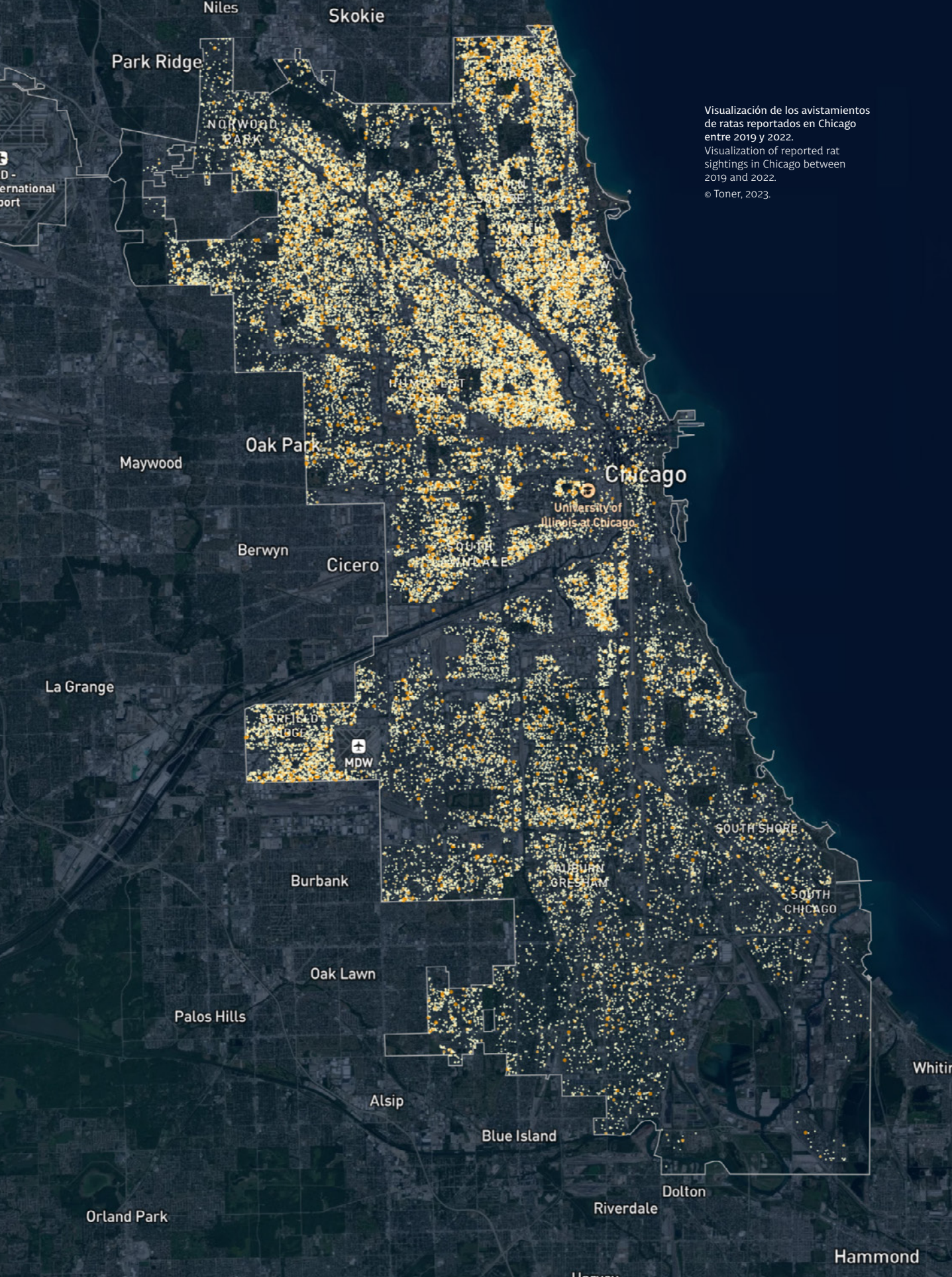

Visualización de los avistamientos de ratas reportados en Chicago entre 2019 y 2022.
Visualization of reported rat sightings in Chicago between 2019 and 2022.

LA GUERRA DE LOS MUNDOS URBANA: RESISTENCIAS OTRAS-QUE-HUMANAS EN EL MARCO DE LA CIUDAD

THE URBAN WAR OF THE WORLDS: OTHER-THAN-HUMAN RESISTANCES WITHIN THE CITY

AITOR FRÍAS-SÁNCHEZ
Universidad de Málaga
Málaga, España
fsaitor@uma.es
https://orcid.org/0000-0003-0131-9219

JOAQUÍN PERAILES-SANTIAGO
Universidad de Málaga
Málaga, España
jperailes@uma.es
https://orcid.org/0000-0002-0779-3205

DIEGO JIMÉNEZ LÓPEZ
Universidad de Málaga
Málaga, España
dj@uma.es
https://orcid.org/0000-0001-6071-3617

RESUMEN El presente artículo explora la naturaleza de la coexistencia urbana entre seres humanos y otros-que-humanos, utilizando como marco de análisis la idea de una "guerra de los mundos" que se desenvuelve en el ámbito de la ciudad. A través del análisis de casos de estudio se muestra cómo la cartografía puede constituir una poderosa herramienta de dominación interespecies y cómo, por contra, puede ser empleada también como un valioso instrumento de resistencia desde el punto de vista de las especies otras-que-humanas con las que compartimos la ciudad. Se concluye abogando por un enfoque más inclusivo en las relaciones interespecies y por la transformación de las ciudades en espacios de coexistencia.

ABSTRACT The present article explores the nature of urban coexistence between human and other-than-human beings, using the notion of a 'war of the worlds' that takes place in the city as analysis framework. Through the analysis of study cases, it is shown how cartography can constitute a powerful tool for interspecies domination, and how, on the other hand, it can also be used as a valuable tool for resistance from the perspective of the other-than-human species with which we share the city. We conclude by advocating for a more inclusive approach to interspecies relations and the transformation of cities into spaces of coexistence.

PALABRAS CLAVE
guerra interespecies
coexistencia
dominación
cartografía
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KEYWORDS
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LA GUERRA DE LOS MUNDOS URBANA

En 1898, el escritor H. G. Wells publicó la que es considerada como una de las primeras y más influyentes tramas literarias acerca de una invasión alienígena: *La guerra de los mundos*. En uno de los capítulos más inquietantes de la narración, titulado "The Man on Putney Hill", el personaje conocido como "el artillero" comparte con el protagonista un detallado plan de resistencia destinado a hacer frente a la invasión marciana. Un plan basado en la coexistencia humano/alienígena que requiere, por parte de los seres humanos, una retirada estratégica al plano subterráneo. Desde el punto de vista del artillero, la única posibilidad de supervivencia para la humanidad frente a los invasores radica en habitar el intrincado sistema de túneles, sótanos y canalizaciones que se extienden por debajo de la ciudad de Londres.[1] Es en este capítulo donde, por primera vez en toda la narración, el protagonista de la obra se enfrenta a la idea de que la humanidad haya sido efectivamente derrotada por los marcianos y de que, en adelante, la guerra de los mundos se adentre en una fase de sumisión. Según la descripción del artillero, los humanos supervivientes deberán migrar, de forma colectiva, al subsuelo de las ciudades y se verán obligados a desarrollar prácticas oportunistas en la superficie.[2] Un modo de vida clandestino que el propio artillero compara con el de las ratas y que, en cambio, se diferencia del modo de vida de los perros, las vacas o los cerdos (a los que compara con aquellos humanos que decidan rendirse y permanecer en la superficie, siendo así domesticados por los marcianos como ganado e incluso como mascotas).

El ser humano, que hasta ahora se ha percibido a sí mismo como la especie dominante del espacio urbano, no tendrá más remedio que pasar a ser una especie más entre las que se limitan a sobrevivir en los intersticios de las ciudades. De esta forma, y según los parámetros descritos por el artillero, la supervivencia de la humanidad quedará vinculada necesariamente al entorno de la ciudad, ya que tan solo las metrópolis de cierto tamaño albergarán las infraestructuras subterráneas suficientes para garantizar la subsistencia de grandes grupos de humanos. Así pues,

[1] Los personajes que aparecen en el capítulo hablan de Londres, pero se hace referencia al hecho de que esta forma de resistencia se pondría en práctica en otras ciudades: "And in all those places we shall gather. Our district will be London" (Wells, 2008, p. 173–174).

[2] "And we may even be able to keep a watch, and run about in the open when the Martians keep away. Play cricket, perhaps. That's how we shall save the race" (Wells, 2008, p. 174).

THE URBAN WAR OF THE WORLDS

In 1898, writer H. G. Wells published what is considered one of the first and most influential literary plots about an alien invasion: *The War of the Worlds*. In one of the most disturbing chapters in the story, entitled 'The Man on Putney Hill', the character known as the 'artilleryman' shares with the main character a detailed plan of resistance aimed at facing the Martian invasion. A plan based on human/alien coexistence that requires, on the part of human beings, a strategic retreat to the subsurface. From the perspective of the artilleryman, humanity's only chance of survival against the invaders lies in inhabiting the intricate system of tunnels, basements, and ducts that extend underneath the city of London.[1] It is in this chapter that, for the first time in the whole story, the main character of the book confronts the idea that humanity might have been sufficiently defeated by the Martians and that, henceforth, the war of the worlds will enter a phase of submission. According to the artilleryman's description, the surviving humans must migrate collectively to the cities' undergrounds and will be forced to develop opportunistic practices above ground.[2] A clandestine way of life that the artilleryman himself compares with that of rats, and that, in contrast, differs from the way of life of dogs, cows, or pigs (which he compares to those humans who decide to surrender and remain on the surface, being thus domesticated by Martians as livestock, and even as pets).

Humans, who until now have perceived themselves as the dominant species in urban space, will have no choice but to become just another species among those that limit themselves to surviving within the interstices of cities. In this way, and according to the parameters described by the artilleryman, the survival of humanity will necessarily be linked to the city environment, since only metropolises of a certain size will harbor sufficient underground infrastructures to guarantee the subsistence

[1] The characters that appear in the chapter speak about London, but reference is made to the fact that this form of resistance will be put into practice in other cities: "And in all those places we shall gather. Our district will be London" (Wells, 2008, p. 173–174).

[2] "And we may even be able to keep a watch, and run about in the open when the Martians keep away. Play cricket, perhaps. That's how we shall save the race" (Wells, 2008, p. 174).

H. G. Wells nos propone, a través de este personaje, un escenario de coexistencia asimétrica entre humanos y alienígenas completamente enmarcado en un contexto urbano. Una "guerra de los mundos" que despliega tácticas de guerrilla y que ya no se emplaza en una escala planetaria, sino en la escala específica de la ciudad.

Esta es una idea que otro célebre escritor de ciencia ficción, William Tenn, exploró décadas más tarde en su novela *Of Men and Monsters* (1968). En ella, los seres humanos habitan como "alimañas"[3] en las oquedades del material aislante de las paredes que conforman las inmensas arquitecturas construidas por "los monstruos" (seres alienígenas gigantes que han invadido el planeta Tierra). Los humanos subsisten gracias a la obtención furtiva de agua, alimentos y otros recursos que logran sustraer de los propios alienígenas, para quienes los humanos no son más que una plaga molesta a la que se esfuerzan por erradicar mediante el uso de trampas. Una forma de coexistencia desigual en la que se establecen, de nuevo, dos posiciones claramente diferenciadas: a un lado, la especie más fuerte, la alienígena, que ejerce dominio sobre el espacio urbano/arquitectónico; al otro, la especie más débil, la humana, la cual se ve sometida y se resigna a habitar en los intersticios de este espacio, en las infraestructuras que lo sirven. Mientras una especie implementa prácticas de exterminio, la otra despliega estrategias de resistencia, con la ciudad actuando como intermediaria entre ambas.

El paralelismo que persiguen ambos autores resulta evidente: los humanos, en el contexto posterior a la invasión, pasarán a asumir el nicho ecológico que anteriormente ocupaban las ratas, las hormigas o las cucarachas en la jerarquía urbana. Esta analogía, que se expresa de forma explícita en ambas novelas, constituye el punto de partida del presente artículo y nos permite construir un prisma conceptual perspectivista a través del cual abordar el estudio de la ciudad contemporánea desde un nuevo ángulo.[4] En un contexto como el actual, caracterizado por una significativa migración de poblaciones humanas y otras-que-humanas hacia entornos

of large groups of humans. Thus, H. G. Wells presents us, through this character, a scenario of asymmetrical coexistence between humans and aliens completely framed in an urban context. A 'war of the worlds' that deploys guerrilla tactics, and which is no longer situated on a planetary scale, but on the specific scale of the city.

This is a notion that another famous science fiction writer, William Tenn, explored decades later in his novel *Of Men and Monsters* (1968). In it, human beings live like 'vermin' in the hollows of the insulating material of the walls that make up the immense architectures built by 'the monsters' (giant alien beings that have invaded planet Earth.) Humans subsist by furtively obtaining water, food, and other resources they manage to steal from the aliens themselves, for whom humans are nothing more than an annoying pest that they strive to eradicate through the use of traps. An unequal form of coexistence in which, once again, two clearly differentiated positions are established: on one side, the stronger species, the aliens, which exercises dominion over the urban/architectural space; on the other, the weaker species, the human, which is subdued and resigns itself to inhabit the interstices of this space, in the infrastructures that serve it. While one species engages in extermination practices, the other deploys resistance strategies, with the city acting as the intermediary between the two.

The parallelism pursued by both authors is evident: humans, in the post-invasion context, will come to assume the ecological niche previously occupied by rats, ants, or cockroaches in the urban hierarchy. This analogy, which is explicitly expressed in both novels, constitutes the starting point of this article, and allows us to construct a perspectivist conceptual prism through which to approach the study of the contemporary city from a new angle.[3] In a context such as the present one, characterized by a significant migration of human and other-than-human

[3] En el inglés original, *vermin* (Tenn, 1968).
[4] "Los autores de este artículo ya han empleado anteriormente la literatura como prisma intelectual a través del cual analizar fenómenos arquitectónicos y urbanísticos operando un cambio de perspectiva (ver Frías-Sánchez et al., 2024). Para más ejemplos del empleo de la literatura como herramienta de análisis aplicada al campo de la arquitectura, ver Jalón Oyarzun, 2022.

[3] The authors of this article have previously used literature as an intellectual prism through which to analyze architectural and urbanistic phenomena operating a change of perspective (see Frías-Sánchez et al., 2024). For more examples of the use of literature as a tool of analysis applied to the field of architecture, see Jalón Oyarzun, 2022.

urbanos,[5] resulta urgente reflexionar acerca de la naturaleza de las interacciones interespecíficas en el contexto de la ciudad. ¿Forman parte, los habitantes de nuestras urbes, de una guerra interespecies? ¿Están involucrados, ciudadanos humanos y otros-que-humanos, en una guerra de los mundos que los enfrenta entre sí y cuyo campo de batalla es la ciudad misma?

El pasado 25 de julio de 2023, el portal oficial de la ciudad de Nueva York se hacía eco de unas declaraciones de Eric Adams, alcalde de la ciudad, en las que afirmaba lo siguiente:

> *Puede que los neoyorquinos no sepan esto sobre mí, pero odio a las ratas. (...) Se necesita el esfuerzo de todos para ganar la guerra contra las ratas (...) espero verles a todos en uno de nuestros 'Anti-Rat Community Days of Action'"* (NYC Hall Press Office, 2023a).

Poco después, el alcalde Adams anunciaba, en otro acto, la que definió como la "siguiente fase en la guerra de Nueva York contra las ratas" (NYC Hall Press Office, 2023b). En esta ocasión, Adams se refirió a los roedores como "el enemigo público número uno" de la ciudad. En noviembre de 2023, los medios de comunicación neoyorkinos anunciaban la contratación, por parte del gobierno de la ciudad, de un equipo "exterminador" cuya labor consistía en la erradicación masiva de poblaciones de ratas impulsando monóxido de carbono en el interior de sus madrigueras (Chan, 2023). Esta estrategia, que desde hace casi una década está siendo implementada en varias ciudades norteamericanas (Garcia, 2016), no es sino la última forma de aniquilación en añadirse a la gran lista de prácticas de exterminio que las ratas han sufrido y sufren en urbes de todo el mundo (Kisner, 2016; Lee et al., 2024).

No obstante, la persecución y erradicación de cuerpos otros-que-humanos en ciudades no es algo que se limite exclusivamente a la *Rattus norvegicus* (la rata común). Solo en los Estados Unidos, en el año 2019, cerca de 690.000 perros y gatos fueron "rescatados" de las calles y, posteriormente, "sometidos a

[5] Es un hecho ampliamente reconocido que en la actualidad, más de la mitad de la población humana reside en entornos urbanos y que esta tendencia sigue un patrón creciente (Dooren & Bird Rose, 2012; Metzger, 2015). Sin embargo, lo que resulta menos conocido es que las poblaciones de seres otros-que-humanos también están migrando a las ciudades de forma voluntaria (Hinchliffe & Whatmore, 2006; Hunold & Mazuchowski, 2020). Y, más aún, que están haciéndolo por las mismas razones que los humanos (Dooren & Bird Rose, 2012).

populations to urban environments,[4] it becomes urgent to reflect on the nature of interspecific interactions in the context of the city. Are the inhabitants of our cities part of an interspecies war? Are human citizens and other-than-humans involved in a war of the worlds that pits them against each other and whose battlefield is the city itself?

On July 25, 2023, New York's official website echoed a statement by the major of the city, Eric Adams, in which he stated the following:

> *New Yorkers may not know this about me — but I hate rats. (...) It takes all of us to win the war on rats (...) I hope to see you out there at one of our 'Anti-Rat Community Days of Action'* (NYC Hall Press Office, 2023a).

Shortly thereafter, at another event, Mayor Adams announced what he defined as "the next phase of the Adams administration's war on rats" (NYC Hall Press Office, 2023b). On this occasion, Adams referred to the rodents as the city's 'Public Enemy Number One'. In November 2023, New York media announced the hiring by the city government of a team of 'exterminators' whose task was the mass eradication of the rat populations by injecting carbon monoxide into their burrows (Chan, 2023). This strategy, which has been implemented in several North American cities for close to a decade (Garcia, 2016), is not but the latest form of annihilation to be added to the long list of extermination practices that rats have suffered and continue to suffer in cities all around the world (Kisner, 2016; Lee et al., 2024).

However, the persecution and eradication of other-than-human bodies in cities is not something confined solely to *Rattus norvegicus* (the common rat). In the United States alone, some 690,000 dogs and cats were 'rescued' from the streets and subsequently

[4] It is a widely recognized fact that today, more than half of the human population resides in urban environments, and that this trend follows a growing pattern (Dooren & Bird Rose, 2012; Metzger, 2015). What is less well-known, however, is that populations of other-than-human beings are also migrating to the cities voluntarily (Hinchliffe & Whatmore, 2006; Hunold & Mazuchowski, 2020). And, furthermore, that they are doing it for the same reasons humans are (Dooren & Bird Rose, 2012).

eutanasia"[6] (Shelter Animals Count, 2023). Otro ejemplo lo constituye la ciudad de Srinagar, en la India, que en 2008 comenzó a ejecutar un plan cuyo objetivo era la eliminación de 100.000 perros callejeros ("Indian Authorities to Poison 100,000 Stray Dogs," 2008). Riyaz Ahmad, máximo responsable de la oficina de salud de la ciudad en aquel momento, justificó semejante exterminio declarando que "estos perros se han convertido en una gran molestia y están amenazando a los humanos" ("Indian Authorities to Poison 100,000 Stray Dogs," 2008).[7] Una justificación en la que resuena la ofrecida por el propio Mahatma Gandhi, cuando afirmó que "matar a los perros callejeros" resulta necesario "siempre que representen una amenaza para la sociedad" (1926, p. 962).

Otro ejemplo sorprendente de esta violencia sistematizada contra los cuerpos otros-que-humanos en entornos urbanos lo podemos encontrar en la ciudad de Ginebra. Suiza encabeza todos los *rankings* mundiales en cuanto a justicia animal se refiere y, dentro del propio país, el Cantón de Ginebra destaca como uno de los lugares del mundo con mayor legislación a favor de los derechos de los animales, siendo pionero en aspectos como la prohibición de la caza (Règlement d'application de La Loi Sur La Faune, 1994; World Animal Protection, 2020). Sorprende, sin embargo, que, en un contexto sociopolítico como este, con una sensibilidad tan desarrollada en la materia, podamos encontrar el artículo 5 del "Règlement d'application de la loi sur la faune", que expone textualmente:

> *Se pueden eliminar sin autorización especial los topos, las ratas, los ratones y los ratones de campo, así como los invertebrados, que causen daños comprobados a los cultivos, los bosques y las propiedades, o que constituyan una molestia grave para el hombre o los animales domésticos, o un peligro para su salud.*

'euthanized'[5] (Shelter Animals Count, 2023). Another example is the Indian city of Srinagar, which in 2008 began to carry out a plan aimed at eliminating 100,000 stray dogs ("Indian Authorities to Poison 100,000 Stray Dogs," 2008). Riyaz Ahmad, head of the city's health office at that time, justified the elimination by stating that "dogs have become a big nuisance, and they are threatening humans" ("Indian Authorities to Poison 100,000 Stray Dogs," 2008).[6] A justification that echoes the one offered by Mahatma Gandhi himself when he stated that "[stray] dogs will be killed whenever they are a menace to society" (1926, p. 962).

Another remarkable example of this systematized violence against other-than-human bodies in urban environments can be found in the city of Geneve. Switzerland leads all the world rankings in terms of animal justice and, within the country itself, Geneva Canton stands out as one of the places in the world with the most legislation in favor of animal rights, pioneering in aspects such as the prohibition of hunting (Règlement d'application de La Loi Sur La Faune, 1994; World Animal Protection, 2020). It is striking, however, that, in a sociopolitical context such as this, with a highly developed sensitivity in the matter, we can find article 5 of the Règlement d'application de la loi sur la faune, which literally states that:

> *Moles, mice, rats and field mice, as well as invertebrates, which cause proven damage to crops, forests, and properties, or which constitute a grave hazard for men or domestic animals, or a risk to their health, can be eliminated without special authorization.*

[6] Es de gran interés para este artículo tener en consideración el cambio de perspectiva según el cual, desde el punto de vista humano, están "rescatando" y "sometiendo a eutanasia" a estos animales, mientras que, para los perros y gatos, la especie humana los ha capturado contra su voluntad y, a continuación, los asesina. Aquí encontramos un paralelismo muy interesante con las ideas perspectivistas de Tânia Stolze Lima (1996) y Eduardo Viveiros de Castro (1996). En adelante, mantendremos esta lógica perspectivista cuando surjan percepciones subjetivas, empleando la cursiva.

[7] El método elegido para la eliminación de los animales fue el envenenamiento con estricnina. Un método que, según Javaid Iqbal Shah, subdirector de la Sociedad de Srinagar para la Prevención de la Crueldad hacia los Animales, es "particularmente cruel", puesto que causa "un sufrimiento terrible a los perros". "He visto a niños llorar al pasar junto a estos perros agonizantes", concluía Shah, según reportaba NBC News (como se citó en "Indian Authorities to Poison 100,000 Stray Dogs," 2008).

[5] It is of great interest for this article to take into consideration the change in perspective according to which, from the human point of view, they are 'rescuing' and 'euthanizing' these animals, whereas, for cats and dogs, the human species has captured them against their will and, subsequently, kills them. Here we find a very interesting parallelism with the perspectivist ideas of Tânia Stolze Lima (1996) and Eduardo Viveiros de Castro (1996). Henceforth, we will maintain this perspectivist logic when subjective perceptions arise, using italics.

[6] The method chosen for the elimination of the animals was strychnine poisoning. A method that, according to Javaid Iqbal Shah, subdirector of Srinagar's Society for Prevention of Cruelty to Animals, is 'particularly cruel', given that it causes "terrible suffering to dogs." "I have seen children cry when they pass by these dying dogs," Shah remarked, according to NBC News (as quoted in "Indian Authorities to Poison 100,000 Stray Dogs," 2008).

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Mayor Adams Notches Early Victories in War on Rats, Announces First Anti-Rat Day of Action

July 25, 2023

311 Calls on Rat Activity From Last Two Months Have Decreased by 20 Percent Compared to Last Year

First Anti-Rat Day of Action to Take Place in Harlem Rat Mitigation Zone

Noticia publicada en el portal oficial de la ciudad de Nueva York el 25 de julio de 2023.

News published on New York City's official website on July 25, 2023.

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FIGURA 1 Carteles publicados en 1958 con los cuatro tipos de plagas: mosquito, mosca, gorrión y rata. El grafismo empleado resulta extremadamente agresivo y emplea una iconografía bélica.

FIGURE 1 Posters published in 1958 with the four types of pests: mosquito, fly, sparrow, and rat. The graphics used are extremely aggressive and use a warlike iconography.

© Hao, 1958.

Observamos en todos estos casos la construcción de una narrativa que se esfuerza en retratar a la especie *otra* como una *amenaza* para la humanidad en el ámbito urbano, generando un escenario de bandos enfrentados en el que los humanos no tienen más alternativa que emplear la violencia para *defender* sus intereses. Esta narrativa se nutre, como hemos visto, de un vocabulario abiertamente bélico y deriva en la justificación —y, eventualmente, en la implementación— de prácticas de exterminio de las especies *otras* con las que compartimos la ciudad.[8]

Mención especial merecen dos de los que, probablemente, sean los enfrentamientos interespecies más excepcionales de los que se tiene registro: la guerra del Gorrión, en China, y la guerra del Emú, en Australia. En 1958, el gobierno de Mao Zedong activó un plan para la extinción en el territorio chino de las que consideraban las "cuatro grandes plagas" del país (Pariona, 2017). Una de las especies contra las que se declaró la guerra fue el *Passer montanus* (gorrión molinero). Entre otras medidas, se puso en marcha una ambiciosa campaña propagandística anti-gorriones con el propósito de involucrar a la población civil en la disputa [FIGURA 1]. Se colocaron carteles en las calles de todo el país y se instó a los habitantes de las ciudades a implementar prácticas de eliminación tales como dispararles, destruir sus nidos o incluso golpear ollas y sartenes hasta que cayeran muertos de agotamiento ("Red China," 1958).[9]

La guerra del Emú, que tuvo lugar en 1932 en Australia, fue un caso aún más excepcional, puesto que el ejército australiano llegó a desplegar tácticas militares y armamento pesado contra miles de emús, que *amenazaban* una enorme extensión de campos de trigo en el oeste del país ("New Strategy in a War on the Emu," 1953). Si bien este último enfrentamiento interespecies no tuvo lugar directamente

We observe in all of these cases the construction of a narrative that strives to portray the *other* species as a *threat* to humanity in the urban context, generating a scenario of clashing sides in which humans have no alternative but to use violence to *defend* their interests. This narrative is nourished, as we have seen, from an openly warlike vocabulary and derives in the justification — and, eventually, in the implementation — practices of extermination against the *other* species with which we share the city.[7]

Special mention deserve two of what may possibly be the most exceptional interspecies confrontations on record: the War on Sparrows in China, and the Emu War in Australia. In 1958, Mao Zedong's government activated a plan for the extinction in the Chinese territory of what they considered the 'Four Great Pests' of the country (Pariona, 2017). One of the species against which war was declared was *Passer montanus* (Eurasian Tree sparrow). Among other measures, an ambitious anti-sparrow propaganda campaign was launched with the purpose of involving the civil population in the dispute [FIGURE 1]. Posters were put up in the streets of the entire country and city residents were urged to implement elimination practices, such as shooting them, destroying their nests, or even banging pots and pans until they dropped dead from exhaustion ("Red China," 1958).[8]

The Emu War, which took place in Australia in 1932, was an even more exceptional case, as the Australian Army went as far as deploy military tactics and heavy weaponry against thousands of emus that *threatened* a large extension of wheat fields in the west of the country ("New Strategy in a War on the Emu," 1953). Although this last interspecies confrontation did

[8] Para muchos académicos, el origen de esta obsesión por la expulsión de los animales de la ciudad se ha justificado como una medida racional basada en motivos higiénicos y médicos (Tamayo-Uria et al., 2014; Wertz, 1994). Sin embargo, tal y como afirmó Chris Philo en "Animals, Geography, and the City" (1995), estas expulsiones estuvieron motivadas con mayor frecuencia por argumentos morales que por razones "sanitarias".

[9] La campaña del gobierno de Mao Zedong contra los gorriones fue tan eficaz que llevó a la especie al borde de la extinción en el territorio chino. Sin embargo, esta erradicación tuvo efectos desastrosos en el ecosistema, contribuyendo de manera importante en lo que más tarde se conoció como "La gran hambruna china" (Kreston, 2014; Steinfeld, 2018).

[7] For many academics, the origin of this obsession with the expulsion of animals from the city has been justified as a rational measure based on sanitary and medical reasons (Tamayo-Uria et al., 2014; Wertz, 1994). However, just as Chris Philo states in 'Animals, Geography, and the City' (1995), these expulsions were motivated more frequently by moral motivations than by 'sanitary' reasons.

[8] Mao Zedong's campaign against sparrows was so successful that it led to the near extinction of the species in the Chinese territory. However, this eradication had disastrous effects on the ecosystem, contributing significantly to what was later known as the 'Great Chinese Famine' (Kreston, 2014; Steinfeld, 2018).

en el contexto de la ciudad, es cierto que se disputó en un entorno agrologístico servidor de las propias estructuras urbanas a nivel de abastecimiento. En cualquier caso, tanto este como todos los casos expuestos anteriormente ponen de manifiesto una realidad incuestionable: el ser humano es perfectamente capaz de practicar la guerra contra otras especies, especialmente en el marco de la ciudad y sus estructuras servidoras, territorio sobre el que los seres humanos se autoperciben como la especie dominante de pleno derecho.[10]

Tanto H. G. Wells como William Tenn imaginaron el escenario urbano como un campo de batalla interespecies. Al hacerlo, al colocar al ser humano en la posición de seres otros-que-humanos como las ratas o las cucarachas, nos señalaron que, de hecho, las ciudades ya constituyen ese campo de batalla, ese escenario en el que tiene lugar una lucha interespecies que enfrenta a humanos y a otros-que-humanos. Una guerra de los mundos urbana que se manifiesta en diversas formas, que van desde la competencia por los recursos hasta la discriminación y el exterminio.

LA CARTOGRAFÍA COMO HERRAMIENTA DE DOMINACIÓN INTERESPECIES

El "Ocean-Chart" que ilustraba el poema "La Caza del Snark" (Carroll, 1876) muestra una región indefinida del océano, representada como un espacio en blanco [FIGURA 2]. Un espacio en blanco que manifestaba el desconocimiento de Bellman y su tripulación acerca de la localización y los patrones de comportamiento del Snark, criatura mitológica marina a la que pretendían dar caza. Una cartografía que contrasta con la precisión gráfica del "Whale Chart" creado en 1851 por Matthew Fontaine Maury (1851), superintendente del Depósito de Cartas de Navegación e Instrumentos de la Marina de los Estados Unidos [FIGURA 3]. Para la confección de este mapa, Maury recopiló datos provenientes de diversas fuentes, entre las cuales se incluyó una multitud de registros procedentes de navíos balleneros (*Whale Chart [Item Information]*, s.f.). El resultado de esta minuciosa investigación fue un documento que detallaba la distribución estacional de diversas especies de ballenas y que contribuyó significativamente a optimizar la persecución y caza de estos animales por los océanos de todo el planeta.

[10] Existe una multitud de casos de estudio, además de los mencionados, que sirven para demostrar esta afirmación. Ver, por ejemplo, Barua & Sinha, 2023; Johnston, 2021; Stillfried et al., 2017.

not take place directly in the context of the city, it certainly took place in an agrologistic environment serving the very urban structures at the supply level. In any case, this, as all the cases examined above, reveals an unquestionable reality: humans are perfectly capable of practicing war against other species, especially in the context of the city and its serving structure, a territory over which human beings are self-perceived as the dominant species in their own right.[9]

Both H. G. Wells and William Tenn imagined the urban stage as an interspecies battlefield. By doing this, situating the human being in the position of other-than-human beings like rats or cockroaches, they were pointing out that, in fact, cities already constitute this battlefield, this stage in which an interspecies fight pitting humans and other-than-humans against each other. An urban war of the worlds that manifests itself in different ways, ranging from the competition for resources to discrimination and extermination.

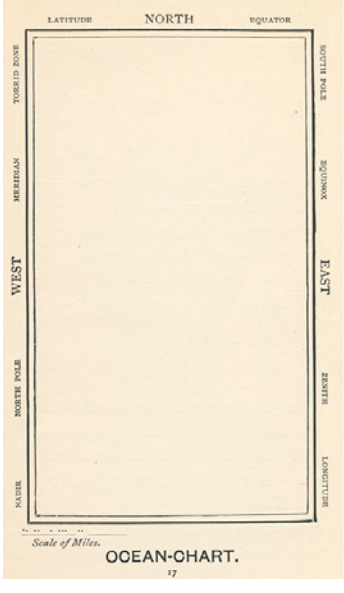
CARTOGRAPHY AS AN INTERSPECIES DOMINATION TOOL

The 'Ocean-Chart' that illustrated the poem 'The Hunting of the Snark' (Carroll, 1876) shows an undefined region of the ocean, represented as a blank space [FIGURE 2]. A blank space that made manifest the lack of knowledge of Bellman and his crew with the location and behavioral patterns of the Snark, the mythological marine creature they intended to capture. A cartography that contrasts with the graphic precision of the 'Whale Chart' created in 1851 by Matthew Fontaine Maury (1851), Superintendent of the Depot of Charts and Instruments of the United States Navy [FIGURE 3]. For the elaboration of this map, Maury compiled data from diverse sources, among which a multitude of data from whaling ships was included (*Whale Chart [Item Information]*, n.d.). The result of this thorough investigation was a document in which the seasonal distribution of diverse species of whales was detailed, contributing significantly to optimizing the chase and hunt of these animals in the oceans of the entire planet.

[9] There is a multitude of study cases, apart from the ones mentioned, that serve to demonstrate this assertion. See for instance, Barua & Sinha, 2023; Johnston, 2021; Stillfried et al., 2017.

En la actualidad existen múltiples versiones de este mapa, que ilustra las guerras del gorrión y del emú, circulando por las redes sociales. Más allá de su cuestionable precisión histórica, esta cartografía nos habla del delirio bélico del que es capaz el ser humano y nos cuenta historias de resistencias otras-que-humanas.

There are currently multiple versions of this map, which illustrates the wars against sparrows and emus, circulating on social media. Beyond its questionable historical precision, this cartography speaks to us of the bellicose delirium humans are capable of, and tells us stories about other-than-human resistances
© Redstream28. (2023, January 23). *Countries that Lost War to Birds* [Reddit Post]. R/MapPorn..



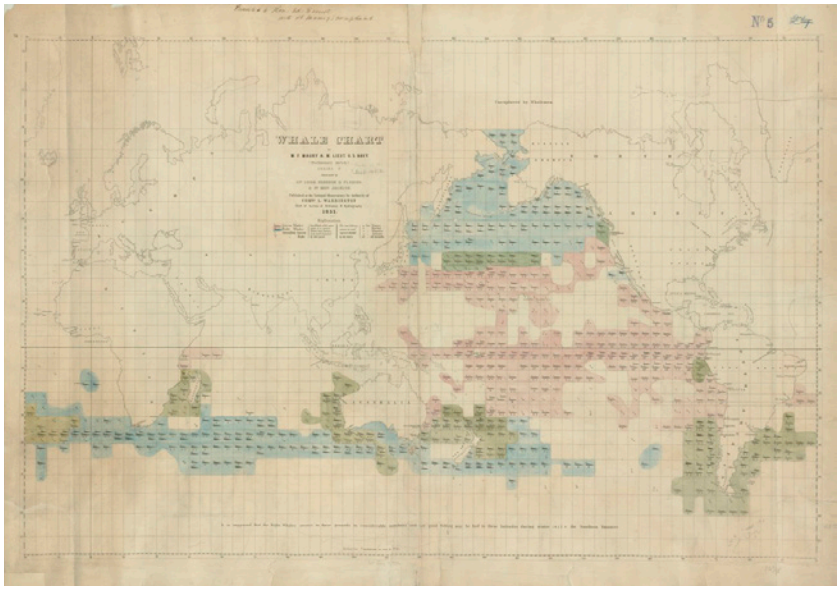


FIGURA 2 FIGURE 2 "Ocean-Chart".
© Henry Holiday, 1876.

FIGURA 3 FIGURE 3 "Whale Chart".
© Matthew Fontaine Maury, 1851.

Durante la guerra del Emú, y tras una serie de derrotas iniciales por parte del bando humano, atribuibles a una subestimación de la capacidad de resistencia de los emús en el diseño inicial de la campaña, los militares a cargo de la contienda se vieron obligados a valerse también de la cartografía como herramienta bélica [FIGURA 4]. Al fin y al cabo, los mapas han sido siempre un arma fundamental en el desarrollo de las guerras humanas, puesto que permiten un alto grado de conocimiento del territorio y la proyección de estrategias avanzadas sobre este (Liebenberg et al., 2016). Su ausencia inicial en este caso respondía a una infravaloración de las capacidades defensivas de los emús, considerados como "menos-que-humanos"[11] por los militares australianos. Sin embargo, la eventual necesidad de recurrir a la cartografía en este enfrentamiento interespecies supuso, de hecho, el reconocimiento de que la capacidad bélica de estas aves era, cuanto menos, comparable a la del *Homo sapiens*.[12]

Algo similar a esto ha ocurrido en algunas de esas ciudades que, como hemos visto, le han declarado la guerra a la *Rattus norvegicus*. Ciudades como Nueva York (Weaver, 2023), Washington (Casey et al., 2017), Chicago (Chicago Data Portal, 2011), París (Jacobs, 2018) o Madrid (Tamayo-Uria et al., 2014) han incorporado recientemente la cartografía a su arsenal bélico con la intención de optimizar las prácticas de control de la especie humana sobre estos roedores. En marzo de 2014 se publicó un modelo de predicción para predecir el "riesgo" de "infestaciones de ratas en Madrid" (Tamayo-Uria et al., 2014). Para ello,

During the Emu War, and after a series of initial defeats suffered by the human side, attributable to the underestimation of the emus' resistance in the initial design of the campaign, the military personnel in charge of the conflict were forced to also make use of cartography as a war tool [FIGURE 4]. After all, maps have always been a fundamental weapon in the development of human wars, given that they allow a high level of knowledge of the territory and the projection of advanced strategies over it (Liebenberg et al., 2016). Their initial absence, in this case, responded to an underestimation of the defensive capabilities of emus, considered as 'less-than-humans'[10] by the Australian military. However, the eventual need to resort to cartography in this interspecies confrontation was, indeed the realization that the combat capabilities of these birds were at least comparable with those of *Homo sapiens*.[11]

Something similar to this has happened in some of those cities that, as we have seen, have declared war on Rattus norvegicus. Cities like New York (Weaver, 2023), Washington (Casey et al., 2017), Chicago (Chicago Data Portal, 2011), Paris (Jacobs, 2018), or Madrid (Tamayo-Uria et al., 2014) have recently incorporated cartography to their war arsenal with the intention of optimizing the control practices of the human species over these rodents. In March 2014, a prediction model was published to predict the 'risk' of "rat infestation in Madrid" (Tamayo-Uria et al.,

[11] En 2017, Chris Philo (2017) reflexionaba acerca de la necesidad de complementar el creciente campo de las "more-than-human geographies" con una nueva vía de reflexión: las "less-than-human geographies". En 2011, Sunaura Taylor (2011) hacía alusión al término en su inspirador texto "Beasts of Burden", donde sostiene que las personas con discapacidad y los seres otros-que-humano están interconectados precisamente por ese trato "menos-que-humano". Finalmente, Yamini Narayanan (2017) empleó el término en su artículo "Street Dogs at the Intersection of Colonialism and Informality" para referirse al trato que reciben los habitantes de barrios marginales en India, ya sean estos otros-que-humanos o humanos. Para los autores de este artículo, el término "menos-que-humano" sirve como medio para señalar la deshumanización de animales y grupos humanos marginados, desafiando el antropocentrismo del espacio urbano y promoviendo la interdependencia de las especies que compartimos la ciudad.

[12] Tras la retirada del bando humano el 8 de noviembre de 1932, el Mayor Meredith, quien estaba a cargo de la expedición, llegó a declarar que los emús eran "como zulúes a los que ni siquiera las balas dum-dum podían detener" ("New Strategy in a War on the Emu," 1953).

[10] En 2017, Chris Philo (2017) reflected about the need to complement the growing field of 'more-than-human geographies' with a new way of reflection: the 'less-than-human geographies'. In 2011, Sunaura Taylor (2011) alluded to the term in her inspiring text 'Beasts of Burden', where she argues that persons with disabilities and other-than-human beings are interconnected precisely by this 'less-than-human' treatment. Finally, Yamini Narayanan (2017) used the term in her article 'Street Dogs at the Intersection of Colonialism and Informality' to refer to the way dwellers of marginal neighborhood were treated in India, either if they were other-than-humans or human. For the authors of this article, the term 'less-than-human' serves as a way of indicating the dehumanizing of animals and marginated human groups, defying the anthropocentrism of the urban space and promoting the interdependence of the species that share the city.

[11] After the retreat of the human side on November 8, 1932, Major Meredith, who was in charge of the expedition, went as far as declaring that emus were "like Zulus whom even dum-dum bullets could not stop" ("New Strategy in a War on the Emu," 1953).

FEATURES

New Strategy In A War On The Emu

● Western Australia Is Forming A 135-mile Defence Line

WHEN THE Western Australian State Cabinet last week approved the expenditure of £52,000 as a special defence measure this represented the opening of yet another major engagement in an unceasing war against an enemy as old as Western Australia itself.

By A SPECIAL CORRESPONDENT

THIS war, ironically enough, is one being continually waged against a creature regarded at home and abroad as a national symbol of Australia.

The enemy is the tough, prolific, gangling marauder of the sand plains whose species, ever since the beginning of agriculture in the State, has invaded, in a frenzy of hunger, some of the finest fields at the time of ripening of the harvest to shear off crops with voracious beaks and to trample with great webbed feet 100 plants into the earth for each one eaten.

In such a way Australia's largest bird, the great 100lb non-flying native emu, has become for farmers a pest that has cost millions of pounds in lost production in recent years.

Now the State Government has drawn up plans for a new defensive engagement against the pest. Its strategy is based on a decision to build a £52,000 emu-proof fence.

The fence will be about 135 miles long, and will be joined to the Government maintained rabbit-proof fences which stretch across a great part of the State.

In Western Australia the emus, like the rabbit hordes, advance from the sandy, semi-arid fastnesses of the north and east, and it is back to those zones that the experts now hope to pen them.

They merely hope, for they know from experience that the emu is a tough and unpredictable adversary.

The Western Australian Government and farmers for generations past have employed a variety of methods to control the menace, including poisoning, trapping, and shooting on a grand scale.

These have met at best with mixed success, and even at times have resulted in such farcical and humiliating defeats that there are many officials and experts to-day in the State who cannot bear to be reminded of the outcome of some of their more ambitious efforts at emu destruction.

Among the failures was a military expedition carried out by a Royal Australian Artillery detachment employing a range of military technique, including mobile warfare strategy and guerilla tactics.

This, the most ambitious project in the history of Western Australia's emu war, was the one which failed most miserably, and which brought for the bird its most complete victory; and the incongruity of the whole thing even had the effect, for once, of arousing public sympathy for the emu.

The Lewis-gun Expedition

THE operation, which began on November 1, 1932, was unique in the world history of pest warfare.

That day a small armed party of the 7th Heavy Battery, R.A.A., under Major C. W. P. Meredith, set out for the rich agricultural area in the vicinity of Campion, about 200 miles from Perth.

The expedition was equipped with Lewis-guns and 10,000 rounds of ammunition.

The need for some quick defence measure was urgent because some farmers had been permanently driven from their properties and others were threatening to leave if prompt action was not taken by the Government.

Early in this engagement it became surprisingly obvious that open warfare against the birds was useless because of the speed of their retreat and manoeuvre; and it even became apparent that the toughness of their feathered hides made them immune to glancing volleys of machine-gun bullets.

On the second day the expedition leader decided upon a more careful strategy. The party arose at daybreak to prepare an ambush near to a dam towards which a flock of more than 1,000 birds had been reported to be moving.

When, just after daylight, a wave of bobbing heads appeared in the distance, the detachment and armed farmer companions were hushed in anticipation of a major victory. At 100 yards they fired simultaneously from several directions at an almost perfect target of lumbering, bare-feathered bodies.

They were astounded to find, after several bursts of fire, that fewer than a dozen emus had fallen. Before reloading could be achieved the birds were not only out of gunsight but well on their way to being out of sight altogether.

This engagement was typical of those which took place in ensuing days. During those days apparently the emus began to improve their own understanding of the science of warfare, for a confused Army observer on the fourth day sadly admitted that "each pack seems to have its leader now—a big black-plumed bird which stands fully six feet high and keeps watch while his mates carry out their work of destruction and warns them of our approach."

With scarcely a victory of any consequence to its credit the Army finally ingloriously withdrew to the accompaniment of a tirade of abuse from all sides. At the time the whole incident provided a topic of amusement throughout the State.

Major Meredith remarked on the outstanding ability of the emus to keep moving even when badly wounded.

He sighed: "If we had a military division with the bullet-carrying capacity of these birds it would face any army in the world.

"They can face machine-guns with the invulnerability of tanks. They are like Zulus whom even dum-dum bullets could not stop."

Another member of the party bitterly remarked: "There's only one way to kill an emu—shoot him through the back of the head when his mouth is closed, or through the front of his mouth when his mouth is open. That's how hard it is."

The Plan For The Barrier

NOTHING since that defeat has led to such high hopes as the present plan for the construction of a special emu-proof fence in the rich agricultural area near to where the 1932 fiasco took place.

An Agricultural Department reconnaissance party will leave for the area in a few days as a preliminary to the start of work on the big fence.

The fence will join the No. 1 and No. 2 rabbit-proof fences, making a barrier which will be the first close protection to the agricultural area surrounding the Kulja-Bonnie Rock railway line. It will begin at a point on No. 1 fence about 77 miles north of the East-West railway.

The fence will be 4ft 10in high and about 130 miles long. It will be constructed of heavy ring-locked wire incorporated with rows of barbed wire about four inches apart at the top and bottom.

It may have the effect of defeating hordes of emus which carry out seasonal invasions from pastoral areas further north. It is designed to funnel them in an area surrounded by No. 1 fence on one side and No. 2 fence on the other. In this area north of the agricultural settlements they can do little harm.

This measure is expected to be the most effective yet. It will be complementary to a "beak" bonus system, which was introduced in 1944 and in which the reward was increased to 4/- a beak in 1948. There also is a bonus of 6d each on the gathering of emu eggs. There have been up to 30,000 beak claims in one year.

But even if some degree of victory over the emu is obtained soon for the long-suffering farmers and the continually harassed Government it will be by no means a complete or final victory. For the tough, busy beak and the large heavy tread of the emu carry with them all the hardiness of the cruel, sparse environment of the emu's origin—the Australian sand plains.

And the emu, so gangling and comical yet now so much feared by farmers, has been part of the country for unknown eons past.

It was a mere two and a half centuries ago that Willem de Vlamingh, after anchoring the Geelvinck near the mouth of the Swan River on Decem-

This map shows how emus from the dry interior have been pushing into the developed areas of Western Australia.

Trapped, poisoned and even machine-gunned, its beak worth 4/- and each egg sixpence—the emu is a tough adversary for Western Australia's farmers.

FIGURA 4 En esta noticia del Sunday Herald, publicada el 5 de Julio de 1953, se ilustra el plan que el gobierno australiano creó para tratar de hacer caer a los emús en una trampa.

FIGURE 4 This Sunday Herald news report, published on July 5, 1953, illustrates the plan elaborated by the Australian government to lead emus to a trap.

los autores analizaron una muestra de datos compuesta de 10.956 avistamientos reportados entre 2002 y 2008. Dicha muestra se puso en relación con una serie de parámetros que los autores asociaron con la proliferación de infestaciones de ratas en entornos urbanos, como la cercanía a espacios verdes, la proximidad de fuentes de agua, la densidad de la población humana, etc. El resultado de esta investigación fue el mencionado modelo predictivo y una serie de cartografías que los autores denominaron "mapas de riesgo de infestación de ratas" [FIGURA 5].

Ciudades como Nueva York (Frei, 2019), Washington (Casey et al., 2017) y Chicago (Dorris, 2014) han iniciado proyectos similares a este, basados en el análisis de datos de avistamientos reportados por ciudadanos. Estos datos, combinados con parámetros asociados a la proliferación de ratas, permiten generar modelos predictivos que anticipan picos de avistamientos y optimizan el despliegue de equipos de control de plagas. Un ejemplo notable de esto es el modelo desarrollado por el investigador Daniel Neill para la ciudad de Chicago, el cual ha demostrado una alta efectividad en su función predictiva (Dorris, 2014).

El incipiente éxito que está mostrando esta metodología ha favorecido su empleo en estudios cada vez más ambiciosos. Por ejemplo, el proyecto de investigación "Manrattan—A Look into NYC's Rats" (Cheng et al., 2022) analizó la distribución de avistamientos de ratas en la ciudad de Nueva York entre 2010 y 2022, utilizando más de 200.000 reportes ciudadanos, junto con otros conjuntos de datos como información fiscal, inspecciones a restaurantes y entradas del metro [FIGURA 6].

Estas investigaciones, que combinan el uso de tecnología interactiva y métodos avanzados de análisis de datos, están siendo capaces de generar cartografías cada vez más precisas de la distribución estacional de la *Rattus norvegicus* y su correlación con diversos parámetros urbanísticos. Lamentablemente, al igual que ocurrió con el "Whale Chart" de Maury, estas herramientas cartográficas están siendo utilizadas por las autoridades de las ciudades para optimizar la persecución y erradicación de estos roedores a manos de equipos "exterminadores" como el de Matt Deodato en Nueva York. De esta forma, la cartografía se erige como una poderosa herramienta de control interespecies, con un importante impacto en la consolidación de la supremacía del *Homo sapiens* dentro del ecosistema urbano.

2014). For this, the authors analyzed a data sample composed of 10,956 sightings reported between 2002 and 2008. This sample was placed in relation to a series of parameters that the authors associated with the proliferation of rat infestations in urban environments, such as being close to green areas, the proximity of water sources, human population density, etc. The result of this investigation was the abovementioned predictive model and a series of cartographies that the authors called 'risk maps of rat infestation' [FIGURE 5].

Cities like New York (Frei, 2019), Washington (Casey et al., 2017), and Chicago (Dorris, 2014) have started similar projects, based on the analysis of sightings data reported by city residents. These data, combined with parameters associated with the proliferation of rats, allow to generate predictive models that anticipate sightings peaks and optimize the deployment of pest control teams. One notable example of this is the model developed by researcher Daniel Neill for the city of Chicago, which has proven highly effective in its predictive function (Dorris, 2014).

The incipient success this methodology is showing has favored its use in increasingly ambitious studies. For example, the research project 'Manrattan—A Look into NYC's Rats' (Cheng et al., 2022) analyzed the distribution of rat sightings in New York City between 2010 and 2022, drawing on over 200,000 citizens' reports, along with other data sets such as tax information, restaurant inspections, and subway entrances [FIGURE 6].

These investigations, which combine the use of interactive technology and advanced data analysis methods, are able to generate more precise cartographies of the seasonal distribution of the *Rattus norvegicus* and its correlation with urbanistic parameters. Unfortunately, just as happened with Maury's 'Whale Chart', these cartographic tools are being used by city authorities to optimize the persecution and eradication of these rodents at the hands of teams of 'exterminators' like Matt Deodato in New York. In this way, cartography emerges as a powerful interspecies control tool with a significant impact on the consolidation of Homo sapiens within the urban ecosystem.

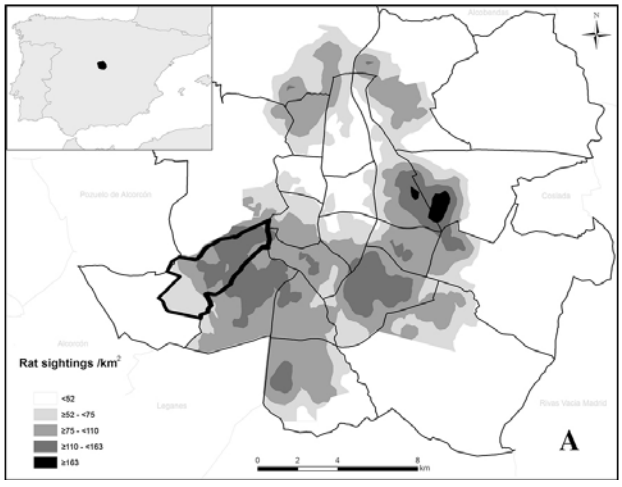


FIGURA 5 Mapas de riesgo de infestación de ratas en la ciudad de Madrid.

FIGURE 5 Risk maps of rat infestation in the city of Madrid.

© Tamayo-Uria et al., 2014, p. 112.

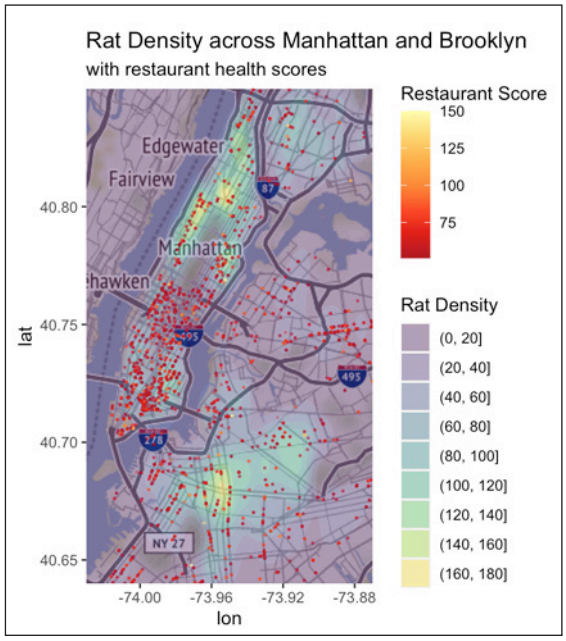


FIGURA 6 Mapa que asocia la densidad de avistamientos de ratas en Nueva York con la puntuación de los restaurantes en cuanto a salud e higiene.

FIGURE 6 Map that associates rat sighting density in New York with restaurant scores in terms of their health and sanitary conditions.

© Cheng et al., 2022.

LA CARTOGRAFÍA COMO HERRAMIENTA DE RESISTENCIA INTERESPECIES

Cuando el artillero comparte con el protagonista de *La guerra de los mundos* su proyecto de supervivencia subterránea frente a la invasión marciana, afirma tenerlo "todo planeado" (Wells, 2008).[13] A continuación, le muestra el túnel que él mismo ha comenzado a excavar en el sótano de la casa que se erige en la cima de Putney Hill y que, según sus planes, deberá conectar con la red general de alcantarillado de Londres. Tras toda una mañana ayudándole a ampliar la excavación, el protagonista comienza a plantearse una serie de interrogantes respecto a la idoneidad de la elección del punto inicial para el trazado del túnel, así como la posibilidad real de encontrar la red de alcantarillado desde dicho punto. Al reflexionar sobre estas cuestiones, el protagonista esboza una serie de mapas imaginarios de la Londres bajo-tierra, poniendo a prueba el plan de resistencia urbana concebido por el artillero. Estos mapas, proyectados en la mente del lector, nos cuentan historias alternativas de Londres. Historias acerca de *otras Londres* que, en realidad, ya están ahí y que coexisten con la Londres que todos conocemos.

Algo parecido realizaron Uriel Fogué, Eva Gil y Carlos Palacios (confundadores de la oficina de arquitectura Elii) junto al artista Orkan Telhan, con la ciudad de Estambul (Fogué et al., 2021). En su proyecto "Microbial Fruits of Istanbul" propusieron dar voz a los microorganismos que habitan la Estambul subterránea, poniendo en valor las historias no narradas de esos "otros Estambules" [FIGURA 7].

El proyecto produce una serie de cartografías que inciden en la agencia de esas *ciudades otras* que generalmente ignoramos, pero que están y siempre han estado ahí, coexistiendo con las ciudades humanas cuya historia se ha establecido como canónica. Esta propuesta se materializa a través de una instalación que se erige como un punto de encuentro entre ambas ciudades [FIGURA 8].

Un proceso inverso a este tiene lugar en la ficción de "Of Men and Monsters" (Tenn, 1968). En esta obra, en lugar de proyectar cartografías (imaginarias o reales) de las ciudades subterráneas, los seres humanos —que habitan en los intersticios de las ciudades alienígenas— estudian de memoria los espacios que existen arriba, en la superficie.

[13] En el inglés original: "I've got it planned". Nos interesa aquí la segunda acepción del verbo "to plan", según Oxford Languages: design or make a plan of (something to be made or built) (Oxford Languages, s.f.).

CARTOGRAPHY AS AN INTERSPECIES RESISTANCE TOOL

When the artilleryman shares with the main character of *The War of the Worlds* his underground survival project in the face of the Martian invasion, he says "I've got it planned" (Wells, 2008). He then shows him the tunnel he has begun to excavate in the basement of the house that stands at the top of Putney Hill and that, according to his plans, should connect to London's general sewage system. After spending an entire morning helping him to extend the excavation, the protagonist begins to ask himself a series of questions about the suitability of the choice of the initial point for the tunnel route, as well as about the actual likelihood of finding the sewage system from that point. When reflecting on these questions, the protagonist sketches a series of imaginary maps of underground London, putting the resistance plan conceived by the artilleryman to the test. These maps, projected in the reader's mind, tell us alternative stories about London. Stories about *other* Londons which, in reality, are already there and coexist with the London we all know.

Something similar is what Uriel Fogué, Eva Gil, and Carlos Palacios (confounders of Elii Architecture Studio), together with artist Orkan Telhan, did with the city of Istanbul (Fogué et al., 2021). In their project 'Microbial Fruits of Istanbul', they proposed to give microorganisms that inhabit underground Istanbul a voice, valorizing the untold stories of these 'other Istanbuls' [FIGURE 7].

The project produces a series of cartographies that affect the agency of those *other cities* we generally ignore, but which are there and have always been there, coexisting with the human cities whose history has been established as canonical. This proposal is materialized through an installation that stands as a meeting point between both cities [FIGURE 8].

An inverse process to this takes place in the fiction of 'Of Men and Monsters' (Tenn, 1968). In this work, instead of projecting cartographies (imaginary or real) of underground cities, the human beings — who inhabit the interstices of the alien — study by

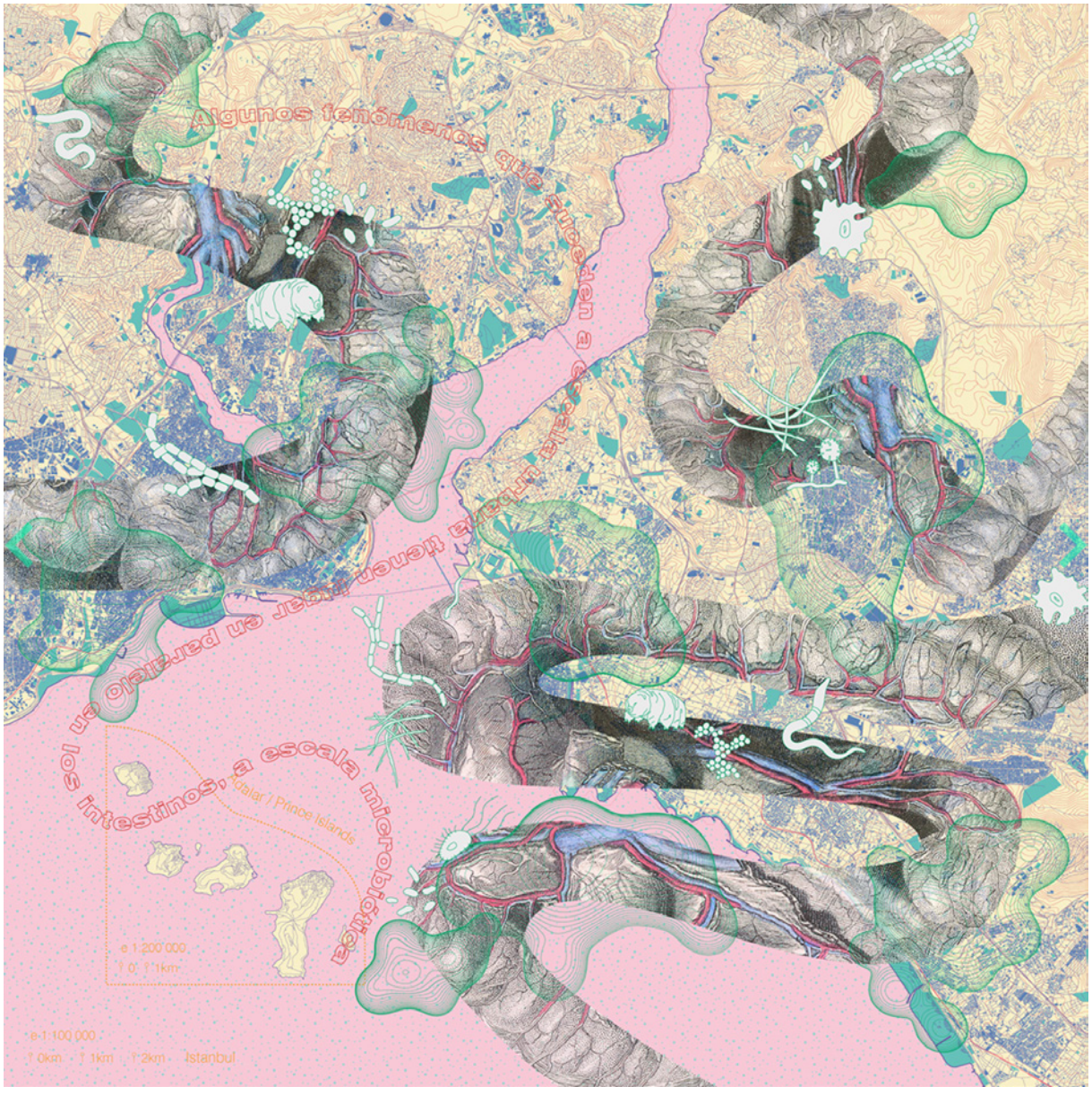


FIGURA 7 Mapa que superpone la Estambul humana —en la superficie— y la Estambul subterránea, habitada por microorganismos.

FIGURE 7 Map overlapping the human Istanbul — aboveground — and the underground Istanbul, inhabited by microorganisms.

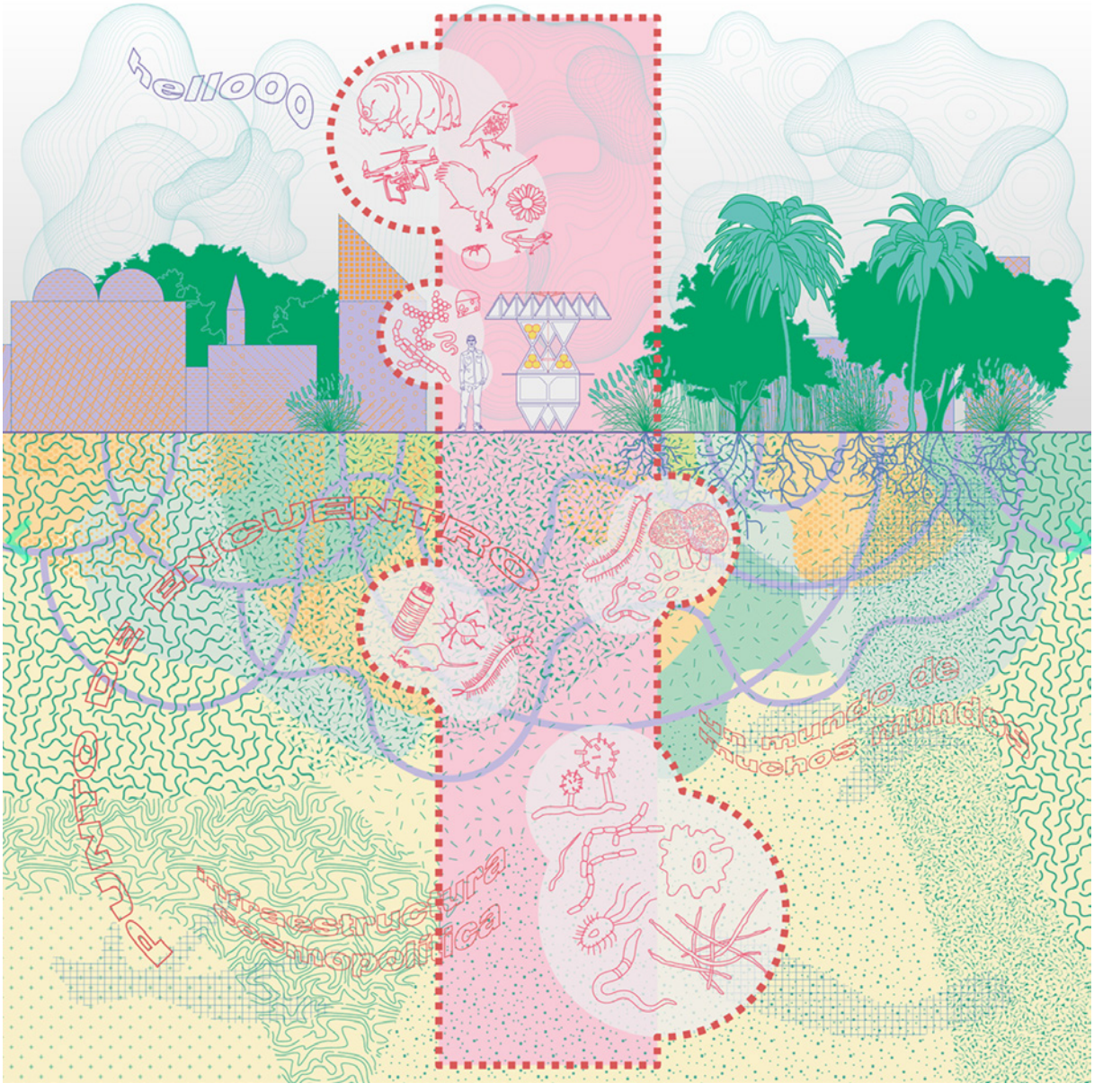


FIGURA 8 Instalación propuesta en "Microbial Fruits of Istanbul" donde la arquitectura urbana se establece como intermediadora entre la Estambul humana y la Estambul otra-que-humana.

FIGURE 8 Installation proposed in 'Microbial Fruits of Istanbul', where urban architecture is established as a mediator between the human Istanbul other-than-human Istanbul.

En territorio alienígena, más allá de la protección que ofrecen las sombras, los humanos se mueven de memoria, siguiendo planos que han estudiado hasta interiorizarlos, tratando de ignorar la explosión de estímulos que perciben sus sentidos en ese extraño mundo.[14] El autor de esta obra consigue transmitir la extraordinaria dificultad que implica, para cualquier especie animal, habitar los inmensos espacios arquitectónicos construidos por seres de una escala muy superior.

En su proyecto de investigación "Synanthropic Suburbia", la arquitecta e investigadora Sarah Gunawan (2015) mapeó precisamente la forma en la que determinadas especies sinantrópicas[15] (entre las que podemos encontrar a la rata común) experimentan el espacio urbano/arquitectónico de las ciudades canadienses [FIGURA 9].

Gunawan llevó a cabo una meticulosa investigación que nos invita a adoptar la perspectiva de los roedores y comprender cómo experimentan las arquitecturas urbanas creadas por el ser humano. Investigación que se tradujo en una serie de cartografías de los mundos circundantes de estos roedores dentro del ámbito urbano[16] [FIGURA 10].

Sin embargo, y a diferencia de los esfuerzos investigativos expuestos en el apartado anterior de este artículo, donde la cartografía se esgrime como una herramienta de dominación interespecies, esta vez el proceso de documentación se orienta desde una intencionalidad muy distinta: el reconocimiento de la agencia urbana de la rata y la viabilidad de integración de este animal en el diseño arquitectónico de la ciudad como habitante legítimo. El estudio desarrollado por Sarah Gunawan (2015) busca establecer formas de convivencia más próximas al mutualismo entre humanos y otras especies en el

heart the spaces that exist aboveground. In alien territory, beyond the protection offered by the shadows, humans move by memory, following the plans they have studied to the point of internalizing them, trying to ignore the explosion of stimuli their senses perceive in this strange world.[12] The author of this work manages to transmit the extraordinary difficulty that implies, for any animal species, to inhabit the enormous architectural spaces built by beings of a much larger scale.

In her research project 'Synanthropic Suburbia', architect and researcher Sarah Gunawan (2015) made a precise mapping of the way particular synanthropic species[13] (among which we can find the common rat) experiment the urban/architectural space of Canadian cities [FIGURE 9].

Gunawan carried out a meticulous investigation that invites us to adopt the perspective of rodents and understand how they experience the urban architectures created by humans. An investigation that resulted in a series of cartographies of these rodents' surrounding worlds within the urban environment[14] [FIGURE 10].

However, and unlike the investigative efforts presented in the preceding section of this article, where cartography is wielded as a tool for interspecies domination, this time the documentation process is oriented from a very different intentionality: the recognition of the urban agency of rats and the viability of the integration of this animal into the architectural design of the city as a legitimate inhabitant. The study carried out by Sarah Gunawan (2015) seeks to establish forms of coexistence that

[14] "Twenty paces. Where did the light come from? It was everywhere; it glowed so; it was white, white. Twenty-five paces. Touch the wall with your shoulder. Don't — above everything — don't wander away from the wall. Thirty paces. In light like this you had no need of the glow lamp. It was almost too bright to see in. Thirty-five paces. The floor was, not like a burrow floor. It was flat and very hard. So was the wall. Flat and hard and straight. Forty paces. Run and keep your eyes down. Run" (Tenn, 1968, p. 24).
[15] El término "sinantropía" se utiliza en biología para designar la capacidad de algunas especies de flora y fauna que habitan en ecosistemas urbanos o antropizados, adaptándose a las condiciones ambientales creadas o modificadas como resultado de la actividad humana.
[16] El trabajo de Sarah Gunawan está fuertemente influenciado por el *Umwelt* de von Uexküll (ver von Uexküll, 2010).

[12] "Twenty paces. Where did the light come from? It was everywhere; it glowed so; it was white, white. Twenty-five paces. Touch the wall with your shoulder. Don't — above everything — don't wander away from the wall. Thirty paces. In light like this you had no need of the glow lamp. It was almost too bright to see in. Thirty-five paces. The floor was, not like a burrow floor. It was flat and very hard. So was the wall. Flat and hard and straight. Forty paces. Run and keep your eyes down. Run" (Tenn, 1968, p. 24).
[13] The term 'synanthrope' is used in biology to designate the ability of certain flora and fauna species that inhabit urban or anthropized ecosystems to adapt to the environmental conditions created or modified as result of human activity.
[14] The work of Sarah Gunawan is strongly influenced by von Uexküll's *Umwelt* (see von Uexküll, 2010).

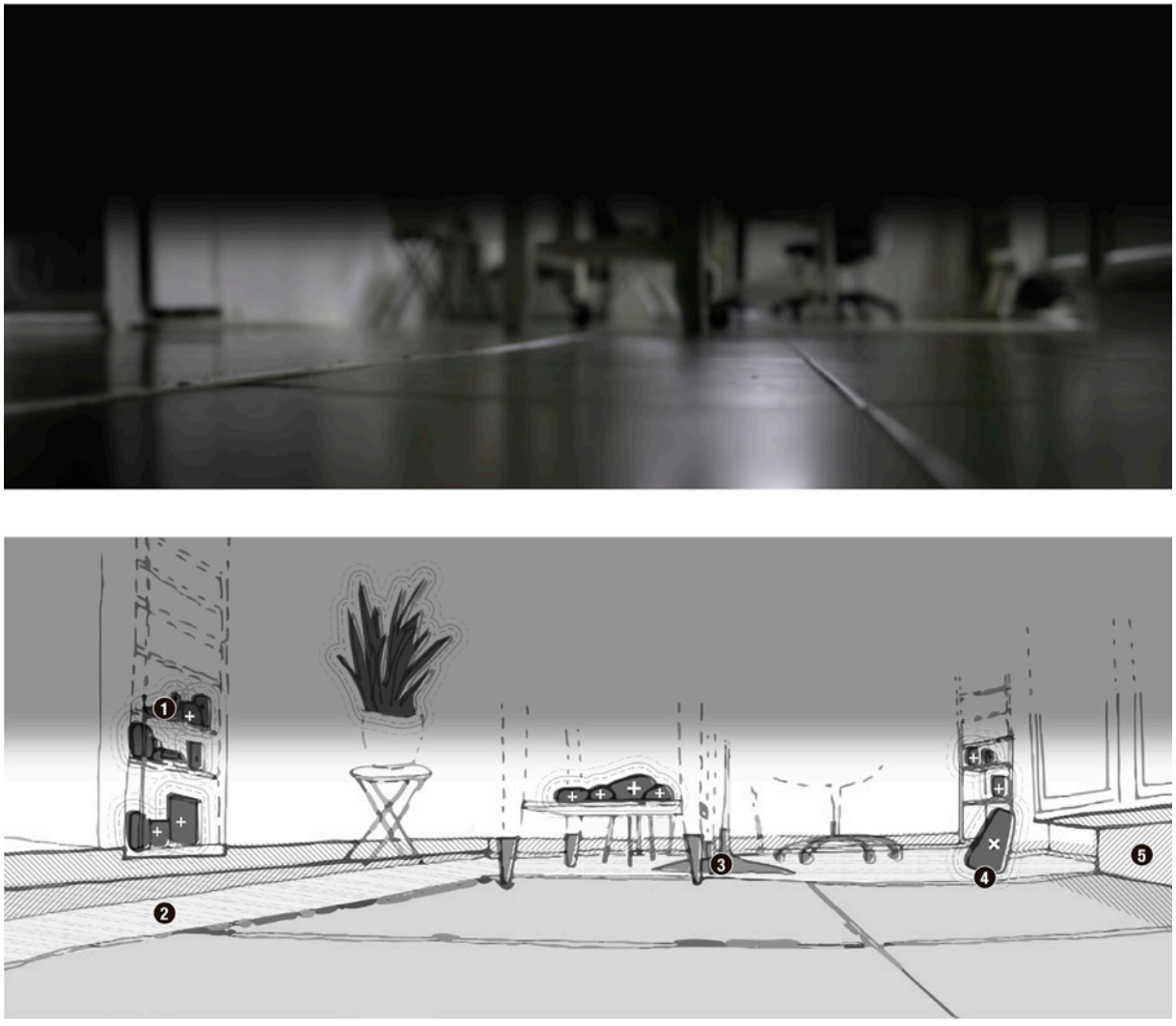


FIGURA 9 Análisis gráfico de la percepción del espacio arquitectónico por parte de una rata.

FIGURE 9 Graphic analysis of the perception of architectural space by a rat.

marco de la ciudad, evitando en la medida de lo posible, la proliferación de interacciones negativas. Para ello, propone un enfoque sensible y abierto hacia las especies otras-que-humanas con las que compartimos el ámbito urbano. Este enfoque se vale de la cartografía como herramienta cognitiva a través de la cual alcanzar el nivel de comprensión de nuestros vecinos otros-que-humanos necesario para su integración.

Finalmente, cabe destacar otro proyecto de investigación que empleó la cartografía como instrumento intelectual para desentrañar las claves de una convivencia urbana excepcional: la tesis doctoral del investigador Marcus Baynes-Rock (2012). En este trabajo, Baynes-Rock realizó una intensiva labor etnográfica en la ciudad de Harar, en Etiopía, cuyo objetivo fue comprender las claves que hacen posible el complejo tipo de convivencia entre humanos y hienas que se da en dicha ciudad, donde ambas especies comparten el uso del espacio urbano de forma pacífica. A través de esta investigación, Baynes-Rock trató, empleando la cartografía como una de las principales herramientas cognitivas de análisis, de extraer conocimiento científico aplicable a otras ciudades acerca de esta insólita coexistencia entre humanos y otros-que-humanos [FIGURA 11].

CONCLUSIONES

Las narrativas de obras como *La guerra de los mundos* (Wells, 2008) o *Of Men and Monsters* (Tenn, 1968), entre otras, nos brindan una lente perspectivista a través de la cual analizar las tensiones entre habitantes humanos y otros-que-humanos en el marco de la ciudad contemporánea. Como ha quedado expuesto a través del presente artículo, el ámbito de la ciudad es, tal y como imaginaron H. G. Wells y William Tenn, un campo de batalla interespecies donde la especie humana se esfuerza por imponer su supremacía sobre otras especies con las que comparte el espacio urbano. Las ciudades constituyen escenarios donde se libran batallas en las que se compite por el derecho a ocupar el espacio físico, pero también por el dominio y la supervivencia.

En esta guerra de los mundos urbana, la cartografía ha demostrado ser, lamentablemente, una herramienta muy poderosa de dominación, aportando al bando humano de la contienda un instrumento bélico con capacidad para optimizar las prácticas de control sobre las especies otras-que-humanas que se atreven a habitar en los intersticios de las ciudades.

Sin embargo, los casos expuestos en el último apartado de este artículo demuestran que la cartografía puede ser,

are closer to mutualism among humans and other species in the context of the city, avoiding as far as possible the proliferation of negative interactions. For this, she proposes an approach that is sensitive and open to the other-than-human species with which we share the urban environment. This approach relies on cartography as a cognitive tool that allows to reach the level of understanding of our other-than-human neighbors required for their integration.

Finally, it is worth highlighting another research project that used cartography as an intellectual tool to unravel the keys to exceptional urban coexistence: the doctoral thesis of researcher Marcus Baynes-Rock (2012). In this work, Baynes-Rock carried out intensive ethnographic work in the city of Harar, in Ethiopia, with the purpose of understanding the keys that make possible a complex type of cohabitation between humans and hyenas that takes place in that city, where both species share the use of the urban space peacefully. Through this research work, Baynes-Rock tried, using cartography as one of the main cognitive analysis tools, to extract scientific knowledge applicable to other cities about this uncanny coexistence between humans and other-than-humans [FIGURE 11].

CONCLUSIONS

The narratives behind works like *The War of the Worlds* (Wells, 2008) or *Of Men and Monsters* (Tenn, 1968), among others, provide us with a perspectivist lens through which to analyze the tensions between human and other-than-human inhabitants in the context of the contemporary city. As it has been exposed in the present article, the realm of the city is, just as H. G. Wells and William Tenn imagined, an interspecies battlefield where the human species strives to impose its supremacy over the other species with which it competes for the right to occupy the physical space, but also for domination and survival.

In this urban war of the worlds, cartography has proven to be, unfortunately, a very powerful domination tool, supplying the human side in the conflict a war instrument with the capacity to optimize the control practices over other-than-human species that dare to inhabit the interstices of the city.

However, the cases exposed in the last section of this article demonstrate that cartography can, conversely, be a resistance stool for the other-

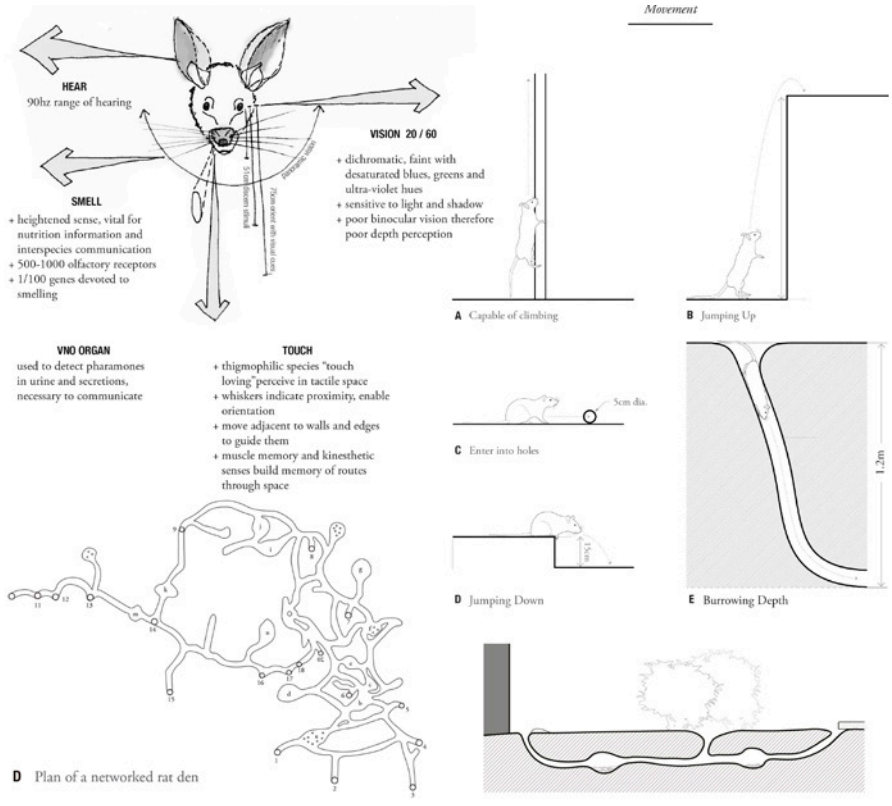


FIGURA 10 Mundos circundantes de una rata en entornos urbanos.

FIGURE 10 Surrounding worlds of a rat in urban environments.

© Gunawan, 2015, pp. 60–64.

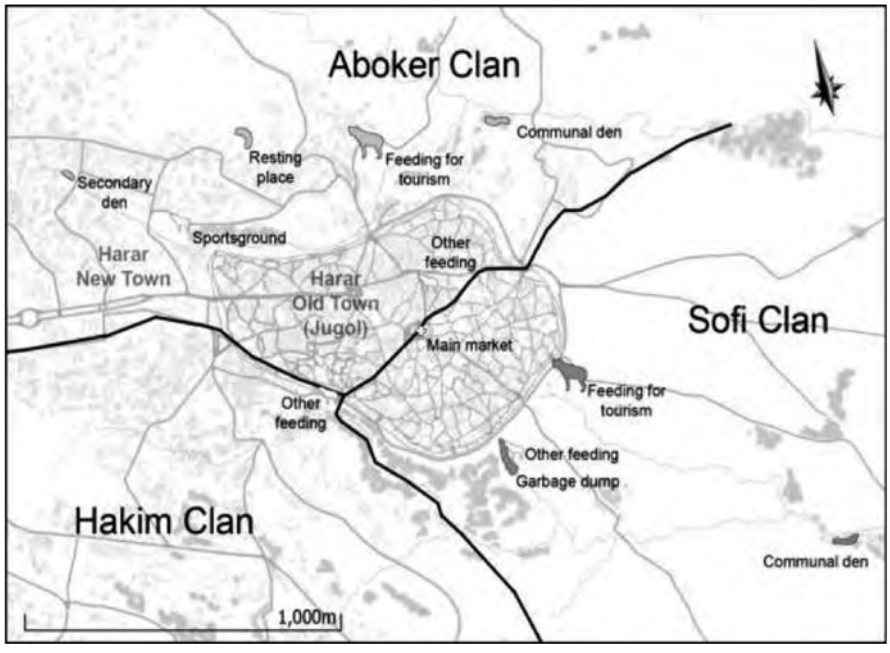


FIGURA 11 Mapa que muestra la superposición de los barrios humanos y los barrios de las hienas en Harar.

FIGURE 10 Map showing the overlapping of human and hyena neighborhoods in Harar.

© Baynes-Rock 2012, p.49.

por contra, una herramienta de resistencia para el bando otro-que-humano. Propuestas como "Microbial Fruits of Istanbul" (Fogué et al., 2021) o "Synanthropic Suburbia" (Gunawan, 2015) demuestran que esta se puede utilizar con el fin de visibilizar y dar voz a los habitantes otros de las ciudades y como instrumento de generación de arquitecturas que actúen como intermediadoras entre humanos y otros-que-humanos. La investigación llevada a cabo por Marcus Baynes-Rock (2012) en Harar supone un notable ejemplo de cómo la cartografía se constituye como un instrumento de análisis fundamental para desentrañar casos de estudio en los que una convivencia interespecies positiva en el ámbito urbano ya tenga lugar, con el objetivo de extraer conocimiento científico extrapolable a otros lugares.

Los autores de este artículo nos posicionamos en contra del exterminio de los seres otros-que-humanos que está teniendo lugar en las ciudades y consideramos que es preciso desafiar las narrativas de dominación y adoptar un enfoque más inclusivo en nuestras relaciones con otras especies. Frente al empleo de la cartografía como herramienta de dominación, creemos que resulta urgente el empleo de dicha herramienta con el fin de aprender e incorporar nuevas formas de coexistencia entre humanos y otros-que-humanos en entornos urbanos que no impliquen la aplicación de violencia de unos cuerpos sobre otros. Solo así podremos transformar nuestras ciudades en espacios de coexistencia; solo así podremos avanzar hacia una concepción de la ciudad entendida como un lugar para la libre asociación de seres, ya sean estos humanos u otros-que-humanos. m

than-human side. Proposals like 'Microbial Fruits of Istanbul' (Fogué et al., 2021) or 'Synanthropic Suburbia' (Gunawan, 2015) demonstrate that it can be used with the aim of visibilizing and providing a voice to the other inhabitants of the cities and as an instrument for the generation of architectures that act as mediators between humans and other-than-humans. The research work carried out by Marcus Baynes-Rock (2012) in Harar constitutes a notable example of how cartography is instated as a fundamental analysis instrument to unravel study cases in which a positive interspecies cohabitation in the urban environment is already in place, with the purpose of extracting scientific knowledge that can be extrapolated to other places.

The authors of this book take a stand against the extermination of other-than-human beings that is taking place in the cities, and consider that it is imperative to challenge the domination narratives and adopt a more inclusive approach in our relations with other species. Regarding the use of cartography as a dominion tool, we believe in the urgency of using this tool with the aim of learning to incorporate new forms of coexistence between humans and other-than-humans in urban environments that do not involve the exertion of violence of some bodies over others. Only in this way we will be able to transform our cities into spaces of coexistence; only in this way can we advance towards a conception of the city understood as a place for the free association of beings, be they human or other-than-human. m

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