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The Uses of Genre: Is There an “Adam Smith Question”?

THIS PAPER SETS OUT A novel computational method of testing the uses to which generic membership can be put to help us understand large-scale movements in the history of ideas. It does so by taking a well-known test case, the so-called Adam Smith Question, as an easily identifiable (and well-researched) problem in generic consistency.¹ In brief, the problem is this: Smith proposes one version of human nature based on sympathy in his *Theory of Moral Sentiments* (*TMS*) and another, completely orthogonal to it, based on self-interest in his *Wealth of Nations* (*WN*).² This incoherence (if one assumes that Smith worked hard at creating a unified theory of human nature, which in itself is contestable) is said to be one of genre, the difference between moral philosophy and political economy.

The wider context of Smith’s intellectual project—let us say the second half of the British eighteenth century—also provides us with a background in which the question of genre is itself problematic or undergoing conceptual construction. It has long been recognized that over the course of the century the contours of emerging genres—for example, prose fiction, political economy, moral philosophy, aesthetics—would ossify around different and sometimes contradictory sets of moral, social, and epistemological premises. Literary critics have largely investigated this generic instability via the conspicuously hybrid genre of the novel, with particular attention to the early novel’s seeming inattention to modern distinctions of “fact” and “fiction,” within what Mary Poovey calls the “fact/fiction continuum.”³

A significant fellow traveler in this epistemological crisis can be identified in the uneven and incompatible development of concepts of

ABSTRACT This paper presents a computational method for assessing the uses of the category “genre.” It takes as its example the long-standing “Adam Smith” problem, which seeks to settle whether Smith’s two major works, *The Theory of Moral Sentiments* and *The Wealth of Nations* are compatible with each other and can be seen as contributing to a larger “system” of inquiry embarked upon by Smith. REPRESENTATIONS 149. Winter 2020 © The Regents of the University of California. ISSN 0734-6018, electronic ISSN 1533-855X, pages 73–102. All rights reserved. Direct requests for permission to photocopy or reproduce article content to the University of California Press at <https://www.ucpress.edu/journals/reprints-permissions>. DOI: <https://doi.org/10.1525/rep.2020.149.1.73>.

economic morality across different genres that might be termed the “self-society continuum.” In *Commerce, Morality, and the Eighteenth-Century Novel*, Liz Bellamy argues that economic texts privileged the second term, “society,” as they compressed individuals and their personal faculties into an indiscriminate mass of *homo economicus*, while, conversely, contemporaneous texts of moral philosophy addressed a unique individual steeped in elite civic humanist rhetoric that exempted him or her from the rational maximization of money and naked self-interest.⁴ The new commercial morality was understood as peculiar, destructive, and “far from being overwhelmingly accepted or embraced” by ruling classes whose traditionalism could not easily comprehend and accommodate the burgeoning intangible property of financial instruments.⁵ This unease was then reflected in a parallel discordance between works of moral philosophy and the fledgling genre of economics. Bellamy explicitly identifies this inconsistency in generically separate works by David Hume and Smith, who seem to void the ethical directives of their moral philosophy with their economic texts and vice versa.

Yet “negates” is perhaps too strong a way of putting things. After thirty years without significantly revising the work, Smith began to alter *TMS* in the last year of his life, adding a sixth part titled “Of the Character of Virtue” that “appealed to the citizenry to place the interests of society ahead of the interest of any faction to which they might be attached.”⁶ Crucially, however, this revision did not radically alter the precepts of the theory to align more explicitly with the selfish personality exhibited by *WN*. For Smith, there seems never to have been an urgent need to bring the two works into dialogue. To complicate matters still further, the alleged contradiction may well arise, at least in part, from the anachronistic imposition of generic differences that at the time were not perceivable. What would only later be recognized as political economy was still, at the point of Smith’s writing, in the process of coming into being. As Margaret Schabas notes, “Economic phenomena were viewed as contiguous with physical nature” up until the mid-nineteenth century, when the notion of “the economy” as a delimited entity first arose.⁷

It is in large part due to these complex compositional, generic, and historical contexts that scholars have, over the past three decades, increasingly tired of the Adam Smith Problem, with its binary options. In 1998, Amos Witztum declared briskly that, “for modern readers this is not a real problem.”⁸ More recently, David Wilson and William Dixon claimed, “The old *Das Adam Smith Problem* is no longer tenable. Few today believe that Smith postulates two contradictory principles of human action.”⁹ Close readings of the concepts of sympathy, prudence, and self-interest in *TMS* and *WN* have led critics to conclude that Smith does not openly recommend

two polar opposite theories of human motivation, although “there is still no widely agreed version of what it is that links these two texts, aside from their common author; no widely agreed version of how, if at all, Smith’s postulation of self-interest as the organizing principle of economic activity fits in with his wider moral-ethical concerns.”¹⁰

This paper applies a novel computational mode of analysis to the large question of genre and to the more specific issues that arise in Smith’s work. We do so, however, not to flog the dead horse of *das Adam Smith Problem*; we do not believe that such a debate could ever be decisively “settled” one way or another. We do, however, believe that the computational analysis of large corpora (and subcorpora) permits us to discern both the continuities and discontinuities of conceptual usage across different works—continuities and discontinuities to which more standard modes of intellectual history, for all their many virtues, remain blind. We thus interrogate two interlocking questions: first, to what extent does the sympathy so cardinal to *TMS*, and the self-interest so essential to *WN*, participate in broader conceptual networks, whose existence is statistically verifiable? Second, to what extent do such local continuities or discontinuities prove representative of broader generic differences in the culture at large? Chief among the virtues of such a computational approach, we believe, is the critical vantage it offers with regard to genre. Rather than simply accepting the markers that authors or publishers apply to the texts at hand (“political economy,” and so on), we use patterns of lexical collocation to investigate whether such distinctions are indeed valid.

For this study, we draw upon the broad intellectual position outlined in Peter de Bolla’s *The Architecture of Concepts*, which stakes a claim for the utility of computational approaches as a means of uncovering the complex conceptual networks in which lexical items are embedded. For de Bolla, because concepts are “units of ‘thinking’ that cannot be expressed in words without remainder,” they may be stretched across constellations of collocations circulating in a “common unshareable” domain of the textual culture at large.¹¹ Reflecting a sort of cultural storehouse of value, concepts are held “simultaneously by one on behalf of the many and by the collective on behalf of the individual.”¹² While individual language users clearly do differ in the connotations that they ascribe to a given word, their disagreement is nonetheless conditioned by a horizon of meaning, of which they remain unconscious, yet which they cannot but share.

Since the publication of *The Architecture of Concepts*, a number of new (or more widely available) computational tools have made such an itinerary far more susceptible to realization. In recent years, Ryan Heuser, Andrew Goldstone, and Ted Underwood have employed vector spaces and topic modeling to produce analyses that complement the corpus analysis of genre that

we attempt.¹³ Our analysis differs from the typical applications of standard topic modeling, however, to the extent that ours more readily facilitates moving between large patterns of data and the individual texts and words they comprise. This computational methodology has two obvious advantages over more conventional forms of standard history: on the one hand, it allows us to comprehend the cultural archive to a far greater degree than even the most prodigiously well-read analog historian can attempt, directing attention toward thousands of hitherto little-read texts of proto-economics and moral philosophy. On the other, it enables us to perceive common patterns (or the absence thereof) that may not be apparent when we read for general theme or overt semantic content.

To uncover broader conceptual networks, we proceed through a measure of lexical collocation developed by the Cambridge Concept Lab.¹⁴ This procedure amends the statistical measure, common to corpus linguistics, of the relative probability of lexical collocations. For a given term x (which we call the “focal token”), we calculate the relative probability of terms y , z , and so forth (here “bound tokens”) occurring at a specific lexical distance. For instance, we might enquire which terms occur with greatest relative probability at a distance of ten from “sympathy,” which measures all lexical material at a distance of ten words before and after the focal term.¹⁵ Rather than simply ordering the list by raw frequency—that is, the number of unique instances of a word occurring ten places from “sympathy”—we calculate what we call the “distributional probability factor” (DPF): a variation of what corpus linguistics terms pointwise mutual information (PMI), which calculates the relative probability of such collocations.¹⁶ A stop word (as understood in computer science to refer to common words that are regarded as potential “noise”) such as “the” is highly likely to collocate with any other word in the corpus; PMI therefore divides the number of collocations by the raw frequencies of the collocated words, to calculate the *relative* probability. In practice, PMI tends to favor “unusual” words that might collocate only a small number of times; our bespoke DPF therefore revises the calculation so as to attempt to ensure that words with both high and low raw frequencies appear.

In a given corpus, we calculate the DPF of every word with every other word at every lexical distance: billions of calculations. The result is a unique “signature” for each term, whose bound tokens are listed in order of their co-occurrence, and which can be varied according to lexical distance or chronological range. These signatures help us identify conceptual ontologies that are distinct from the semantic networks within which terms appear. As one can discern immediately, the further away one moves from a focal token—say one hundred words away—the underlying force for a collocation is less likely to be semantic. We believe such distributions give us a purchase on distinctively conceptual activity and formation.¹⁷

There are various ways in which we might determine what counts as a “significant” binding between terms, either in absolute or relative terms. For the purposes of this essay, we take the top twenty-five items on a focal token’s given list to be considered significantly bound. For example, the term most likely to uniquely co-associate with “sympathy” at a distance of ten over the eighteenth century is “antipathy” (raw collocation frequency: 225; DPF: 17703, a strong bind), although the term “love” (raw collocation frequency: 1,166; DPF: 1454, a significantly weaker bind) occurs much more frequently at that distance. Ranking by DPF allows for greater precision of lexical co-association by identifying the relative probability inherent in the relationship between two words.¹⁸

For our current purposes, we have applied these tools to the digital corpus of Eighteenth Century Collections Online (ECCO), which contains 205,000 individual volumes (or 32 million pages) published in the United Kingdom between 1701 and 1800; despite its imperfections (with optical character recognition to the fore), this cultural archive has a strong claim to being comprehensive. ECCO subdivides this massive dataset under a number of generic headings, which are, sadly, unhelpful for our purposes: we find the rather broad designations of “History and Geography,” “Social Sciences,” “Religion and Philosophy,” “General Reference,” “Fine Arts,” “Literature and Language,” “Law,” and “Medicine, Science, and Technology” too blunt. Indeed, one might well observe that such categories reflect our current division of discourse rather more than an eighteenth-century classification. What, then, do we do with a specific field such as moral philosophy, or a nascent field such as political economy, both of which are covered by none (or several) of these broad categories?

To answer this important question, we have constructed a bespoke subcorpus of ECCO in order to run detailed cross-comparisons among the categories and with the dataset as a whole. We do so through a combination of supervised machine learning and more traditionally qualitative inspection of the results; at all stages, we treat genre not as a given, but as a complex entity. To begin, we selected two hundred texts whose content unambiguously consisted either of political economy (such as James Steuart’s *Inquiry into the Principles of Political Oeconomy*, 1767) or moral philosophy. Using the lexical information from these (often very extensive) titles, we then trained our computer automatically to predict which documents within ECCO conformed to a similar pattern; we then manually inspected the results, to ensure that the individual works did indeed conform to the respective generic categories. Having filtered out the inevitable noise (discarding around 3 percent of each automatically generated list), we reached totals of 1,236 for moral philosophy and 1,652 for economics.¹⁹ Note that at first pass we have removed histories, acts of

Parliament, and political treatises from the economic category; sermons and other explicitly theological tracts—for example, Samuel Pye’s *Moral System of Moses* (1770) and Thomas Hitchcock’s *Mutual Connexion between Faith, Virtue, and Knowledge* (1761)—from the moral philosophical category. Table 1 demonstrates the terms that were most powerfully predictive of the respective genres.

At this early stage, we should reiterate that these bespoke subcorpora make *no* strong claim to generic comprehensiveness or integrity: as we have already conceded, genres are (particularly in the period to hand) both unstable and hybrid. Yet our speculative venture is that salient distinctions between such genres not only exist but can also be modeled. The proof for this claim will be in the results that we are able computationally to generate: if, for example, the very distinction between moral philosophy and political economy should be found unworkable, we would then expect a large amount of lexical overlap across (in this case illusory) generic markers. One of the strong advantages to this mode of proceeding, we contend, is the redirection of scholarly attention from the canonical works that still form the central constituents of intellectual history, to more marginal texts that we certainly would have been unlikely ever to set eyes upon. The resulting subcorpora thus provide a diverse sample of what we are for now provisionally calling two distinct genres. It is important to note, in this respect, that the dramatic increase in publication rates for the two categories to hand is broadly representative of wider trends: for ECCO as a whole, publication amounted to a thousand titles a year at the start of the century, only to rise to between three and four thousand a year in the 1790s. Table 2 shows the first ten titles of each genre, ordered by their estimated predictability by the title features above—these provide representative samples of each larger subcorpus.

The establishment of these subcorpora enables us to analyze the discourse-specificity of conceptual networks, paying particular attention to a series of related terms—“sympathy,” “advantage,” “interests,” “credit”—that bear upon the larger question of genre coherence and consistency as well as *das Adam Smith Problem*.²⁰ In doing so we can identify two terms, *distance* and *credit*, which seem to have considerable force in determining the respective putative distinct genres of moral thought and economics. We can begin to get a handle on this by inspecting the co-associations of the term “ambition” (table 3). Over the century, although retaining about half its co-associations, the concept *ambition* still drifted away from “popularity,” “effeminacy,” and “grandeur” and clustered instead with “domination,” “enterprises,” and “wealth.” One of these terms, “fortune” also behaves in a very specific modality with “merit”: it binds with this second term in a restricted field that we call a “mutual dependency set,” whereby each term

TABLE 1. Truncated list of predictive title elements scaled between economics and moral philosophy titles

rank	econ title word	estimate*	rank	moral title word	estimate*
1	commerce_.	0.438409391	615	human_nature	-0.523518303
2	oeconomy	0.430881881	614	philosophical	-0.502510707
3	a_discourse	0.386605005	613	and_moral	-0.490160909
4	fall	0.369484197	612	virtue_and	-0.485197805
5	funds_.	0.332439808	611	greek	-0.469608837
6	ireland_.	0.319954014	610	manners	-0.430713105
7	essay_upon	0.304493664	609	of_reason	-0.42407606
8	prices_of	0.303143703	608	a_philosophical	-0.402296531
9	considerations	0.294277208	607	morals	-0.400713896
10	a_proposal	0.291933052	606	of_virtue	-0.396090051
11	proposal_for	0.291910913	605	divine	-0.392347181
12	merchant	0.289094542	604	inquiry_ concerning	-0.379471718
13	proposal	0.28755322	603	de	-0.378692463
14	quantity	0.286446055	602	human	-0.365036208
15	scarcity	0.27667598	601	characters	-0.364681542
16	manufacture	0.270883861	600	and_reflections	-0.358358835
17	industry	0.267358719	599	maxims	-0.352448063
18	the_african	0.26584556	598	essays	-0.349426126
19	trade_.	0.264466831	597	men	-0.34840277
20	new_and	0.257009426	596	a_moral	-0.347160643
21	a_merchant	0.252646984	595	philosophy_.	-0.339829984
22	agriculture_.	0.250980372	594	philosophical_ necessity	-0.338993547
23	credit_.	0.250283906	593	wisdom	-0.326845188
24	linen	0.242996465	592	opinions	-0.326183782
25	the_establishment	0.238702775	591	love	-0.325127111
26–380	[...]	[...]	590–381	[...]	[...]

Left: lexical elements most predictive of economics texts; right: those of moral philosophical texts.

* A model based on our selections of titles by genre generated title elements (nouns, adjectives, syntax, etc.) most likely to befit their respective genres. The higher the estimate, the more likely to be an economic title; the lower, the more likely to be moral, with a threshold we located at the 380th title element.

TABLE 2. Top ten titles yielded by predictability of title features

author	title	code predicted*	author	title	code predicted*
Defoe, Daniel	<i>A plan of the English commerce</i>	0.997564079	Grove, Henry	<i>A system of moral philosophy</i>	0.030496953
Smith, Simon	<i>The golden fleece: or the trade, interest, and well-being of Great Britain considered</i>	0.996322523	Earle, John	<i>The world display'd: or, mankind painted in their proper colours</i>	0.030969545
Postlethwayt, Malachy	<i>The African trade, the great pillar and support of the British plantation trade in America</i>	0.995600699	Fordyce, David	<i>The elements of moral philosophy</i>	0.031870215
Wood, William	<i>A survey of trade</i>	0.994094587	Plato	<i>The works of Plato abridg'd</i>	0.033584937
Rolt, Richard	<i>A new dictionary of trade and commerce</i>	0.991518361	Pigott, Charles	<i>A sketch of the manners of the age</i>	0.042428065
	<i>The capital of the South-Sea Company, at Midsommer, 1720</i>	0.98998056	Gros, John Daniel	<i>Natural principles of rectitude, for the conduct of man</i>	0.044832917
	<i>The Importance of Jamaica to Great-Britain, consider'd</i>	0.985957381	Locke, John	<i>An essay concerning human understanding</i>	0.048174743
	<i>A scheme or proposal for taking off the several taxes on land, soap, starch</i>	0.983804835	Old gentleman, of Gray's Inn	<i>Human wisdom displayed: or, a guide to prudence and virtue</i>	0.062847506
Mortimer, Thomas	<i>A new and complete dictionary of trade and commerce</i>	0.981842803	Archenholz, Johann Wilhelm von	<i>A picture of England: the laws, customs and manners of England</i>	0.062847506
Champion, Richard	<i>Considerations on the present situation of Great Britain and the United States</i>	0.98000951	Ferguson, Adam	<i>Principles of Moral and Political Science</i>	0.063584577

Left: economics; right: moral philosophy.

Applying our model of title elements to the ECCO corpus yielded the following texts, ranked again by likelihood of representing each genre at a specific threshold.

* Indicates the strength of a title's having genre-specific title elements. The higher the number, the more "economic" a title appeared in our model; the lower, the more "moral philosophical."

TABLE 3. Shared lexis sets of “ambition” at lexical distances of 10 and 100 words from the focal token

1701–1750*	dpf	1750–1800*	dpf
avarice	5456	avarice	6760
aspiring	4408	aspired	6410
ambitious	4318	ambitious	5827
patriot	3689	courted	4554
pride	3519	passions	4179
popularity	3284	gratified	3586
passions	3083	pride	3578
effeminacy	2951	wealth	3578
grandeur	2798	ignoble	3537
envy	2493	envy	3379
ignoble	2378	pitying	3328
fortune	2142	patriot	3297
		enterprises	3261
		vanity	3023
		domination	2867

Terms here are ranked by distributional probability factor (DPF), i.e., the probability that, compared to all other words, they will occur at a distance of 10 from the focal token, in this case, “ambition.” This table in particular represents the common sets—the terms shared between a DPF-ranked list of words co-occurring at a distance of 10 and a list of co-occurrences at a distance of 100.

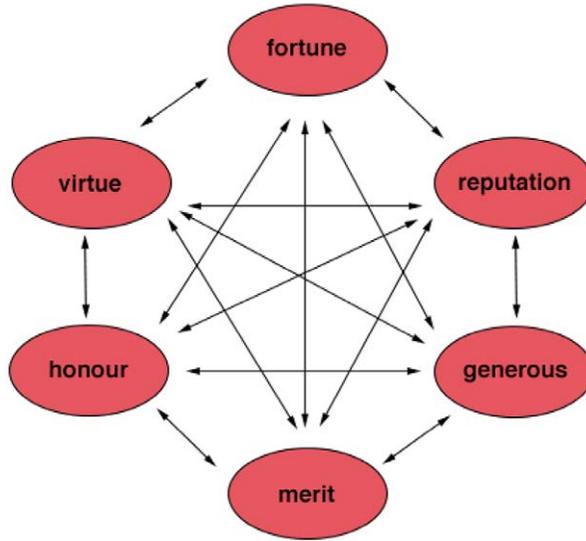
* Year range

in the set has a very high DPF with every other. Here one can see how this set changes between the first and second half of the eighteenth century (table 4).

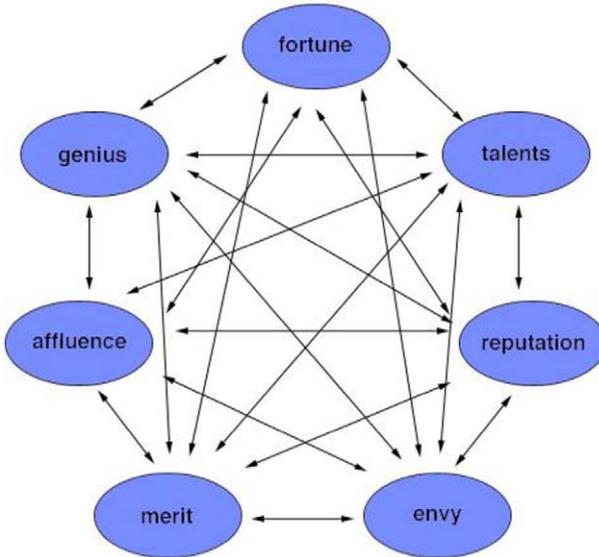
Clearly, the concepts of *fortune* and *merit* substituted their earlier associations with “virtue” and “honour” for the more meritocratic and monetized “talents,” “genius,” and “affluence.” Such an alteration in the constellation of mutually associated terms might be simply explained by the development of the genre we are tracking, what we have come to know as economics.²¹

TABLE 4. Mutual dependency sets from “fortune” and “merit” at a distance of 10

1701–1750



1750–1800



If this is so, we nevertheless need to pay attention to the striking discursively heterodox nature of Smith’s thinking, which was fully conversant with a distinctively Scottish concatenation of the physiological and financial (table 5).

TABLE 5. “Sympathy” at a distance of 10

<i>sympathy, freq 10747, 1701–1750</i>		<i>sympathy, freq 47546, 1750–1800</i>	
antipathy	22549	softest	11693
vicinity	7237	antipathy	11145
adonis	6381	exerts	6351
softest	5458	alleviate	4991
occult	5009	temptations	4691
faded	4979	sore	4675
nerves	2937	boundless	4622
spark	2864	nerves	4607
sorrows	2853	bowels	4380
disturbances	2704	irritation	4148
boundless	2579	sensation	4116
strings	2432	feelings	3838
shades	2320	sensibility	3577
weeping	2284	maternal	3567
weep	2266	tenderness	3513
griefs	2263	softened	3502
agonies	2225	stomach	3418
exerting	2203	emotions	3417
mutually	2179	cutaneous	3409
concurring	2147	adonis	3366
ugly	2140	melt	3360
pardoning	2111	soothing	3345

Physiological terms in bold.

Here one can see that over the course of the second half of the century “sympathy” began to co-occur drastically more strongly with physiological terms like “alleviate,” “sore,” “bowels,” “irritation,” “sensation,” “stomach,” “cutaneous,” and “soothing.” At first glance, this corporeal preeminence in sympathy may seem odd, but as Catherine Packham details in *Eighteenth-*

TABLE 6. “Sympathy” at a distance of 5 for eighteenth-century moral philosophical texts

rank	stat*		rank	stat*	
1	12.8	undiverted	15	9.3	applauds
2	12.6	theopathy	16	9.3	alleviates
3	12.0	pulsations	17	9.2	compensates
4	11.4	equalize	18	9.1	pungent
5	10.6	antipathy	19	9.1	unintelligent
6	10.2	frequents	20	9.0	closest
7	10.0	sycophant	21	9.0	enlivens
8	10.0	enlivened	22	8.8	contagion
9	9.9	consoling	23	8.8	tenderest
10	9.8	congratulation	24	8.8	evaporate
11	9.7	indirect	25	8.5	sincerest
12	9.6	implanting	26	8.5	cupid
13	9.5	instantaneous	27	8.5	sympathies
14	9.4	unsupportable	28	8.5	soothed

Physiological terms in bold.

This table, along with all our genre-related tables, was generated using the AntConc tool for corpus analysis.

* “Stat”: a probability algorithm comparable to DPF. Co-associative terms are ranked by “stat.”

Century Vitalism, the body language in *WN* was not mere rhetoric; it was embedded in the specific context of physiological knowledge in midcentury Scotland.²² This was the unique outlook of the Edinburgh Medical School, composed of physicians like Robert Whytt, Alexander Monro, and William Cullen, Smith’s personal doctor and intimate friend.²³ The ranking in table 6 (using AntConc, a concordance software program for genre-specific queries) demonstrates just how widespread was this physiological conception of sympathy.

Here, in the subcorpus of texts we have defined as moral-philosophical, we find “pulsations,” “alleviates,” “contagion,” and “soothed”—as well as

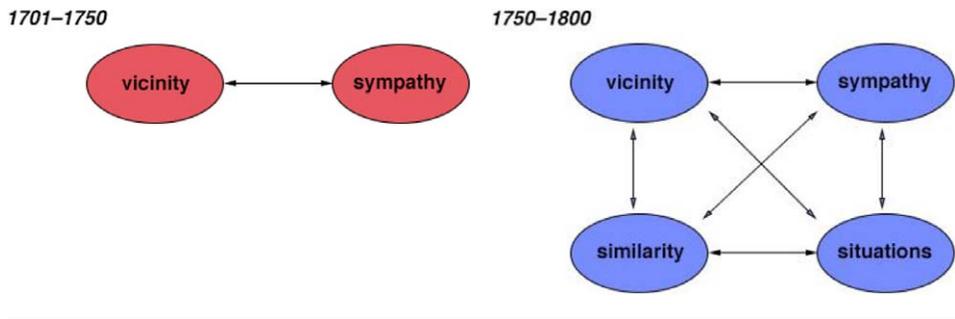
the physiologically tinged “distresses” (rank #47) and “relieving” (#70)—co-associated closely with “sympathy,” which is typical of Scottish Enlightenment vitalism. We see an instance of such collocations, when Smith writes in *TMS* that “sympathy, however, enlivens joy and alleviates grief.”²⁴ As Christopher Lawrence has noted, several of the opening sympathetic scenes of *TMS* could easily be drawn from contemporary medical texts:

Persons of delicate fibres and a weak constitution of body complain, that in looking on the sores and ulcers which are exposed by beggars in the streets they are apt to feel an itching or uneasy sensation in the corresponding parts of their own bodies.²⁵

For Smith, references to corporeal sympathy are consistently identified with weakness, fear, and femininity—“Women, and men of weak nerves, tremble and are overcome with fear, though sensible that themselves are not the objects of the anger”—in which the vitalist understanding is rewritten wholesale as a negative, “delicate,” and “weak” system.²⁶ Consider the condescension when Smith writes, “Some people faint and grow sick at the sight of a chirurgical operation, and that bodily pain which is occasioned by tearing the flesh, seems, in them, to excite the most excessive sympathy.”²⁷ The feminine weakness of fainting fails the higher standard Smith projects with ratiocination—it is the *wrong*, “excessive” sympathy. Sympathy in *TMS* certainly begins as an immediate faculty that synchronizes pains and pleasures between the localized organs of independent people. But as *TMS* advances in social scope to its second stage regarding the impartial spectator and the formation of moral standards, Smith crucially preserves certain traces of lowly hypochondriac vitalist territory—sores, ulcers, nerves, stomachs, irritations—only to identify an *unsuccessful* form of sympathy and, in its stead, unanimously privilege one faculty in particular, intrusively gawking at the sores in the passage just quoted: sight.

The sense of sight is the key load-bearing concept throughout the *TMS*. Smith invokes this faculty as “generating the vital force of sympathy,” just as he places it front and center in the approbative moral work he assigns to the role of the postulated impartial spectator.²⁸ As Emma Rothschild notes, Smith uses the words “eye[s],” conjugations of “to see,” and, of course, “spectator” conspicuously often throughout *TMS*.²⁹ Indeed, almost every scenario in *TMS* involves the act of looking by a sympathizer often called the “onlooker,” in near-theatrical scenes that underscore the effect of images of suffering on the spectator.³⁰ Although some critics have argued that the impartial spectator is derived from conscience rather than sight—emphasizing “the man within the breast”—this has lately been corrected by

TABLE 7. Mutual dependency sets from “sympathy” and “vicinity” at a distance of 10



stressing the spectator as “the looking-glass, or mirror, through which we are able to see how others judge us; without that mirror, reflections of the spectatorial moral agency and conscience within oneself could not develop” (table 7).³¹

Fonna Forman-Barzilai has recently attempted to extend Smith’s sympathy beyond physical and affective proximity so as to encompass other forms of literal and historical distance: “There are other ways than *physically* that a person can be ‘near’ or ‘remote,’” for example, one sympathizes more with distant persons in situations similar to one’s own than in alien ones.³² A comparison of Hume’s writing with the wider cultural archive also works in this respect: whereas in the first half of the eighteenth century, *sympathy* reciprocally binds with “vicinity” alone, by the second half of the century this mutual dependency set has enlarged so as also to encompass “situations” and “similarity”: markers of a more abstract form of likeness. Despite her efforts, Forman-Barzilai is moved finally to admit that “Smith’s theory of moral judgement fails to supply what is necessary for enlarging the perspective of a spectator entangled within . . . historical space.”³³ Although “vicinity” does not occur in *TMS* or *WN*, both texts demonstrate the importance to sympathy of embodied proximity, as Smith writes in the *Essays on Philosophical Subjects*: “We shall be sensible that distance from the eye cannot be the immediate object of sight, but that all visible objects must naturally be perceived as close upon the organ, or more properly, perhaps, like all other sensations, as in the organ which perceives them.”³⁴ To whatever degree the culture at large might extend the frontiers of sympathy as the eighteenth century draws on, Smith continues to focus upon a situational proximity that underpins his political economy and his moral philosophy alike: vision guarantees both sympathetic response and rational self-interest, as against the remoteness of other

TABLE 8. Nouns modified by “distant” in *TMS* and *WN*

nouns modified by “distant”	freq	overall score
sale	15	11.8
country	29	10.21
employment	7	9.84
voyage	3	9.71
place	4	9.41
prospect	2	9.23
market	7	9.19
carriage	2	9.12
province	2	8.64
consequence	2	8.54

minds or abstract credit. This is underscored by the fact that the most common nouns modified by “distant” in both *TMS* and *WN* are those associated with commerce (table 8).

The continuity succeeds because Smith’s moral philosophy privileges appearance over substance—exchange over use value—by deferring conclusive moral judgment to a generalized supra-individual entity. Because Smith’s project in *TMS* is not a prescriptive recommendation of duty valuable in itself, but rather a descriptive account of how moral sentiments arise socially through sympathy, he presents a “weakly moral” framework convenient for the market of *WN*. Confusion between prescription and description incidentally generates a dubious moral gap whereby the agent could feasibly select verdicts of the impartial spectator that align with those of any contemporaneously dominant marketplace of spectators. Appearance here becomes paramount because conclusive moral judgment can be significantly deferred—the proponent of a Ponzi scheme can perform approbative benevolence for years of advantageous PR goodwill before being eventually identified by the marketplace as a fraud. Appearance, buoyed by the absolute emphasis on sight, necessarily glosses over invisible motivation and intention, which are naturally secondary for someone who famously promotes the pursuit of private self-interest as an adventitious source of public welfare. Consider the following passage from *TMS* with an implied commercial emphasis:

We begin, upon this account, to examine our own passions and conduct, and to consider how these must appear to [others] . . . We suppose ourselves the spectators of our own behavior, and endeavor to imagine what effect it would, in this light, produce upon us. This is the only looking-glass by which we can, in some measure, with the eyes of other people, scrutinize the propriety of our own conduct.³⁵

It is remarkably easy here to read optical sympathy—a system of appearance, marketplace scrutiny, and self-presentation—as the mainspring of a larger credit authentication process, namely the “reputation mechanism” of contemporary game theory.³⁶ J. G. A. Pocock writes that “if speculative man was not to be the slave of his passions, he had to moderate these by converting them into opinion, experience, and interest, and into a system of social ties which these things reinforced.”³⁷ This provides an excellent description of how *TMS* seems to contribute to what Albert Hirschman calls capital’s gradual formation of a “set of compatible psychological attitudes and moral dispositions, that are both desirable in themselves and conducive to the further expansion of the system.”³⁸ However, to begin to parse this dimension of Smith’s sympathy as a cluster of appearance, trust, propriety, and credit, we must begin from the rational self-interest that emerges variously as both a certain kind of sympathy and as economic individualism.

In *The Passions and the Interests*, Hirschman outlined how the previously avaricious understanding of commerce became mellowed with palatable qualities of *douceur*, polish, and gentleness—the emergence of *doux commerce*. Smith, he writes, “blunted the edge of Mandeville’s shocking paradox by substituting for ‘passion’ and ‘vice’ such bland terms as ‘advantage’ or ‘interest.’”³⁹ As we can see from table 9, the use of “passions” and “interests” across eighteenth-century genres reflects the clout of *doux commerce*, and unsurprisingly “passions” occurs significantly only in moral philosophy. Affirming Hirschman’s thesis, the picture for “passions” in moral philosophy is one of ungovernable, antisocial danger, panic, and inflammation. For *interests*, the results across genres reveal a somewhat different trend (table 10).

Despite plenty of lexical overlap, “interests” appears to uniquely co-associate with opposite trends across genres: harmonious interconnectedness in economics and violent separation in moral philosophy. Terms exclusively occurring with “interests” in economic texts include “consonant,” “dependent,” “coincide,” “reciprocal,” “connected,” and “conductive”; while in moral philosophy they include “convulse,” “disparity,” “interruptions,” “collision,” “contradictory,” “variance,” “cautions,” “adverse,” “impulses,” and most ironically, “competition.” And while the texts of political economy show some similarities to this moral philosophical trend (“clashing” and “jarring” are after all at the top of their list), there is clearly far more

TABLE 9. “Passions” at a distance of 5 in moral philosophical texts

rank	stat		rank	stat	
1	9.7	agile	21	8.2	habituating
2	9.6	attuning	22	8.2	errands
3	9.4	transfusion	23	8.2	ungovernable
4	9.3	calming	24	8.1	inflame
5	9.2	inflaming	25	8.0	unruly
6	9.2	transfuse	26	8.0	subside
7	8.9	ruggedness	27	7.9	enflamed
8	8.9	irascible	28	7.9	extinguishing
9	8.9	panics	29	7.9	appetites
10	8.9	poised	30	7.9	repels
11	8.8	tempestuous	31	7.9	goaded
12	8.7	headstrong	32	7.8	lustful
13	8.6	domineering	33	7.8	unsocial
14	8.6	disquieting	34	7.8	allays
15	8.5	heeded	35	7.8	curbs
16	8.4	grandeur	36	7.7	lusts
17	8.4	ungovern	37	7.7	enflame
18	8.3	dominant	38	7.7	preservation
19	8.2	complications	39	7.6	overcomes
20	8.2	ruly	40	7.6	ungoverned

ambivalence at play: “dearest,” “conciliate,” “consonant,” and “coincide” have far fewer counterparts in the other genre. This distinction reveals that political economic texts presented an at least potentially benign picture of (self-)interest, while moral philosophy described the same relationship much more combatively.

This insight informs Hirschman’s observation that Smith used “interests” and “passions” as synonyms in *WN*, contrary to their history as

TABLE 10. “Interests” at a distance of 5

econ	stat	freq		moral	stat	freq	
1	12.2	10	clashing	1	11.1	5	convulse
2	10.9	21	jarring	2	10.9	5	disparities
3	9.7	18	dearest	3	10.5	11	prejudicing
4	9.4	5	reparations	4	10.2	15	pertaining
5	9.3	5	disengaged	5	10.2	5	concileable
6	9.2	5	conciliate	6	9.9	8	endears
7	8.9	5	consonant	7	9.8	9	clashing
8	8.9	5	coincide	8	9.2	18	interfering
9	8.8	184	commercial	9	9.2	11	resigning
10	8.6	7	inseparable	10	9.1	21	jarring
11	8.5	16	monied	11	8.9	8	educations
12	8.5	22	reciprocal	12	8.6	9	collision
13	8.4	37	prejudicial	13	8.3	5	depression
14	8.4	11	sacrificed	14	8.3	15	participate
15	8.3	7	warmly	15	8.2	11	betraying
16	8.3	8	subservient	16	8.0	6	convulsion
17	8.3	7	incompatible	17	7.9	6	allurement
18	8.2	11	conducive	18	7.9	6	clash
19	8.2	13	connected	19	7.8	8	perishing
20	8.2	7	interfering	21	7.8	5	interruptions

Left: economic texts; right: moral philosophy.
Terms in bold are unique to the list.

antonyms.⁴⁰ By conflating the two in order to properly address behavior of “the great mob of mankind,” Smith obliterated the “opposition of the interests and the passions and the ability of the former to tame the latter.”⁴¹ While self-interest still achieved marketplace visibility, Hirschman argues that Smith’s concept of *interests* necessarily accommodated passions

like “ambition, the lust for power, and the desire for respect, [which] were considered a solid bloc [that fed] on each other.”⁴² This suspicious union of passions and interests thus resonates not only in *WN* but also in the wider discursive enclave of eighteenth-century political economy as contrasted with moral philosophy.

In spite of this general trend there is a very significant anomaly in *WN*: “detrimental”—the second-strongest co-association with “interests” between 1750 and 1800 and a collocation unique to political economy—does not occur at all within its pages. “Detrimental” and “detriment” imply the identification of risk and liability—“detrimental to the interests” being the usual phrase. One explanation for this absence is that Smith in *WN* transfers the traditional conceptual baggage of “interest[s]” onto “advantage[s],” a concept that shares greater stability across genres. *Interests* in *WN* are consistently understood as fixed, taken-for-granted principles of motivation and behavior, for example, “It is thus that the private interests and passions of individuals naturally dispose them to turn their stock towards the employments which in ordinary cases are most advantageous to the society,” or “They have a plain interest that the whole produce should be as great as possible.”⁴³ *Interests* was thus used primarily in what Hirschman identifies as the routine eighteenth-century assertion that man should be taken “as he really is.”⁴⁴ Smith deploys *interests* as the transparent currency of exposed rational calculation, “a constancy that permitted economists to treat human nature as a dependable factor in analysis.”⁴⁵ But the true kernel of cost-benefit analysis operated uniquely in *WN* via the even more amoral and euphemistic “advantage.” Although “interests” may be “detrimental,” they are so within the wider welfare of community, public, and society. “Advantage,” conversely, is measured according to the market values of profit and benefit. This is borne out by the fact that the strongest bound tokens with “advantage” across the century at a distance of five are verbs such as “reap,” “accrue,” “gain,” and “improve.” We should note, however, that from the 1760s the verb “derive” rises to the top of the list after sixty years at a significantly weaker strength of co-association. Indeed, for 1750–1800, among the top co-associations for “derive” are “advantages” and “benefits,” marking a drastic shift in the composition of the co-association constellation from the first half-century.

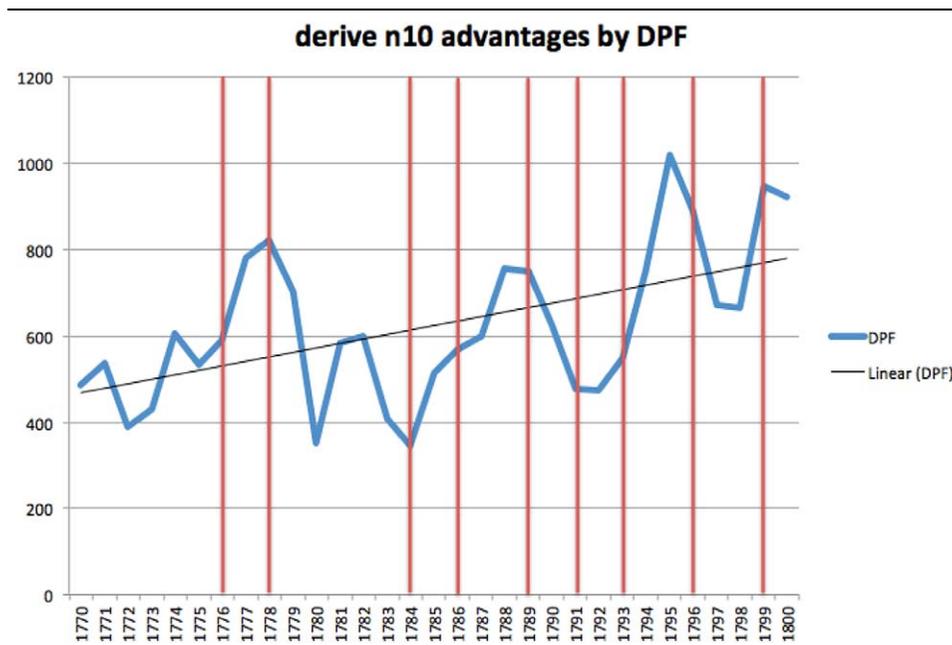
WN reflects the spirit of this architecture in many observations, such as “The advantage which the landlord derives from planting, can nowhere exceed, at least for any considerable time, the rent which these could afford him,” and “Merchants and manufacturers are the people who derive the greatest advantage from this monopoly of the home-market.”⁴⁶ Clearly, “deriving advantage” represents a stage of achieving surplus value above and beyond the mere interplay of interests. In fact “*deriving advantage*” can be

read as the logico-mathematical peak of the economic abstraction process: a suspicious euphemism of “derivation” designed for opportunistic market exploitation. Of course, *deriving advantage* complemented the advent of *doux-commercial* predictability and risk aversion—one could assume that all market actors not only minded their interest but also actively sought to derive advantage *from* one another. As Smith writes, “Every individual is continually exerting himself to find out the most advantageous employment for whatever capital he can command. It is his own advantage, indeed, and not that of the society, which he has in view.”⁴⁷ The euphemism thus implies a more active, egregious market interaction: one derives advantage “from” or “over” *whom* exactly?

Moreover, a comparison of the usage of “deriving advantage” over the last thirty years of the century reveals a reliable swell in the strength of binding between these two terms. We might assume that the printings of *WN* inform the general trend, and indeed there is a significant peak in DPF scores for “derive-advantage(s)” in 1778, the date of publication of the second edition. But if we inspect the trend line over the last thirty years of the century we see that there is no strong correlation with the reprintings. Beyond the fact of its sizable influence through the sheer frequency of its editions, we can surmise that *WN* does not appear to be an independent outlier or motor in the usage of “deriving advantage,” but rather a work reflecting a larger shift (table 11). However, the pattern of distribution of this co-association across genres gives us pause. In table 12 we have used the metadata in ECCO to track movement across the regions in the dataset over the second half of the century.

This spike in the 1760s for texts marked as “literary” is doubtless connected to the fact that before midcentury “deriving advantage” occurs mostly in contexts that are far from economic or even faintly mathematical or calculable—one might think of it as a residue of that earlier conceptual constellation. One finds “deriving advantage” in texts concerned with aesthetic or literary matters, as in John Hawkesworth’s literary periodical, *The Adventurer* (1760): “You may derive yet greater delight and advantage from the representation of his pieces.”⁴⁸ Or from a collection of pieces on beauty (1761): “What advantage do we derive from such writings?”⁴⁹ In his *Journal of a Voyage to Lisbon* (1755), Henry Fielding wrote about how a good critic, by denying literary ornament, could “derive no other advantage than the loss of an additional pleasure in the perusal.”⁵⁰ In *The Expedition of Humphry Clinker* (1771), Tobias Smollett writes, “It is a lucky circumstance, however, that her reputation will not suffer any detriment, but rather derive advantage from the discovery.”⁵¹ Even a text on poetics (1769) could read thus: “Eight verses out of ten, throughout our best poems, have no other advantage than what they derive from the use of

TABLE 11. DPF scores between “derive” and “advantages” at a distance of 10, 1770–1800



Diagonal line shows linear trendline. Vertical lines indicate years of London (re)printings of WN.

dissyllables.”⁵² “Deriving advantage” thus seems to collect a peculiar *doux-commercial* gentility that helps equate disinterested aesthetic pleasure with profit.

The genetically heterodox genesis of “derive-advantage(s)” corresponds with its two occurrences in *TMS*:

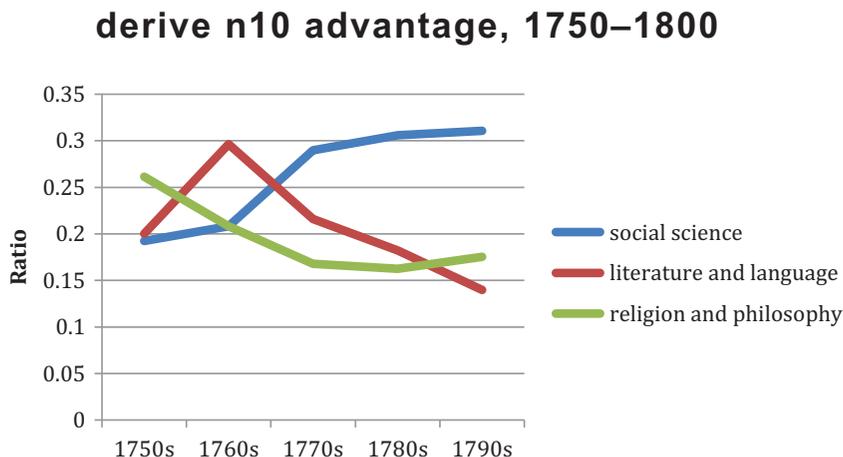
There is a satisfaction in the consciousness of being beloved, which to a person of delicacy and sensibility, is of more importance to happiness, than all the advantage which he can expect to derive from it.⁵³

And nearly one hundred pages later:

The love of just fame, of true glory, even for its own sake, and independent of any advantage which he can derive from it, is not unworthy even of a wise man.⁵⁴

Crucially, these two almost identical phrasings implicitly argue against the notion of gaining advantage through calculable actions that is at the heart of WN. Moreover, these two instances address a socially determined happiness

TABLE 12. Ratio of the collocation “derive–advantage” at a distance of 10 by genre, over total collocations of “derive–advantage” at a distance of 10



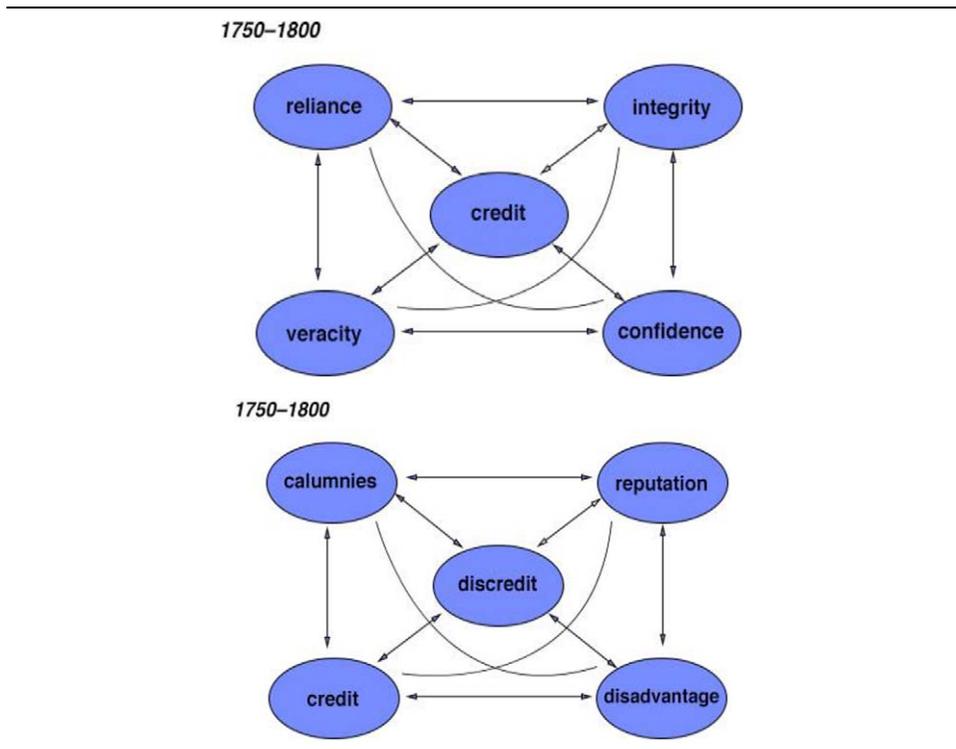
Genre categorizations derived from ECCO are imperfect but still representative.

that seems to be in tension with the coincident advantages to be derived from spectatorial approbation, fame, and being beloved. Here, the earlier aesthetic aspect of “derive-advantage(s)” is being applied to the spectatorial marketplace. This interplay of aesthetic-optical judgment, deriving advantage, and the ultimate formation of ethical or moral reputation generates in turn a direct economic correlate in *credit*.

In the eighteenth century, there was still no linguistic distinction between economic and social credit: “credit” and “creditor” connoted the ethical currency of trust, integrity, confidence, honor, and reliance that ostensibly translated transparently between personal and business life.⁵⁵ Mutual dependency sets from 1750 to 1800 demonstrate the ethical-economic strength of *credit* and the lack thereof (table 13). The overlap of ethics and economics contained in “credit” is clear—its presence commands veracity, reliance, and integrity; its absence, calumnies and disadvantage. In fact, the overlap of *credit* with *sympathy* further underscores the ethical bedrock of *credit* (table 14).

For both *sympathy* and *credit*, “reliance” and “confidence” figure prominently in their conceptual makeup because of the ethico-economic interplay unique to early modern capitalist transactions that would degenerate by the end of the century via abstract institutionalized forms of credit and *doux-commercial*, mathematical pretensions of stability.

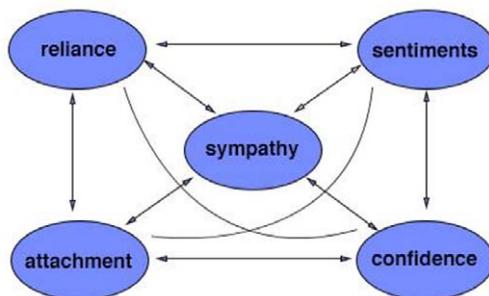
TABLE 13. Mutual dependency sets of “credit” and “discredit” at a distance of 10, 1750–1800



For early modern merchants, credit was a necessary business risk that usually required an initial leap of faith that might only be subsequently supported by the confidence accruing through repeated transactions resulting in payment. Paper money and specie were in notoriously short supply: about three pounds’ worth of coins per Englishman existed in circulation in 1696.⁵⁶ The lack of a stable central currency was such that Bank of England notes “did not pass as currency beyond about a twenty-mile radius of London for the entire eighteenth century.”⁵⁷ With this dearth, a merchant simply could not work outside credit—it was so intimately connected to the growth of overseas trade that, as Julian Hoppit explains, merchants “would have been hopelessly uncompetitive . . . because [the credit system] worked more often than not. It allowed trade to expand, strengthened commercial ties, and helped reduce some risks.”⁵⁸ Credit played a similarly dominant role in local communities, as noted by Craig Muldrew’s study of credit litigation in seventeenth-century King’s Lynn: “Most buying and selling was done on credit, and

TABLE 14. Mutual dependency set of “sympathy” at a distance of 10, 1750–1800

1750–1800



accounts were compared at regular intervals to settle the difference in cash.”⁵⁹ At the local level, credit was an overwhelmingly common form of deferred reciprocity, as Muldrew substantiates the long-term scope of early modern credit; most people accumulated numerous reciprocal debts over time that were only eventually mutually canceled at convenient intervals.⁶⁰

The risks of credit correlated along the sympathetic gradient—the more distant or dissimilar the borrower, the higher the risk. The most common means of extending commercial credit was by shipping goods in advance of payment or accepting bills of exchange drawn on a third party—both were exceptionally risky and uncertain.⁶¹ It was especially difficult to verify the integrity of the distant trading partner. Whereas small communities would know the integrity of this or that borrower, “merchants trading between different communities would not have had the same access to knowledge about each others’ characters as they would have had about those of their neighbors.”⁶² The bill of exchange facilitated transactions between individuals outside their communities, hundreds or even thousands of miles away.⁶³ The conditions of the bill of exchange required a particularly trying covenant of trust, as John Smail notes:

To grant a credit period of six to twelve months when selling goods required that one trust one’s credit to remit the bill at the proper time. Moreover, one had to trust that the bill itself would be a good one, drawn on the basis of a balance held in the hands of a sound house that would pay the debt on the date specified.⁶⁴

Still, the legal enforcements behind the bill of exchange provided only limited protection because the processes for repayment or bankruptcy were usually more expensive than the payment at stake.⁶⁵ Therefore, merchants had to open often dangerously risky credit relations with “firms about which

they had only limited, often hearsay, evidence.”⁶⁶ Credit was a distinctly *social* risk—in contrast to losses by transit, handling, or the insurable fire or sea—whose only recourse for minimization was through choosing honest, reliable trading partners. The credit economy therefore demanded a moral correlate of confidence, reliance, integrity, honor, and probity. We can get the measure of this when we inspect the co-associated language around the terms “character,” “integrity,” “probity,” and “prudence”—that is, concepts ostensibly regarding the *substance* of credit. By comparing the two subcorpora around this axis, we find that moral philosophical texts display a cluster built upon an *essential* quality that becomes socially instrumentalized in the economic texts (table 15). Compare *probity* in moral philosophy with its economic counterpart: “frankness” and “candour” instead of “punctual” and “industry.” Indeed, what is substantive and genuine for moral philosophy seems to become expedient in economic texts. But remarkably, this distinction dissolves in those terms related to the sociality of credit (table 16).

Especially noteworthy are the contrasts in *reputation* and *trust*, which seem to yield the opposite motion. In the case of “reputation” moral philosophy tends toward the negative (“blacken,” “blemishing,” “deluding,” “slander”), whereas economic texts do the opposite, slant toward the positive (“unimpeached,” “probity”). In the case of the other term, “trust,” the direction of travel is reversed: in moral philosophy we find more positive co-associates (“reliance,” “rigorous”), while in economic discourse we find negative co-associates (“irretrievable,” “imperious,” “imprudent,” “unworthy”).

These computational analyses have yielded a number of original findings. Despite the fact that political economy was a nascent discourse within the eighteenth century, and as such not yet fully or consistently differentiated from other genres, we clearly perceive that many of its key concepts are suspended within very different networks from those that we find in texts of moral philosophy. These differentiations do not always pan out quite as we might expect, however: while in the case of a term such as “probity,” the stress in political economy falls—as we might expect—upon utilitarian efficiency, more substantive terms such as “reputation” and “trust” reveal a very different picture. Within a developing international system of speculative finance, a notion of “deep” trustworthiness increasingly displaces the visible availability of agents in a local economy. Moral philosophy, by contrast, despite its civic humanist pretensions, frequently evinces a more skeptical attitude toward human character. It is in this broader context—where the distinctions between entrenched and emergent genres are demonstrable, if often porous—that we can resituate *das Adam Smith Problem*. Notwithstanding attempts to convert Smith into an

TABLE 15. High-ranking co-associations at a distance of 5 for “character,” “integrity,” “probity,” and “prudence” unique to moral philosophy and political economy

	moral	econ
character	Immaculate (8), unblemished (7)	reputation (20), manners (29), paint (7)
integrity	unquestioned (11), genuineness (13), unshaken (18), inviolate (10), inflexible (31), incorruptible (7), inviolable (24), firmness (31)	sentiment (5), testimony (6), behaved (5), diligence (12), sagacity (11), impartiality (10), modesty (5), zealous (6), fortune (15)
probity	frankness (7), candour (5), patriotism (7), sincerity (22), veracity (5), generosity (14)	punctual (5), expertness (7), confiding (7), moderation (5), privately (6), experience (27), industry (10)
prudence	veracity (12), unambitious (9), evenness (5), reliance (11)	rashness (3), rigor (3), discreet (6), steadiness (5), confidence (6), imitating (7)

Raw frequencies in parentheses. Each category contains terms co-associating uniquely within their genre with “character,” “integrity,” etc., which means there is no significant probability of their occurring in the opposite genre at a distance of 5 from the focal tokens in the left-hand column.

avatar for neoliberalism, his moral philosophy and political economy alike register the need to safeguard sympathy and speculative credit against the excesses that are intrinsic to both forms of conduct, through a rational self-interest grounded in visibility. As we have seen, Smith in fact proves powerfully unrepresentative of broader cultural trends, insofar as his own works elide what is beginning to clarify into the separate genres of political economy and moral philosophy. What the later reception of his works designated as a “problem” was therefore a function of the hardening of generic categories outside the immediate curtilage of *TMS* and *WN*. We should not use this as a brush to tar their author with the complaint of conceptual incoherence; rather, we should turn our attention to the desideratum of coherence as a necessary and sufficient condition for generic membership. This might make us pause and consider both the advantages and disadvantages of using genre as a way of sifting or categorizing discourses, texts, or ideas.

TABLE 16. High-ranking co-associations at a distance of 5 for “confidence,” “esteem,” “reputation,” and “trust” unique to moral philosophy and political economy

	moral	econ
confidence	undoubting (14), conciliation (14), pretenders (23), unshaken (10), supercilious (12), perjury (18), compulsion (12), presumption (46), insinuated (8)	unabated (5), restore (16), withdrawn (5), recovering (5)
esteem	approbation (226), greediness (6), discredit (12)	obedient (9), profession (5), rewarded (5)
reputation	blemishing (10), blacken (14), discredit (25), currency (14), undeserved (6), deluding (6), subtlety (14), acquired (239), intents (5), slander (15)	unimpeached (5), slur (7), probity (7), persuasion (7), ability (12)
trust	reliance (13), testify (11), deceive (13), rigorous (13)	Irretrievable (6), qualifying (5), imperious (5), imprudent (6), unworthy (6), conscience (5)

Raw frequencies in parentheses.

Notes

1. The test case is also referred to as “Das Adam Smith Problem,” the German definite article betraying the problem’s genesis among nineteenth-century German economists determined to disprove Smith as a cultural entrepreneur of a uniquely *British* economic program unfit for Germany.
2. Adam Smith, *The Theory of Moral Sentiments* (1759) (New York, 2010); Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations*, ed. Tom Griffith (1776) (London, 2012). Henceforth we will refer to these works as *TMS* and *WN*, respectively.
3. Mary Poovey, *Genres of the Credit Economy* (Chicago, 2008), 14. See Michael McKeon, *The Origins of the English Novel, 1600–1740* (Baltimore, 1987), 26.
4. Liz Bellamy, *Commerce, Morality, and the Eighteenth-Century Novel* (Cambridge, 1998), 37.
5. *Ibid.*, 23.
6. Jerry Evensky, “Setting the Scene: Adam Smith’s Moral Philosophy,” in *Adam Smith and the Philosophy of Law and Economics* (New York, 1994), 26.
7. Margaret Schabas, *The Natural Origins of Economics* (Chicago, 2005), 2.

8. Amos Witztum, "A Study into Smith's Conception of the Human Character: Das Adam Smith Problem Revisited," *History of Political Economy* 30, no. 3 (1998): 489.
9. David Wilson and William Dixon, "Das Adam Smith Problem: A Critical Realist Perspective," *Journal of Critical Realism* 5, no. 2 (2006): 251.
10. *Ibid.*
11. Peter de Bolla, *The Architecture of Concepts* (New York, 2013), 29.
12. *Ibid.*, 6.
13. "Word Vectors in the Eighteenth Century," on Ryan Heuser's website, content posted April–September 2016, ryanheuser.org, <http://ryanheuser.org/word-vectors>; Andrew Goldstone and Ted Underwood, "The Quiet Transformations of Literary Studies: What Thirteen Thousand Scholars Could Tell Us," *New Literary History* 45, no. 3 (Summer 2014): 359–84; Andrew Goldstone and Ted Underwood, "What Can Topic Models of PMLA Teach Us About the History of Literary Scholarship?," *The Stone and the Shell* (blog), 14 December 2012, <https://tedunderwood.com/2012/12/14/what-can-topic-models-of-pmla-teach-us-about-the-history-of-literary-scholarship/>.
14. The Cambridge Concept Lab is a four-year project to develop computational modes of inquiry into the structure of conceptual forms. See <https://concept-lab.lib.cam.ac.uk/>.
15. In order to avoid very small data counts, we in fact sum the collocations of a lexical "window" of five words: so a distance of ten in practice means 8, 9, 10, 11, and 12 words before and after the focal token.
16. See Gerlof Bouma, "Normalized (Pointwise) Mutual Information in Collocation Extraction," *Proceedings of the Biennial GSCL Conference* (2009): 31–40; K. W. Church and Patrick Hanks, "Word Association Norms, Mutual Information, and Lexicography," *Computational Linguistics* 16, no. 1 (1990): 22–29; J. Pennington, J. R. Socher, and C. D. Manning, "Glove: Global Vectors for Word Representation," *EMNLP* (Empirical Methods in Natural Language Processing) 14 (2014): 1532–43.
17. For a fuller account of this method, see Peter de Bolla et al., "Distributional Concept Analysis: A Computational Model for Mapping the History of Concepts," *Contributions to the History of Concepts* 14, no. 1 (June 2019).
18. However, for our genre-specific queries, we used a different but comparable corpus-analysis tool, AntConc, for collocations ranked similarly by statistical probability. These results should still compare representatively with the cleaner and stronger data we draw from ECCO (Eighteenth-Century Collections Online), *TMS*, and *WN*.
19. These totals include reprints of specific texts or multiple editions, a conceivable methodological hang-up of further "noise" that de Bolla, *Architecture of Concepts*, 8, helpfully dismisses as negligible because his approach deals with word circulation rather than unique raw frequency, dissemination, or readership.
20. Italics will be used to denote references to a concept rather than to a word or focal token.
21. Murray Milgate and Shannon C. Stimson, *After Adam Smith: A Century of Transformation in Politics and Political Economy* (Princeton, 2009), 49.
22. Catherine Packham, *Eighteenth-Century Vitalism* (London, 2012), 107.
23. *Ibid.*, 104.
24. *TMS*, 19.
25. *Ibid.*, 14; Christopher Lawrence, "The Nervous System and Society in the Scottish Enlightenment," in *Natural Order: Historical Studies of Scientific Culture* (London, 1979), 32.

26. TMS, 36.
27. Ibid., 29.
28. Packham, *Eighteenth-Century Vitalism*, 55, 67; Peter de Bolla, "The Visibility of Visuality," in *Vision in Context* (New York, 1996), 75; Vivienne Brown, *Adam Smith's Discourse: Canonicity, Commerce, and Conscience* (London, 1994), 35–36; Emma Rothschild, "The Theory of Moral Sentiments and the Inner Life," *Adam Smith Review* 5 (2010): 26.
29. Ibid.
30. Packham, *Eighteenth-Century Vitalism*, 67; Audrey Jaffe, *Scenes of Sympathy* (Ithaca, 2000), 10.
31. David Bevan and Patricia Werhane, "The Inexorable Sociality of Commerce: The Individual and Others in Adam Smith," *Journal of Business Ethics* 127 (2015): 331. See, for spectator derived from conscience, D. D. Raphael, *The Impartial Spectator* (Oxford, 2007).
32. Fonna Forman-Barzilai, "Sympathy in Space(s): Adam Smith on Proximity," *Political Theory* 33, no. 2 (April 2005): 197.
33. Ibid., 209.
34. Adam Smith, *Essays on Philosophical Subjects* (London, 1795), 216.
35. TMS, 135.
36. J. J. Graafland, "Do Markets Crowd Out Virtues?," *Journal of Business Ethics* 91, no. 1 (January 2010): 10.
37. J. G. A. Pocock, *Virtue, Commerce, and History* (Cambridge, 1985), 115.
38. Albert O. Hirschman, "Rival Interpretations of Market Society: Civilizing, Destructive, or Feeble?," *Journal of Economic Literature* 20, no. 4 (Dec. 1982): 1466.
39. Albert Hirschman, *The Passions and the Interests* (Princeton, 1977), 18–19.
40. Ibid., 111.
41. Ibid.
42. Ibid., 110.
43. WN, 627, 384.
44. Hirschman, *Passions*, 14.
45. Joyce Oldham Appleby, *Economic Thought and Ideology in Seventeenth-Century England* (Princeton, 1978), 93.
46. WN, 173, 478.
47. Ibid., 443.
48. John Hawkesworth, *The Adventurer* (London, 1760), 91.
49. *Fugitive Pieces on Various Subjects* (London, 1761), iv.
50. Henry Fielding, *The Journal of a Voyage to Lisbon* (London, 1755), xv.
51. Tobias Smollett, *The Expedition of Humphry Clinker* (London, 1771), 50.
52. Daniel Webb, *Observations on the Correspondence between Poetry and Music* (London, 1769), 125.
53. TMS, 49.
54. Ibid., 141.
55. Craig Muldrew, "Interpreting the Market: The Ethics of Credit and Community Relations in Early Modern England," *Social History* 18, no. 2 (May 1993): 177.
56. Ibid., 171n40.
57. Poovey, *Genres of the Credit Economy*, 46.
58. Julian Hoppit, *Risk and Failure in English Business, 1700–1800* (Cambridge, 1987), 102.
59. Craig Muldrew, "Credit and the Courts: Debt Litigation in a Seventeenth-Century Urban Community," *Economic History Review* 46, no. 1 (Feb. 1993): 25.

60. Muldrew, "Market," 173.
61. John Smail, "Credit, Risk, and Honor in Eighteenth-Century Commerce," *Journal of British Studies* 44, no. 3 (July 2005): 442.
62. Muldrew, "Market," 180.
63. Smail, "Credit," 442.
64. *Ibid.*, 445.
65. *Ibid.*
66. *Ibid.*, 446.