

# WORKPACKAGE 1 – BIODIVERSITY AND PERCEPTION

## DELIVERABLE 3 – REPORT ON HUMAN PERCEPTION OF CORVIDS

### CONTEXT

#### GENERAL CONTEXT

Perception of biodiversity is not a very well-studied subject, probably because it is at the border of different academic fields, and it is difficult to know how to address it properly.

Yet, it is an important factor that must be taken into account in a lot of urbanism, ecosemiotics, cultural semiotics, biosemiotics or zoosemiotics subjects, including very sensitive subjects like the protection or reintroduction of endangered species (see the work of Mäekivi and Magnus in the attached documents). Projects aiming to have a real impact on biodiversity issues implying close human populations should gather data about how these populations perceive the target species and include them in their program.

#### INSIDE THE PROJECT

This project will partially follow the methodology set for a previous study (Delahaye 2021) of another urban species (*Rattus norvegicus*) in another urban environment (Paris, France). This study showed that it is possible to learn a lot of things about relationship between humans and liminals by comparing semiotic representations to factual data. After completing Deliverable 1, another step is, consequently, to gather and analyse data about how biodiversity and liminal species are perceived in Tartu by inhabitants, in particular regarding corvids, our case-study, and even more especially regarding the main species of this project, *Corvus corone cornix* (or *Corvus cornix*). Part of the data will be literary documents, as it is well theorized that literary productions can reflect quite effectively, not the reality of natural species, but the vision and relationship humans have or would like to have with them (Maran 2014).

### RESEARCH QUESTION AND HYPOTHESIS

#### QUESTION AND SUBQUESTION

This deliverable is part of the Case study 1, aiming to study the relationship between biodiversity and perception of such biodiversity on different semiotic levels. The main question of this Case study is: What are the roles of liminal species in a human city?

The report on human perception and textual expression aims to answer more specifically to the question: How is biodiversity and liminal species perceived by inhabitants of Tartu city, especially regarding corvids?

#### HYPOTHESIS OF THIS STEP

The general hypothesis of the Case study is that cities are perceived as an exclusively human environment. It is true that biodiversity in cities is expectedly still lower than in most natural ecosystems, yet it is present, complex and changing. So, humans and animals are parts of this ecosystems, interacting permanently with each other and strongly semiotically linked.

The hypothesis of this precise step is that, based on the previous study on rats, there is probably a gap between the perceived biodiversity and the real data. Gathering data about what representations about liminals humans in cities are creating and how or why they create them is consequently an important part to understand how big this gap can be, and, further, how humans are creating representations about liminals that are more or less close to the factual reality of these species.

## METHODOLOGY

### METHODOLOGICAL CHOICES

Two main kinds of textual materials were marked as relevant. The first is related to literature and arts, and is composed of documents indicating how these species are perceived in a symbolical and cultural way by inhabitants. The second is related to actual and day-to-day relationship between liminals and inhabitants and management of this relationship. Analysis was both on how previous authors interpreted these documents and on the lexical and semantic elements that could be extracted from them.

For the first category, very helpful references were given by Rene Kiis (Semiotics Department of Tartu University), about how frequent corvids representation is in Tartu-based fictions (via Database “Tartu in Fiction”, see in the References and links section), about how they participate to the gothic atmosphere of the city (see the article “Spooky Tartu”, also in Reference and links section) or about cultural particularities of Tartu city (Velsker & Soovik 2017). Another document about the link between literary life and relationship between inhabitants and other species (see the Documents section for linked documentation) was also given by Timo Maran (Semiotics Department of Tartu University).

For the second category, one other reference was also proposed by Rene Kiis about how inhabitants talk about their relationship with corvids, in particular jackdaws (Elo Tuule 2017). Some points of interest were also gathered during interviews with Lauri Laanisto (Estonian University of Life Sciences) and Marko Mägi (Institute of Ecology and Earth Sciences of Tartu). This last one also suggested to write to Tartu’s Government to gather potential complaints of citizens, as he knew these complaints exist from his own previous work with corvids (available in the References and links section). Timo Maran suggested to use the public database of Tartu’s Government correspondence (also available in the References and links section).

### ISSUES AND PROBLEM SOLVING

The first, and major, issue was without any doubt the language issue. Scientific and academic works about Tartu aesthetic, wildlife or literary life are mostly in Estonian and very few works exist in English. This issue could be partially solved:

- By direct interviews, for example with Marko Mägi when he explained parts of his work.
- Because some works have at least a summary in English.
- By translating, first the table of contents, then titles and sections, then the interesting parts of these sections with an automatic translation tool (from Estonian to English; as the Estonian-French corpus is very weak, the translation is passing by an English step that could add confusion).

This was not enough to explore the Tartu Government database, as most of the research options and menus could not be selected by keyboard or mouse, and must be rewritten by hand in the translator, which is very time consuming.

The second issue is that, for the Tartu Government database, the language issue could not be compensated by the first or second solutions used for other documents: no translation in English was available and the city’s government never answered to the requests sent by emails.

## POINTS OF VIGILANCE

The exploitation of the Tartu Government database was not successful, but it should not be interpreted as an absence of interesting data.

For documents that have been interpreted with the assistance of a automatic translation tool, results must be taken carefully: the corpus Estonian-English is not very rich or strong and there is a possibility of mistake or misunderstanding.

## RESULTS

### RAW RESULTS

For the first category of documents, a major thematic appeared: the gothic aesthetic of Tartu city. In the blog *Itching for Eestimaa*, the author describes the city as “Tartu, covered in old, creaky wooden houses spewing forth murky smoke”, “home to all sorts of local crazy people”. For Velsker and Soovik, the city has its own particular status and a “literary Tartu” exists side-by-side with the “factual” Tartu. The city is often represented as “a romanticized wooden slum” that is full of mystery and secrets (“intriguing streets that were only whispered about”).

Corvids are a part of this aesthetic and are therefore seen as a species that gives its “flavour” to the city. In the blog *Itching for Eestimaa*, the author writes that “they add a certain Hitchcock flavor to the local ambience”, and, when talking about the “crazy people” living in Tartu, he includes poets but also birds watchers. Velsker and Soovik wrote that “the most typical town bird in today’s Tartu is the jackdaw” and that it is even present in fictional cities based on Tartu (“the whole Tarbatu is full of oaks, lindens and maples, the tops of which are inhabited by the most impudent winged monsters – the jackdaws”). The name of this species (*hakilid*) (*Coloeus monedula*) appears 72 times in the database “Tartu in Fiction”, but other corvids are also an important source of inspiration (crows “vares” appear 22 times). Timo Maran, who did an analysis of some of these results in his seminar (see in the Documents section) noted that a lot of words used to described them are negative and even worrying (“black”, “sad”, “noisy”, “flew anxiously”, “jackdaw army”, “jackdaw vortex”, “Jericho trumpets”) but also that places related to corvids are linked to the gothic aesthetic mentioned above (churches, cemeteries). Other symbolical strong associations are made with dark forces, war, ruins or bad omens.

For the second category of documents, both Järv Elo Tuule and Marko Mägi agree that the principal complaint about corvids is the noise (in the analysis made by Timo Maran, a lot of negative words are used to make reference to this noise: “screaming, screaming, shaking, crackling, roaring, praising, squealing, squealing”). Both of them also conclude that repellents were not successful, as a lot of people find them more disturbing than the birds. Järv Elo Tuule adds that some people are liking these birds and find repellents cruel, which create discomfort in the city. Marko Mägi added that birds aren’t minding repellents anyway by now (see Deliverable 1 about this point). He suggested to contact the city’s government to gather letters of complaint, but the city never answered to the mails, and no document of this kind could be found in the public database (which does not mean that they are not there, see Points of vigilance section about this aspect).

During interviews, two others minor points of tension were added. Marko Mägi reported that, in Raadi cemetery, aggression could occur during nesting season. They are apparently all from the same pair of crows (*C. cornix*), and his explanation is “an exception, a matter of personality”. In the same cemetery, Lauri Laanisto explained that crows often steal candles put on graves by people, in order to eat the paraffine. This can be easily understood as an action with important and negative emotional aftermaths.

### INTERPRETATION

These results show the kind of contradictory relationship people of Tartu have with corvids. Tart is a literary object, with strong symbolical background and a very particular gothic spirit. Inhabitants seem to be attached to the “ambiance” of their city, and corvids are an important element of this ambiance. On one hand, even if description of corvids, and jackdaws in particular, are not very positive, this does not seem to be a real problem for the people, they are not really frightened but seem to appreciate all the strong and dark semiosis gathered by the birds (they are a recurrent literary pattern). On the other hand, they complain about these birds, and it is interesting to see that, even if some aggressive or destructive behaviours are described, they are not complaining about that but mainly focused on the noise. No satisfying solution has been found, since repellents seem to be even worse than the problem they should have been addressed.

## MILESTONE 1 – PROGRESS REPORT

### IMPACT OF RESULTS

These results are important for Milestone 1, as they are the symbolical and emotional point of view of what was evaluated in Deliverable 1. They are also an interesting background to understand the widespread interest Estonian people clearly show in observing their city wildlife, as shown in Deliverable 2.

### ISSUES, PROBLEMS OR LACKING

The impact of the symbolical life is often not taken into account when thinking about animal management and relationship between humans and other animals in cities. But the elements gathered here show that this symbolical life can be particularly rich, strong and unexpected. This is something with a important semiotic weight, that can impact considerably the way interactions are understood.

This symbolical life grows and express itself in a lot of productions, in particular textual productions, and it can be difficult to grasp it when these productions are in a rare language. Even if it is not an endangered language, with around 0.01% of the world population able to understand it, Estonian is indeed a rare language. The present work clearly only scratches the surface of what there is to understand and a more detailed work about this symbolical and emotional life can only be done properly by a native speaker. This must not be seen as a problem, but more as a good practice suggestion (as explained in the previous section).

### NEXT STEPS

The next step will be to use these results with the ones obtained in Deliverable 1 and Deliverable 2 in order to create a comparative analysis. This analysis aims to be a “bigger picture” in order to map the global situation by taking into accounts various aspects: ethological, ecological, symbolical, emotional and cultural.

## GENERAL PROJECT – CURRENT STATE OF PLAY

### IMPACT OF RESULTS

These results are not yet exploitable on their own, but they can be used as a counter point of Deliverable 1, as they can be used to explain some humans’ perceptions towards corvids that are not related to biological and ecological evidences.

## PROPOSITIONS FOR OTHER ASPECTS OF THE PROJECT

## ACADEMIC ASPECTS

These results are not very interesting on their own in academic aspect, but they can be useful in another way. As it is explained in the Issues and problem solving section, a very small fraction of this work and documentation are accessible in English. References and citations of these sources in Estonian in future research papers, conferences or communications could be an entry point for other international researchers, that could be interested by this topic but would not know that these works exist and could then be interested in translating or inventorying these documents.

## POPULARIZATION ASPECTS

The aesthetic aspects of the results are an interesting outcome that could be used in the popularization plan. Using key points of the aesthetic aspect could be used to reach more easily the general public.

## NEXT STEPS

These results will allow to have a more general view of the situation and the subject, and could be used for a proposition for communication at the 22<sup>nd</sup> Gatherings in Biosemiotics, which deadline for submission is at the end of next month.

## ANNEXES

## REFERENCES AND LINKS

## REFERENCES

- Delahaye, Pauline. 2021. « Rats, Mice and Humans ». *Linguistic Frontiers* 4 (1): 44-52. <https://doi.org/10.2478/lf-2021-0004>.
- Elo Tuule, Järv. 2017. « Hakkide küsimus Tartus. Konflikti olemusest ja lahendusvõimalustest ». Thesis, Tartu Ülikool. <https://dspace.ut.ee/handle/10062/58424>.
- Maran, Timo. 2014. « Biosemiotic criticism: modelling the environment in literature ». *Green Letters* 18 (3): 297-311. <https://doi.org/10.1080/14688417.2014.901898>.
- Velsker, Mart, et Ene-Reet Soovik. 2017. « Cities Within a Second City: The Case of Literary Tartu ». In *Literary Second Cities*, édité par Jason Finch, Lieven Ameel, et Markku Salmela, 89-108. Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-319-62719-9\\_5](https://doi.org/10.1007/978-3-319-62719-9_5).

## LINKS TO WEBSITE AND DOCUMENTS

Database “Tartu in fiction”: <https://teele.luts.ee/>

Monitoring of crows in Tartu report: [https://tartu.ee/sites/default/files/research\\_import/2018-01/Vareslaste%20monitooring%20Tartus\\_l%C3%B5pparuanne%2C%20leping%20M-030.pdf](https://tartu.ee/sites/default/files/research_import/2018-01/Vareslaste%20monitooring%20Tartus_l%C3%B5pparuanne%2C%20leping%20M-030.pdf)

“Spooky Tartu” on the blog Itching for Eestimaa:

<https://itchingforeestimaa.wordpress.com/2007/02/18/spooky-tartu/>

Tartu City Government database: <https://tartu.ee/et/dokumendid>

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#### DOCUMENTS

Abstract for Streams conference by Nelly Mäekivi and Riin Magnus “Relations between local people and the reintroduced European mink: an ecosemiotic analysis” (PDF version of panel – 27/01/2022)

Department seminar by Timo Maran “Tartu hakid: ökosemiotiline analüüs” (PDF versions Presentation + Text documents – 26/01/2022)