing authorities
concerned with ensuing that sustainable ecotourism, in the absence of conflict, is part of
Utría’s future; foster among all three stakeholder communities, increased attention to telos 3,
service to other species and to the whole of nature, including service to the other communities
with legitimate claims to make use of the park.

7 REFERENCE LIST

Tomo IV. Bogotá: Colciencias.


---

**Table 1. Number of Interviews Conducted**

<table>
<thead>
<tr>
<th>Interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afro-descendant (Incl. 1 small group interview with two respondents)</td>
</tr>
<tr>
<td>Embera Community (Incl. 1 large group interview with 17 respondents)</td>
</tr>
<tr>
<td>Park Administration</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

**Table 2. Basis for encoding into Categories.**

<table>
<thead>
<tr>
<th>Utterances concerned with…</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telos 1 Self-Maintenance, Development, and self-realisation</td>
</tr>
<tr>
<td>Telos 2 Replication and renewal</td>
</tr>
</tbody>
</table>
Table 3. Aggregated emphasis count per tele by stakeholder community*

<table>
<thead>
<tr>
<th>Signified Stakeholder</th>
<th>Balanced emphasis</th>
<th>Combined emphasis</th>
<th>Single emphasis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T1, T2, T3</td>
<td>T1, T2</td>
<td>T2, T3</td>
<td>T1, T3</td>
</tr>
<tr>
<td>Afro-descend.</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Embera</td>
<td>2</td>
<td>11</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Park Admin.</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>16</td>
<td>-</td>
<td>6</td>
</tr>
</tbody>
</table>

* The total number of interviews was 32. The variation of values in the total column is because most interviews included significations of more than one community, while not all communities were signified in all interviews.

Table 4. Overview of the relative emphasis of attention across the tele, attributed to each of the three stakeholder communities*

Afro-descendant Community

<table>
<thead>
<tr>
<th>Interviews including utterances encoded for the Afro-Descendant community as signified</th>
<th>Total encoded utterances signifying Afro-descendant Community</th>
<th>Average # of Utterances</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>947</td>
<td>316</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distribution of utterances across the Tele: all informants</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>Average # of Utterances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distance from the mean</td>
<td>-225</td>
<td>-53</td>
<td>-173</td>
<td>-</td>
</tr>
<tr>
<td>Quartile Emphasis</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>FAVoured Average Low</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Embera Community

<table>
<thead>
<tr>
<th>Interviews including utterances encoded for the Embera community as signified</th>
<th>Total encoded utterances signifying Embera community</th>
<th>Average # of Utterances</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>429</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Distribution of utterances across the Tele: Afro-Descendant informants</th>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>Average # of Utterances</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>469</td>
<td>219</td>
<td>115</td>
<td></td>
</tr>
<tr>
<td>Distribution of utterances across the Tele: all informants</td>
<td>201</td>
<td>184</td>
<td>44</td>
<td>143</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>----</td>
<td>-----</td>
</tr>
<tr>
<td>Distance from the mean</td>
<td>58</td>
<td>41</td>
<td>-99</td>
<td>-</td>
</tr>
<tr>
<td>Quartile</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Favoured</td>
<td>Favoured</td>
<td>Low</td>
<td>-</td>
</tr>
</tbody>
</table>

| Distribution of utterances across the Tele: Embera informants | 169 | 142 | 34 | - |

## Park Administration Community

<table>
<thead>
<tr>
<th>25</th>
<th>Interviews including utterances encoded for Park Administration as signified</th>
</tr>
</thead>
<tbody>
<tr>
<td>258</td>
<td>Total encodes utterances with signifying Park Administration Community</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>T1</th>
<th>T2</th>
<th>T3</th>
<th>Average # of utterances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distribution of utterances across the Tele: all informants</td>
<td>104</td>
<td>95</td>
<td>59</td>
</tr>
<tr>
<td>Distance from the mean</td>
<td>18</td>
<td>9</td>
<td>-27</td>
</tr>
<tr>
<td>Quartile</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Emphasis</td>
<td>Average</td>
<td>Average</td>
<td>Low</td>
</tr>
</tbody>
</table>

| Distribution of utterances across the Tele: Park Administration informants | 40  | 39  | 30  | -   |

1

* Utterance were assigned, in all cases, based exclusively on the object of signification, regardless of who made the utterance. The bias in favour of Afro-descendant and Embera significations concerning the Park Administration, which reflects the distribution of interviews, is disregarded for the purpose of the present analysis, as we are focused here on overall collective understandings of teleological dispositions.

Map 1. Location of the Study Area