The English Genitive Alternation
The English ‘s genotype freely alternates with the of genotype in many situations:

Mary’s brother ~ the brother of Mary
the man’s house ~ the house of the man
the dog’s paw ~ the paw of the dog
the result of the accident ~ the accident’s result
the condition of the guitar ~ the guitar’s condition
the door of the building ~ the building’s door
But animate pronouns are restricted nearly categorically to ’s-genitives:

“compare her money and your nose with the very unnatural the money of her and the nose of you.” (Huddleston and Pullum 2002: 476)

And inanimate pronouns are strongly disfavored as of-genitives:

its shadow ~ the shadow of it
its condition ~ the condition of it
its paw ~ the paw of it
Previous work:

animacy an important factor in genitive choice in English:

Study # 1


Rosenbach (2003) reports a quantitative experimental study which controls for the overlapping factors (animacy, topicality, prototypicality of the possession relation) that affect genitive choice:

Her items and conditions:

[+animate +topical +proto]: the boy’s eyes ~ the eyes of the boy
[+animate, +topical, −proto]: the mother’s future ~ the future of the mother
[+animate, −topical, +proto]: a girl’s face ~ the face of a girl
[+animate, −topical, −proto]: a woman’s shadow ~ the shadow of a woman
[−animate, +topical, +proto]: the chair’s frame ~ the frame of the chair
[−animate, +topical, −proto]: the bag’s contents ~ the contents of the bag
[−animate, −topical, +proto]: a lorry’s wheels ~ the wheels of a lorry
[−animate, −topical, −proto]: a car’s fumes ~ the fumes of a car
–Operationalizes animacy as personal, common nouns vs. concrete common nouns (excluding geographical and temporal)

–Operationalizes topicality as second-mention, definite expression vs. first-mention, indefinite expression

–Operationalizes possessive relations as
  
  for humans: body parts, kin terms, and permanent legal ownership vs. states and abstract ‘possessions’
  
  for inanimates: part/whole relations vs. non-part/whole relations
A sample question from her questionnaire:

A helicopter waited on the nearby grass like a sleeping insect, its pilot standing outside with Marino. Whit, a perfect specimen of male fitness in a black flight suit, opened [the helicopter’s doors/the doors of the helicopter] to help us board.

(based on Patricia Cornwell, The Body Farm, 52)
's and *of* genitives in English (Rosenbach 2002)
Another finding:

the ’s-genitive is spreading across time (older to younger speakers) and space (younger American to younger British speakers)
Note on design and analysis:

– univariable analysis (= ‘basic statistical tests’, such as Chisquare)

– controls (e.g. holds length of possessor and possessum constant; excludes proper nouns)

– stratificational analysis (e.g. age, pp. 396–7)
Study # 2

Lars Hinrichs and Benedikt Szmrecsányi (hot) ‘Recent changes in the function and frequency of Standard English genitive constructions: a multivariate analysis of tagged corpora’.
The research question:
How and why is the s-genitive spreading? Colloquialization? Americanization?
The corpora:

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<th>1990s</th>
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</thead>
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<td>Frown</td>
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<td></td>
<td>1961</td>
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<tr>
<td>British English</td>
<td>LOB</td>
<td>F-LOB</td>
</tr>
<tr>
<td></td>
<td>1961</td>
<td>1991</td>
</tr>
</tbody>
</table>

Sections A/B journalistic language (reportage and editorials)

high quality: POS-tagged and manually postedited
Use only ‘interchangeable’ (alternating) observations.

Extraction of ’s-genitives:

–eliminate elliptical examples (dinner at Tiffany’s; fixed expressions (Murphy’s law); descriptive genitives (the men’s room); ‘own’ examples; titles of works (John Steinbeck’s Of Mice and Men)

Extraction of of-genitives:

–eliminate indefinites (some members of his cabinet); postmodified possessors (leading to, e.g., the guy on the right’s sister); measure phrases (a pound of flesh); conventionalized of-genitives (the University of Mississippi)
Coding practice: train coders on sample of data; refine until agreement statistics (Cohen’s kappa) are acceptable; then code full data; assess reliability at end
Coded variables:

**Semantic & Pragmatic**

– animacy: human, animal, collective, inanimate

– ‘thematicity’ (text frequency of possessor NPs head noun)

– information status (‘given’ = a previous mention of possessor head noun in up to 50 preceding words)

**Phonological**

– final sibilant in possessor (*the sad and angry side of Bush*)
Coded variables (continued):

**Processing/Parsing**
– end-weight: measured by length in words, excluding definite determiner in possessum of *of*-genitives
– structural persistence, syntactic priming, repetition in discourse: was previous occurrence of genitive an ’s-genitive?
– nested genitives

**Economy-related**
– Type/token ratio: a measure of lexical density
– ‘Nouniness’
‘Univariate’ analysis (basic statistical tests) shows that all of the above factors are significant.

‘Multivariate’ analysis shows the magnitude and direction of the effects, separates possibly confounded variables, and assesses the explanatory value of each predictor (not the same as its significance).
“Regression analysis, in point of fact, is the closest a corpus linguist can come to conducting an experiment: the procedure systematically tests each factor while holding the other factors in the model constant.” (p. 35)
Multivariate analysis shows that some seemingly significant factors are not, when other predictors are taken into account:

– givenness is insignificant once thematicity (text frequency) is taken into account

– animacy does not interact significantly with sampling time when other factors, such as end-weight, are controlled for.

“Hence, whatever the longitudinal spread of the s-genitive in our data is due to, it does not seem to involve shifts in writer’s preferences concerning animacy of the possessor.” (p. 45)
Reading assignment:

Please read the Hinrichs and Szmrecsányi paper for next Tuesday.