Spaces of Empire

By

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Abstract

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This project is an attempt to offer a genealogy of Empire from a different perspective, with different possibilities for resemblance and familiarity, to seek an order not in sequence in an effort to destabalize long-held causal narratives of empire(s). Beginning with the Romans, I am interested in an "experiential" historicism that wants to articulate what historical subjects thought they were doing as empire as a social and political construct was coming into being. To such an end, I examine distinct imperial Roman building practices—their devices to tell the time, their cities both at home and abroad, their roads, and their maps—as well as the metaphorical language surrounding them. Jumping ahead to the British imperial novel, both early and late, I trace the evolution and devolution of these edifices and metaphors in order to show the ways in which empire abstracts and aestheticizes itself both conceptually and in practice. Finally, I use a combination of the concrete and metaphorized world of empire under the Romans, and its abstraction and aestheticization under the British, to argue for the current manifestation of imperial "space" in the digital realm, which was envisioned early on through imperial metaphors and practices. In this way, I argue against conceptions of the digital as a "new" space, free from the overarching logic of Empire, and eventually seek to find a road out towards political and imaginative alternatives.

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Contents

Spaces of Empire

Layla Nova Forrest-White

INTRODUCTION

In many ways, this work is directly concerned with the same intersection of points and motivations behind Hardt and Negri's 2000 *Empire*. Like them, I am most concerned with clarifying that I am not using empire, nor their Empire, as any kind of metaphor, and thus tool for excavating and illuminating resemblances or discords between "x phenomena" and previous empires, but instead, as they say, as a concept, "which calls primarily for a theoretical approach."[1] This theoretical approach, then, is heavily dependent upon a strong operating concept of empire, and here, too, I defer to Hardt and Negri, though with some serious caveats. My first caveat is that Hardt and Negri's concept of Empire is in juxtaposition with imperialism, which they define as a by-gone form of European colonialism and economic expansion: "the territorial boundaries of the nation delimited the center of power from which rule was exerted over external foreign territories through a system of channels and barriers that alternately facilitated and obstructed the flows of productions and circulation."[2] Secondly, they argue that the United States and its Jeffersonian constitution of "expanding frontiers" and "power [...] effectively distributed in networks"[3] is the current generator of this new, conceptual practice of Empire. I disagree with both of these fundamental assertions in that to so delineate and demarcate Empire versus empire versus imperialism versus European colonialism, etc. undermines their most basic conceptual tenet concerning Empire, namely, that "Empire is characterized fundamentally by a lack of boundaries: Empire's rule has no limits."[4] I am in absolute agreement with Hardt and Negri on this point. Empire's rule has no limits, and this is nowhere clearer than on the conceptual level. As an idea, it has spawned itself repeatedly throughout, for my interests, Western history, and my intention is to follow its genealogy, as it always already holds its own logic of a globe without limits and time without end. Finally, before returning to Hardt and Negri's definition of Empire, suffice it to say that I differ from them most drastically in this dissertation's overarching argument, which is that the Internet is the latest "space" to be understood through the unshakable concept of Empire, and not, as the two argue in 2004's *Multitiude*, the networked path to a truly democratic state (of mind, even).[5]

Turning to their clear and concise concept of Empire, Hardt and Negri define it thus:

> The concept of Empire is characterized fundamentally by a lack of boundaries: Empire's

[1] Hardt & Negri. *Empire*. Cambridge: Harvard University Press, 2000, xiv.
[2] Ibid. p. xii.
[3] p. xiv.
[4] Ibid.
[5] Hardt & Negri. *Multitude: War and Democracy in the Age of Empire*. New York: Penguin Books, 2004.

> rule has no limits. First and foremost, then, the concept of Empire posits a regime that effectively encompasses the spatial totality, or reality that rules over the entire "civilized" world. No territorial boundaries limit its reign. Second, the concept of Empire presents itself not as a historical regime originating in conquest, but rather as an order that effectively suspends history and thereby fixes the existing state of affairs for eternity. From the perspective of Empire, this is the way things will always be and the way they are always meant to be. In other words, Empire presents its rule not as a transitory moment in the movement of history, but as a regime with no temporal boundaries and in this sense outside of history or at the end of history. Third, the rule of Empire operates on all registers of the social order extending down to the depths of the social world. Empire not only manages a territory and a population but also creates the very world it inhabits. It not only regulates human interactions but also seeks directly to rule over human nature. [...] Finally, although the practice of Empire is continuously bathed in blood, the concept of Empire is always dedicated to peace—a perpetual and universal peace outside of history.[6]

Besides the importance of the definition itself, to which I will continuously refer, is the distinction there at the very end, between the "practice of Empire" and the "concept of Empire". For my purposes, particularly when looking at the early Roman Empire as the origin for and of this concept, it is not at all easy to separate the concept from the practice, as the two were far more murkily combined, helping, along the way, to mutually solidify the other's status as such. In other words, at this early stage, it is perhaps more clear to say that the Empire's practice, at least at home at Rome, was to create its concept, both internally, and externally as a quasi-participatory/inclusive form of social and political dominance.

My desires in better articulating what constituted this concept and practice of empire in the ancient sense are to thus be able to extrapolate to other practices of empire, be they self-evident (as with the late nineteenth- and early twentieth-century British novel), or not (as with the conceptual and architectural structures underlying the Internet and digital practices). This work is an attempt to offer a genealogy of empire from a different perspective, with different possibilities for resemblance and familiarity. Such language leads to the undoubtedly Foucauldian nature of this project. Many of my foundational assumptions and later theoretical backings would not be possible without Foucault's work in many different areas. To begin with, the structural conceit of my argument—that there is a form of analysis or "bringing to light" concerned not with a knowledge form's "rational value" or "objective form," but instead with that knowledge's ongoing "conditions of possibility"[7]—is what Foucault has called in many places "not so much a history [...] as an archaeology."[8] Following this, how to go about conducting such an archaeological study is also taken from Foucault, in that "consider[ing] the very historicity of forms of experience"[9] is my main goal in attempting to offer not a history of Empire, but rather an archaeology of its continuously evolving conditions of possibility, and, thus, of forms of experience under imperial order(s).

Finally, the overall motivation for such a project is also Foucauldian, in that looking to establish an "order among things"—especially when those things are themselves being

[6] *Empire*. pp. xiv-v.

[7] Foucault. Preface to *The Order of Things*. New York: Vintage Books, 1994, p. xxii.

[8] Ibid.

[9] Foucault. Preface to *The Uses of Pleasure*, in *The Foucault Reader*. New York: Pantheon, 1984, p. 334.

examined for aspects of the political / social order of which they are a part—is not the sequential, historical mode of "linking consequences," but instead an effort at "grouping and isolating."[10] Following the visual metaphor his archaeological mode of inquiry has given him, Foucault ends the preface to *The Order of Things* thus: "[i]n attempting to uncover the deepest strata of Western culture, I am restoring to our silent and apparently immobile soil its rifts, its instabilities, its flaws; and it is the same ground that is once more stirring under our feet."[11] Though with far less grand ambitions, my desire is the same in that I am most interested in an inquiry into imperial forms and spaces which does not presuppose its own findings, but instead seeks an order not in sequence, in an effort to destabilize the long-held causal narratives of empires.

Historical narratives of empire are especially prone to causality, as empire often seems to be defined as a threshold of acquisition: once a certain power acquired x amount of land/resources/people, empire was established. Thus, accounting for empire becomes synonymous with accounting for the how's and when's of acquisition. Such historicism is the causality of time and sequence, and my intent here is instead to find an archaeology of space and contiguity, what Henri Lefebvre and others have referred to as the project of "spatialization," thereby arguing for the philosophical, and not just scientific, importance of actual, and not just "mental," space. As he says in *The Production of Space*, the "emancipation of the sciences—and especially of mathematics—from their shared roots in traditional metaphysics" led to the quantification and qualification of space as "absolute," and thus of the realm of science, and not philosophy.[12]

For my interests, those who have been most instrumental in reasserting and reintegrating space's importance in philosophical and critical study in ways applicable to both the literary and historical record have been those who have challenged Kant in order to prove the human production of space, or what Lefebvre and others have called "place,"—all those ways, in other words, in which space is *a posteriori* rather than *a priori*. Though space, along with time, may be a fundamental condition for any other phenomena, there are tremendous consequences in not distinguishing between this *a priori* space which we cannot really know, and the social, political, "governmentalized" place of human living.

In addition to Lefebvre (and Foucault), there is one more key thinker in this spatializing of literature: Walter Benjamin, for all aspects of his work in general, but in particular his twin ideas of what Susan Buck-Morss has called the "truth of historical transiency," and the experiential voice as the only one capable of speaking such a truth. This truth, in addition, is found in reading the changing language of cities. Speaking of his essay with Asja Lacis on Naples, and that city's "porosity," Buck-Morss says that

> an experiment is underway, how images, gathered by a person walking the streets of a city, can be interpreted against the grain of idealist literary style. [...] The phenomena—buildings, human gestures, spatial arrangements—are "read" as a language in which a historically transient truth (the truth of historical transiency) is expressed concretely, and

[10] *The Order of Things*. p. xix.

[11] Ibid. p. xxiv.

[12] Lefebvre, H. *The Production of Space*. Translated by Nicholson-Smith, D. Cambridge: Blackwell Publishing, 1991, pp. 1–2.

> the city's social formation becomes legible within perceived experience.[13]

This type of experience carries shock at its center, and it is, for Benjamin, Baudelaire, who, living in shock[14] is most able to both read the city, and also interpret it back again for another reader, "against the grain of idealist literary style." This new literary style, while within the genre of lyric poetry, comes to be called modernism, after Baudelaire's own coinage of the term.

Coupled to this anti-idealist literary style, which I will call experiential rather than modern to avoid historical confusion, the second methodology I take from Benjamin is in his creation, or lack thereof, of a narrative in this experiential voice. The *Arcades Project* is in constant play with the double meaning of the world "plot," as it is intimately tied to the word in its architectural / spatial sense (the Parisian arcades), while it simultaneously attempts to avoid literary "emplotment" altogether. Instead, Benjamin quotes his way through the nineteenth century, and towards an alternative theory of history: "this work," he writes in Convolute N, "has to develop to the highest degree the art of citing without quotation marks. Its theory is intimately related to that of montage."[15] Soon after, he records a conversation he had with Ernst Bloch:

> A remark made by Ernst Bloch apropos of *The Arcades Project*: "History displays its Scotland Yard badge." It was in the context of a conversation in which I was describing how this work—comparable, in method, to the process of splitting the atom—liberates the enormous energies of history that are bound up in the "once upon a time" of classical historiography. The history that showed things "as they really were" was the strongest narcotic of the century.[16]

For Benjamin, then, the story-teller, or "emplotter" of history switches from the voice of classical historiography, which intones "once upon a time," to the montage editor's silence (even the quotation marks disappear), which culls and patches.

In this way, an experiential historical account is fragmentary, dissolute, and decidedly non-teleological. The seeming radicality of such an account is, I think, neutralized in that it is a theoretical claim that informs much historical work; those who have claimed the "end of history" from Hegel to Fukayama, are far fewer than those who allow its constantly evolving nature, and thus the fragmentary nature of any particularity thereof. Interestingly enough, the desire for the telos of revolution, which surely informs Benjamin's work, is that which cannot be accounted for. As Frederic Jameson characterizes what he calls Benjamin's "weak messianism," there is

> nothing predictable, nothing to be read in the signs of the times, in the first few swallows or shoots, the freshening of the air. [...] This is the notion of the non-announced, the turning

[13]Buck-Morss, Susan. *The Dialectics of Seeing: Walter Benjamin and* The Arcades Project. Cambridge: The MIT Press, 1991, p. 27.

[14]At the end of "On Some Motifs in Baudelaire," Benjamin offers that Baudelaire, in his poetry, has collapsed *Erfahrung* (an experience, prompted as such by shock) and *Erlebnis* (something merely lived through) in that shock is the "sensation of the modern age," as the "disintegration of the aura" is experienced as shock (*Illuminations*, p. 194.).

[15]Benjamin, Walter. *The Arcades Project*. Translated by Howard Eiland and Kevin McLaughlin. Cambridge: The Belknap Press, 1999, N1, 10.

[16]Ibid. N3, 4.

of a corner in which an altogether different present happens, which was not foreseen.[17]

Benjamin's is a historiography of potential and potentials, in both the scientific and colloquial sense of the word. In its efforts to erupt history's dormancy, *The Arcades* reads not just like the scraps left from an explosion, or, as Buck-Morss and others argue, as the notes to a more coherent project, but as one potential and free-standing attempt to story-tell Benjamin's experience of the nineteenth century. And while I think that Foucault's "historicity of forms of experience" owes much to Benjamin's work, I must structurally orient myself after the work of the former—in the hopes that his process is somewhat imitable—while led more in spirit by the completely inimitable work of the latter.

This project's final overarching theoretical prompting comes from George Lakoff and others' work on metaphor and categorical thinking. In attempting to highlight this moment in ancient history that I have characterized as Empire's practice being its conceptual formulation of itself, I will be examining several instances of political metaphor-making, as well as the process of experiential meaning derived from such metaphors. Here, I would like to clearly state the more large-scale issues from metaphor theory with which I am working, while examining smaller sub-categories in each chapter.

The most fundamental assertion, beginning with 1980's *Metaphors We Live By*, is that metaphors are not simply an issue of words, emerging in language, but that our "ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature."[18] Metaphors, then, particularly the largest conceptual metaphors that are so pervasive that they are rarely seen as such, must be as rooted in experience as they are in language, such that "no metaphor can ever be comprehended or even adequately represented independently of its experiential basis."[19] Adding on to Jakobson's detailing of the principle of similarity in metaphoric thinking—as opposed to the principle of contiguity for metonymic thinking[20]—Lakoff and Johnson argue that not only is the "essence of metaphor [...] understanding and experiencing one thing in terms of another",[21] but also that, by the time of their afterword written to accompany the 2003 edition, this similarity need not be self-evident, or an indisputable truth asserted by the metaphor. A metaphor "is typically based on cross-domain correlations in our own experience, which give rise to the perceived similarities between the two dimensions within the metaphor. For example, the persistent use of a metaphor may create perceived similarities [...]."[22]

Attention to this way in which a metaphor may alter experience is important for two reasons. On the categorically smaller level, this type of "cross-contamination" is thematized in many of my metaphors of interest in that they are what linguists might call "metaphoric blends" in which "one input space is structured by the source domain

[17]Jameson, F. "Marx's Purloined Letter" in *Ghostly Demarcations: A Symposium on Jacques Derrida's* Specters of Marx. London: Verso, 1999, p. 63.

[18]Lakoff, George and Johnson, Mark. *Metaphors We Live By.* Chicago: The University of Chicago Press, 1980, p. 3.

[19]Ibid. p. 19.

[20]cf. Jakobson's "The Twofold Character of Language"

[21]Lakoff and Johnson. p. 5.

[22]Ibid. p. 245.

of an existing conceptual metaphor in the conceptual system, and the other input space is structured by the target domain of that metaphor."[23] For many students of literature, this is, in many way, simply a "good metaphor," one whose flow of logic is not delimited as being from point A (source domain) to point B (target domain), but instead cyclical and mutually constitutive such that both sides inform each other in terms of meaning making. On the far larger level, however, keeping a focus on the ways in which a metaphor may alter experience, and vice versa, is extremely important for this project in that my metaphors of interest are not, at least in their original political and social usages, naturally emergent from inferences based upon lived experiences as a linguistic being.

As many scholars, though rarely simultaneously, have argued, metaphoric language in technology and politics alike is designed and fashioned in order to create and manipulate understanding and meaning (and eventually categories of use and behavior), as opposed to the more naturally "emergent" nature of other metaphors. Though some grounding in that sense of natural emergence must be there in order for the metaphor to be successful, I am paying attention to the strategic, political usages and creations of metaphors, used and created to give understanding to a world under imperial rule. In addition, some of the non-overtly metaphoric experiential phenomena of the early Empire—crowds, traffic, etc.—have become, over time, the experiential basis for propositions of similarity, without full examination of their phenomenological emergence as consequences of life under imperial structures.

Indeed, the success of some of these metaphors—center and periphery; time as space—is such that, by our own time, they appear to us as some of those barely-metaphoric conceptual bases of thinking. I am working against this naturalization process both to uncover the political machinations fostering these entrenched senses of similarity, but also to eventually argue that not only are the metaphors employed to give conceptual meaning to the early Internet imperial in origin, so too are they "bad metaphors," metaphors that do not fit the experience or the behavior, but, due to their pervasiveness and historically political nature, have drastically altered the possibilities for this experience and behavior, creating a false sense of similarities, a sense of which this project is attempting to remove.

Returning to this project as a whole, in attempting to offer such a historicity of forms of experience under empire—and to eventually argue for a new, evolving form of empire in our current, digital age—I have tried to allow a certain looseness to the idea, and am focusing most heavily on those moments in Roman history when empire was not yet a solid, knowable concept, but instead more fluid and dynamic. I will now move into the historical scene in ancient Rome, as well as give brief summaries of the following four chapters.

The Ancient Roman Empire

At the origin of the Roman Empire under Augustus—roughly concurrent with the shift from BCE to CE—political terminology differed from social experience, an idea that

[23] Lakoff and Johnson. p. 263.

has recently been explored in a myriad of studies, from philological to legal. Though something akin to this process is constantly occurring, the early Roman empire is an especially swift and dramatic instance thereof in that, as Clifford Ando argues,

> a singular linguistic and discursive system is brought through political action into contact with, and then made to regulate, human societies in every way removed from the conditions in which that system had come into being. [...] the demands of empire nurtured and encouraged the creative potential of humans as linguistic and self-interpretive beings, and so new languages were born, by which the emergent realities of the high Roman empire might be described using language of absolute familiarity as nonetheless extraordinarily different.[24]

Ignoring Ando's casting of empire in the role of benevolent, practically biological force, his emphasis of the magnitude of empire's impact, and its effect on the individual speaker, is very important to this project.

At home, peace had put an end to the civil wars which had plagued Rome for the past century, just as her territorial holdings spread firmly into Africa and Asia. For the citizenry, the accurate vocabulary did not quite exist with which to engage with the lived experience. The language of hereditary monarchy seemed no better suited than that of constitutional democracy to describe what was happening in and around Rome. To counteract the radical newness of the governmental policies, geographic holdings and linguistic processes which were coming into being, Augustus instead resorted to calling them all by Republican names and customs. Through this back and forth between vocabulary and experience, the empire, both conceptualized and practiced, was born.

In 27–8 BCE, Octavian, presiding in his sixth and seventh consulships, avers to have "transferred the republic from my power to the dominion of the senate and people of Rome."[25] It is for this service (*meritum*) that Octavian becomes Augustus, by decree of the Senate. Octavian's seemingly benign transfer hints at the enormous power—both military and political—he had accumulated in his efforts to bring peace to Rome, whose civil wars had been practically ongoing at least since the assassination of the tribune Tiberius Gracchus in 133 BCE. As Tacitus says of the society under Augustus' rule,

> [E]ven most of the older generation had come into a world of civil wars. Practically no one had seen truly Republican government. The country had been transformed, and there was nothing left of the fine old Roman character. Political equality was a thing of the past; all eyes watched for imperial commands (*Annales* I.3–4).[26]

That is to say that no such transfer of power is truly made, as not only does Octavian cede no authority, there is no longer a Roman Republic to transfer.

Through different strategies, to be explored in depth in each of the following chapters, the Augustan regime established empire as a concept, while continually referring back

[24] Ando, Clifford. *Roman Social Imaginaries: Language and Thought in the Contexts of Empire*. Toronto: The University of Toronto Press, 2015, p. 6.

[25] *rem publicam ex mea potestate in senatus populique Romani arbitrium transtuli* (*Res Gestae Divi Augusti* 34).

[26] *etiam senes plerique inter bella civium nati: quotus quisque reliquus qui rem publicam vidisset? Igitur verso civitatis statu nihil usquam prisci et integri moris: omnes exuta aequalitate iussa principis aspectare.*[27]

to Augustus, who himself was continually referring back to "old Rome." The land holdings of empire—Rome's imperialist expansion into neighboring territories—surely existed before the concept thereof. Thus did the concept lag behind the thing itself, and the imagination behind the experience. Two of Augustus' critical ways in which to have the two layers better synch up were by calling the new by old names, and simultaneously making himself central to this very naming process.

It is in the more receptive end of this evolving process of meaning-making that I am particularly interested. How did the general public, the subject formed under empire, understand these changes, both cognitively and politically? In other words, what is the constitution of the political subject of empire, those at home to whom the empire "belongs," formed now in opposition to those whom their empire controls (Ando's encounter of one "linguistic and discursive system" coming up against another). In many ways, John Richardson's project in *The Language of Empire*, to

> search for the unattainable, for the notion or notions that the Romans had of their empire as their power spread beyond the boundaries of the Italian peninsula in the third and second centuries BC down to the time, in the midst of the second century AD, when it seemed to have acquired a permanent hold over southern and western Europe and its attendant islands, Asia Minor and what we now call the Middle East, and the northern strip of the African content.[28]

is analogous to what I mean about indirect means of subject formation under empire. Richardson considers these Roman notions of empire unattainable for two reasons, both of which have their own difficulties: on the one hand, 'empire' as a notion is simultaneously complex and simple; it is, simply, a "relationship of political control over the effective sovereignty of other political societies," and, complexly, "immensely varied in the way that political control is achieved and exercised."[29] On the other hand, "relatively little has been written on what the Romans thought their empire was as opposed to what they did to create it,"[30] with good cause; it is uniquely problematic to infer attitudes and ideas from a largely silent population some two-thousand years ago.[31]

Nonetheless, Richardson continues his search for these "general attitudes," under the contention that "in order to understand Roman imperialism and the Roman empire, it is necessary to grasp what the Romans thought they were doing as well as what they did."[32] Tracking changes in the language used to describe what comes to be the Roman empire, specifically *imperium* and *provincia*, Richardson seeks the " 'mental wallpaper' of a section of society, which are not specifically argued about in our sources precisely because they are taken for granted by those who wrote or spoke at the time. Such paradigms have been neatly described as 'short-hand for the assumptions we don't get round to articulating.' "[33]

Within the currently-expanding work being done on this question of "what the Romans thought they were doing," Richardson's work is firmly historical, both in terms

[28]Richardson, J. *The Language of Empire*. Cambridge: Cambridge University Press, 2008, p. 1.
[29]Ibid. p. 2.
[30]p. 5.
[31]As Richardson says Peter Brunt told him, "there were only two figures from antiquity about whose intentions it was justifiable to write, and that they were Cicero and St Augustine" (p. 6).
[32]Richardson. pp. 7–8.
[33]Ibid. pp. 6–7.

of his primary sources (Livy, Cicero, Tacitus and Augustus are his major authors), and his methodology, which he later likens to "the construction of a biography, or more precisely of a pair of biographies [of *imperium* and *provincia*] of two closely related members of a family."[34] Ando's is more applicable in aim to my own work, offering as he is a Foucauldian reading of the "Roman ordering of the world".[35] Other classicists have attempted similar projects within their respective specializations; Indra McEwen has approached the idea of empire architecturally through the work of Vitruvius, while Kendra Eshleman has addressed the social world of intellectuals in the empire through the literary and philosophical sources.[36] The larger project, however, of attempting to better understand societal changes—whether they be linguistic, architectural or philosophic—under the new Roman political structure, is similar for all three.

But by delimiting himself to the "historical authors," Richardson misses the opportunity to continue his search for the patterns of his "mental wallpaper" in the work of the poets (and Apulejus, a fictional prose author) of the time, to whom Richardson dedicates only two unique pages. What better material to consult than the "artistic" record, which concerned itself just as obviously with empire for the unspoken attitudes of a group of people? Likewise, considering such a project as a "biography" of sorts forces a progressive, teleological reading of empire, refusing to allow moments of regression, silence, and disappearance (to name only a few possibilities). Thus, I think of the Roman side of my project, methodologically speaking, as essentially comparative of the work that has already been done on Rome, focusing on the ongoing reconfigurations between architecture and literature, both fictional and historical. My role in this project is almost curatorial in nature, assembling the work of others through a unique lens or set of criteria, thereby putting seemingly disparate phenomena into conversation.

Having established a critical spatial aspect of the imperial process as it occurred during the early Roman empire, then, my interest is in tracing out its possible descendants—now a Foucauldian genealogy of empire—in two different "areas." Though the term here is meant figuratively—imaginary areas in the spatial sense—my intention is not just to practice a literary or digital reading of the theme of imperial space, but to show the ways in which certain literary and digital forms have been greatly influenced by imperial, and thus political, notions of space.

The first space, that of the novel and short story during the British empire's rise and decline, needs less argumentation than the second space, which I will introduce momentarily. As many postcolonial thinkers have argued, the English novel and other distinctly British cultural artifacts, played as important, if less quantifiable, roles in advancing the British empire's borders as its roads, sea-ways, and armies. The British novel serves as a conceptual midpoint between the Roman empire and the digital age in that I am treating it as an aesthetic, literary object, which demands its own type of analysis, rather than the more straightforwardly historical objects from the Roman empire. The motivations for turning towards this literary over overtly-historical approach are largely organizational in nature—though it would be entirely possible to consider

[34]Richardson. p. 182.

[35]Ando. p. 5.

[36]McEwen, I. *Vitruvius: Writing the Body of Architecture.* and Eshleman, K. *The Social World of Intellectuals in the Roman Empire: Sophists, Philosophers, and Christians.*.

the novel as artifact via a historical materialist lens, my intention is to highlight how the novel, more aesthetically speaking, participates in and refuses the process of naturalization and abstraction of imperial concepts begun in Rome, thus leading to the complete abstraction of these concepts in the digital realm. The link between aesthetic modernism—rather than experiential and tangible modernity—and imperialism, however, is a bit more opaque. Allowing that he is arguing about an imperialism that means "the imperialist dynamic of capitalism proper, and not the wars of conquest of the various ancient empires,"[37] Frederic Jameson clarifies this connection in his essay "Modernism and Imperialism". Moving away from an older definition, in which the imperialism of roughly 1884 to World War I is understood to be a "relationship between First World powers,"[38] towards imperialism as the relationship between metropolis and colony, or First and Third Worlds (and thus bearing a much stronger resemblance to Roman imperialism), Jameson offers a reading of modernism as ineluctably linked to and produced by this new sense of space demanded by "colonial" imperialism:

> nor is *Ulysses* by any means the first, let alone the only literary work of the imperialist period that stakes its bet on the properties of maps. The very title of Conrad's *Heart of Darkness*, whatever other resonances it comes to have, is literally determined by the reference to cartography. But cartography is not the solution, but rather the problem, at least in its ideal epistemological form as social cognitive mapping on the global scale. The map, if there is to be one, must somehow emerge from the demands and constraints of the spatial perceptions of the individual [...].[39]

By delinking the concept of style from notions of subjectivity and psychology, Jameson instead asserts a modernist style as recoordinated with "some new account of space, both together now marking the emergence of the modern as such, and the place from which a whole bewilderingly varied set of modernisms begins to flourish."[40] Modernism, then, is defined by Jameson as a "hesitation," emergent in the "spatial gap" between the "contingency of physical objects and the demand for an impossible meaning [...]."[41] The validity of this idea of a "non-empirical space beyond space, the unrepresentable totality"[42] and the emergent connection between a "properly modernist "style" and the representational dilemmas of the new imperial world system"[43] is proven by the new texts these conditions prompt, most notably, as aforementioned, *Ulysses*. Though I will not be reading *Ulysses* in this project, suffice it to say that the texts on which I do focus all participate in this "hesitation" concerning spatial representation, be it before the fact, as with Melville's 1853 "Bartleby," or well after, as with the work of J.G. Ballard. While I will certainly look at these ideas in more depth in the chapters to follow, I am especially interested in the different angles on possible paths out of empire that the novel and other generic forms can provide.

My final "space" comes from a moment in early Internet history, during which the concept of "cyberspace" was coming into being. This particular moment, and the ap-

[37]Jameson, Frederic. *The Modernist Papers*. New York: Verso, 2007, p. 156
[38]Ibid. p. 157.
[39]*The Modernist Papers*. p. 158.
[40]Ibid. p. 159.
[41]p. 160.
[42]p. 161.
[43]p. 164.

parati developed therein, has become of increasing interest to scholars of various fields, from the information sciences to architecture to the humanities. Again, my role here is somewhat curatorial in that I am examining existing work done in this field and fitting it into the larger conceptual field of Empire, to show that the architectural and spatial underpinnings of the digital world are themselves informed by political/historical/material circumstances. Taking the imperial processes and practices as found in ancient Rome and deployed in different ways in the novel, my intention is to argue that the digital world, from early American military projects to the search engines of the mid-1990s and beyond, is founded upon basic imperial principles, and is in fact a new version of an old idea. The final section of each chapter will argue that the Internet is not a democratic force for equal opportunity, but is instead the digital version of the analogue concept of Empire.

In chapter one, "Shadows," I look at the Roman empire's efforts to tell time, while exporting artifacts from Egypt and innovations from Greece in order to do so. In this chapter, I also look at the figure of the Architect, as well as the Mathematician, and how they informed the building of some of ancient Rome's public sites; in addition I will look at the public record of the rites of days, an unwieldy type of calendar. Following this imperial tradition of time and its standardization and keeping, I will read the British invention of Greenwhich Mean Time, as well as Virginia Woolf's Mrs. Dalloway who seems to always be a few minutes behind the constant ringing of Big Ben. Finally, I introduce *Spacewar!*, the first video game of sorts, and the faithful duplication of the night sky, not in any way to be read in relation to earthly position, as in the ancient Greek and Egyptians' "discovery" of time, but as a pure simulacrum, an empty representation. In this chapter, I will be looking at different instances of marking the sun's passage across the earth as instances of what Lakoff and Johnson call an "ontological" metaphor, in which we "impose artificial boundaries that make physical phenomena discrete just as we are: entities bound by a surface,"[44] and one of the most basic thereof: whence the metaphors of "telling the time," and time as a tangible component of political life.

In chapter two, "Cities," I look at the ancient idea of urban space, particularly in relation to ancient Rome as the center of an empire. In this way, "Maps" seeks to examine a different type of metaphor, this time "orientational," giving rise to specific political understandings of inside / outside, center / periphery, home / colony. As urbanism is such a large topic, I have focused on those issues that seem continuously hard-to-solve in urbanization: how people living in such close quarters stay relatively healthy and clean. Such issues are ones of public sanitization just as much as they are of waste disposal, and so I look at the Roman baths and sewer systems, both of which became emblematic of their presence in colonies and provinces. This, then, leads us to the implementation of the gridded city, one of the more lasting imprints of Roman urbanization practices. From there I read the city of London—a decidedly non-gridded and haphazardly-planned city—via Dickens' 1852 *Bleak House*, and the novel's narrative voice as imposing a bygone urban order in comparison with Melville's 1853 short story "Bartleby the Scrivener," and one version of city living in the gridded Manhattan area of Wall Street. Finally, I look at how many overarching theories of digital and information

[44]Lakoff and Johnson. p. 25

design actually stem from urban planning, but not urban planning as dealing with expanding and messy metropoles, but instead the idealized, and never realized, urban plans of Le Corbusier and others.

In chapter three, "Roads," I look at the Roman road system, perhaps the most vital means of creating and keeping the empire. First focusing on the *Via Appia*, and the physical labor that went into her creation, I then read Apulejus' second-century *Metamorphoses* as one of the earliest examples of "road fiction." And as the text is largely concerned with illicit activity on roads around southern Italy and northern Africa, I end the Roman section with the ancient problem of brigandage, and how any public space can and will always be used for purposes other than intended. Thereafter, I return to London, but via another American, this time Edgar Allan Poe's vision of the European city street, and the invention of the detective, or the man with "gum shoes" meant for patrolling the avenues. In conjunction, I read J.G. Ballard's dystopic world, which can be characterized as one big paved road. Finally, I look at all those early Internet metaphors of use and engineering—the Information Superhighway, a road of pure data running straight through a city of bits. Herein, I look at roads as not only an object in the built environment, but so too as a "structural" metaphor, in which the Roman road network becomes a lasting source of similarity for the function and purpose of Empire.

In the final chapter, "Maps," I invert the structure informing my previous three chapters and instead spend the majority looking at the digital realm under the direct guidance of Foucault's definition of *heterotopias*. Expanding upon the work of previous chapters and various ideas of digital infrastructure, I read the Internet itself figured as a "space to be mapped" via search engines and their like. From Explorer, Safari, Magellan, and America Online to Google—both as verb and search tool—I look at the surface Internet and deep web as built upon models of the imperial world. This final section deals with the creation of a "conceptual" metaphor, perhaps the most overarching and opaque one, formulated around often baseless propositions of similarity between Internet behavior and experience and practices of search and inquiry. I then turn to Agrippa's famed, and lost, map of the known world, from the Augustan era, as well as the later Peutinger map, both of which are read in comparison to the verbal, or list-form, maps of itineraries. Finally, I return to Virginia Woolf and her novel *The Waves*, which offers, I think, a version of experience and the world that cannot be mapped, an idea that leads out to the conclusion, which hopes to offer possible strategies for imagining different futures.

Before concluding this introduction, I would like to offer a "mini-reading" that hopefully encapsulates, via abridgment, the types of thinking, logical movement, and type of "historicity" mentioned above, that will explored in more depth in each of the following chapters.

Traffic

In each chapter, I will look at a literal object—some with more heft than others—that, more often than not, predated the Roman empire. In so doing, I will try to examine both the object's status as a concrete thing, as well as the ways it becomes politically

conceptualized and experienced under this regime. My move into the British novel, both of the early and late empire, is to show the ways in which these things, but also now conceptual / political / experiential frames, become associated not just with new imperial orders, but so too with what we now consider modernity (and, as with Woolf especially, literary modernism as well). This middle move is important to my argument for two reasons. The first is that this helps show the imperial roots of later associations between progress and concepts/object of modernity. The second reason is that, as many theorists and critics of modernity have argued, there is a strange operation—and it is this operation that I am most interested in exploring more fully in each chapter—by which modernization / industrialization / etc. come to be, as Paul C. Adams says "understood popularly through metaphors fundamentally opposed to modernist world views."[45] Thus, the progressivism or futurism supposedly inherent in our own digital moment becomes instantly stagnant, as well as imperial in nature, in this regressive return to conservative metaphors of space and time. With this in mind, I will look at traffic as an instance of this vector of historicity.

Traffic in the Roman Empire

In issues that will be explored more fully in both the chapters on roads and cities, traffic in the Roman empire was a phenomenon caused by many factors; road maintenance and increasing urbanization being two main ones. At its most basic, ancient traffic illustrates two, seemingly obvious, facts. The first is that most non-archaeological evidence of traffic comes from legal literature surrounding it—then, as now, traffic, or rather its solutions, were a governmental issue. The second is that long-distance traffic did not seem to be an issue (besides imperfections in the road-systems themselves ("road repairs, accidents, breakdowns, and highwaymen"), "[t]here was only one category of delay for long-distance travelers caused by the government: toll points."[46]), nor was it severe in planned cities, whereas congestion in pre-imperial urban spaces was a recurring issue. As Cornelis van Tilburg, ancient traffic expert, argues,

> the organically developed [as opposed to planned] cities in the Mediterranean area (particularly Italy) could not sustain traffic without problems and drastic measures had to be taken to keep them accessible. Infamous bottlenecks were city gates: many gates had only one single passage, which traffic entering and leaving had to pass through. [...] After passing the gate, the traveller came in amongst the city crowd, which one had to wrestle through. The city with the worst traffic congestion was without doubt Rome, where the unfortunate combination of its extreme population density, a chaotic and insufficient street system and its metropolitan nature combined.[47]

Some of these drastic measures taken to maintain accessibility highlight that ancient traffic was, in many ways, very literally a confusion of spaces. In Rome specifically, as van Tilburg finds it, traffic chaos was due to: "the irregular infrastructure caused

[45]Adams, Paul C. "Cyberspace and Virtual Places" in *Geographical Review*, Vol. 87, No. 2 (Apr. 1997), p. 155.

[46]van Tilburg, Cornelis. *Traffic and Congestion in the Roman Empire*. New York: Routledge, 2007, p. 85.

[47]Ibid.

by disorganized city planning"; "the large population density"; and a "warm climate, which made it possible to live on the street for a large part of the time."[48] In the terms of van Tilburg's list of three major causes of congestion, we can consider the types of movement from which they stem. While the irregular infrastructure and disorganized city planning had effects on pedestrian and wheeled traffic alike, the literal layout and quality of the Roman street was undoubtedly more of a hindrance for wagons and other vessels. The demand in Rome for goods, particularly agricultural, had to sometimes be fulfilled via road transport, often as a last resort in comparison to transport by sea. Far more common within Rome was foot traffic of all kinds, from wandering merchants to draught and pack animals carrying wares. Though there are no records of the volume of such goods transport, van Tilburg, building upon the work of others, estimates that a city of 20,000 has a daily consumption of ten tons of barley and corn; add to this Rome's population many times more than 20,000, as well as the influx of non-essential goods, and we might have some notion of the sizable flow looking to gain entry to and exit from Rome.[49]

But to this flow of people, animals, and things, add a city already teeming with its own crowds and jams. Horace writes of a Rome of ongoing construction, wild animals, rushing traffic, and endless noise (*Epistulae* 2.2.65-76), and Seneca compares the ceaseless motion on the Roman street to a stream:

> Consider this city, in which the throng that streams ceaselessly through its widest streets is crushed to pieces whenever anything gets in the way to check its course as it streams like a rushing torrent—this city in which the seating space of three theatres is required at one time, in which is consumed all the produce of the plough from every land [...].[50] [51]

The interaction of all three of these issues—an interaction which underscored the multifaceted nature of the street as a place of social exchange, commerce, but also, as mentioned above, life itself—created the most chaotic aspect of ancient traffic. While there is evidence of rules concerning road usage (consider the *Lex Julia Municipalis* and when wagons could enter Rome), the lack of historical evidence for systematized traffic regulations ("Neither in literature, nor in archaeology, nor in epigraphy is there information on this theme."[52]) lends weight to van Tilburg's assessment of a 'survival of the fittest' maxim for road-users, especially in Rome: "Whoever, in spite of the crowd, did not get away fast enough from an approaching lictor or wagon ran the risk of a slanging-match or physical violence."[53]

Thus was ancient traffic, when it occurred, emblematic not of the congestion of a particular type of motion, as we think of it today with cars, but had much more to do with a multiplicity of people at different, and sometimes cross, purposes within

[48] van Tilburg. p. 120.

[49] cf. van Tilburg, chapter 2: "Road-users".

[50] Seneca. *De Clementia* 1.6.1-2. Translated by John W. Basore. *Seneca: Moral Essays Volume I.* Cambridge: Harvard University Press, 1928, pp. 373-5.

[51] *Cogitato, in hac civitate, in qua turba per latissima itinera sine intermissione defluens eliditur, quotiens aliquid obstitit, quod cursum eius velut torrentis rapidi moraretur, in qua tribus eodem tempore theatris caveae postulantur, in qua consumitur, quidquid terris omnibus aratur*

[52] van Tilburg. p. 124.

[53] Ibid. p. 125.

the same space. Contrary to modern traffic, ancient traffic was an issue of remaining in or traversing the same space rather than a destination away from the traffic. The dynamism of ancient traffic came, in part, from the new centrality of Rome in an imperial context, as well as Rome's physical unsuitability, infrastructurally speaking, for such centrality. As many historians of the Roman empire have noted, and as will be explored more thoroughly in the chapter on cities, a notable aspect of the Roman practice of imperialism was to export its sense of urbanism across its land holdings in the sense of creating satellite cities, all of which were subsidiary to the central urban site of Rome:

> The Roman Empire, the product of a single expanding urban power center, was itself a vast city-building enterprise: it left the imprint of Rome on every part of Europe, Northern Africa, and Asia Minor, altering the way of life in old cities and establishing a special kind of order, from the ground up, in hundreds of new foundations, 'colonial' towns, 'free' towns, towns under Roman municipal law, 'tributary' towns: each with a different status if not a different form. [...] Even after the city of Rome had been sacked in the fifth century, the poet Rutilius Namatianus could say, with undiminished admiration: "A city of the far-flung earth you have made."[54]

Though traffic, then as now, meant delays, they were of an unexpected nature, characterized by the chaos of the imperial metropolis. This seemingly-oxymoronic dynamism of ancient traffic seems to have left as much a mark in the literary record as any other (this will be looked at in the chapter on roads with Apulejus, and, briefly, Juvenal), and the interest in literature with the city street and its uses and abuses has continued, certainly into the modern novel.

Traffic in the Modern Novel

As Clarissa Dalloway declares that she will buy her party's flowers herself and steps out onto the London streets surrounding Regent's Park, and also into the balletically choreographed opening pages of *Mrs. Dalloway*, that novel's lucky readers find Woolf using both pedestrian and automotive traffic to not only give a sense of urban movement, but to also display the possibilities of narrative movement in this new type of novel. The objects of perception that spatially unite the characters—from the child running into Lucrezia as Peter Walsh watches, to the plane in the sky writing an indecipherable message, seen by Clarissa and Septimus alike—are logistically possible only in crowded urban spaces. Indeed the sense of contiguity that that novel offers, while obviously experientially informed by life in a city like London, has become a hallmark of the modern novel, that novel which Woolf herself described as an obsession "to impart character."[55]

While Mrs. Dalloway loses herself in a flower shop on Bond Street:

> and dark and prim the red carnations, holding their heads up; and all the sweet peas spreading in their bowls, tinged violet, snow white, pale—as if it were the evening and

[54]Mumford, Lewis. *The City in History: Its Origins, Its Transformations, and Its Prospects*. New York: Harcourt Brace, 1961, p. 205.

[55]Woolf. "Mr. Bennett and Mrs. Brown". From *Essentials of the Theory of Fiction*. Edited by Hoffman, Michael J. and Patrick D. Murphy. Durham, North Carolina: Duke University Press, 1996, p. 27.

> girls in muslin frocks came out to pick sweet peas and roses after the superb summer's day, with its almost blue-black sky, its delphiniums, its carnations, its arum lilies was over; and it was the moment between six and seven [...].[56]

it is the sound of traffic—"oh! a pistol shot in the street outside!"[57]—that breaks her reverie. " 'Dear, those motor cars,' " the shop proprietor says, and the novel lifts up, out of Mrs. Dalloway's interiority, moving out into the street beyond, and the sound of a car back-firing becomes the new rule of perceptual and structural orientation for the following pages. The sound allows the narrative to move into and among the crowd on Bond Street, glancing upon Edgar J. Watkiss, Septimus Warren Smith, his wife Lucrezia, boys on bicycles, a chauffeur, back to Clarissa Dalloway, now out on the street once more with her flowers, and then away again, following the car itself "gliding across Piccadilly, [turning] down St. James's Street."[58]

Coming so early in the novel as it does, the way in which the narrative utilizes the car as a means of both accessing other characters, central and peripheral, and moving around London, serves as some kind of tacit instructional key for the reader on how the novel structurally operates. This is, I think, due to not just the clarity of this particular percept, but because of its associative nuances, as the reader grasps that this novel may in fact move like a car in city traffic, with a certain destination in mind, but unpredictable phenomena along the way. This phenomena presents itself in many different forms—the appearance of a certain memory, old illnesses, an increasingly unknown daughter, a neighbor glimpsed across the way.

Arguing that Woolf models this novel's structure after the movement of traffic is one way of describing what many have called the "contiguous" nature of Woolf's novels, in which events, or any aspect of plot development, is contingent upon spatial relationships and proximities, rather than the more traditional novelistic structure of continuity, concerned with the unfolding of temporal sequence. This is not to say that Woolf is in any way more interested in the depiction of space than time, but that she uses distinctly spatial structuring devices (think also of the centrality of the house in *To The Lighthouse*) in order to expose different aspects and facets of time's passage (think here too of *To The Lighthouse*, with the condensation of time on either side of the novel's middle section "Time Passes"). This is a literary inversion of Foucault's observation that philosophy, at least before Bergson, treated space as "the dead, the fixed, the undialectical, the immobile [... whereas time] was richness, fecundity, life, dialectic."[59]

Returning to this idea of *Mrs. Dalloway*'s narrative movement being informed by city traffic, we can see the vitality of this sense of movement. I am not trying to offer the false syllogism that *Mrs. Dalloway*'s structure is informed by traffic, and since the novel's obvious dynamism and constant freshness, thus the same dynamism for traffic. Instead, *Mrs. Dalloway*'s composition is, unlike *To The Lighthouse*'s, uniquely tied to its urban space, and it mirrors its setting in the way it connects its characters and events through spatial contrivances (this is clearest with Septimus Smith, whose

[56]Woolf. *Mrs. Dalloway.* p. 13.

[57]Ibid.

[58]p. 18.

[59]Focuault. "Questions on Geography" in *Power/Knowledge: Selected Interviews & Other Writings 1972–1977.* Ed. Colin Gordon. New York: Pantheon Books, 1980, p. 70.

proximity to Clarissa's world due to his doctor's appointment allows him to enter into the novel and become its thematic foil to Clarissa's interior world). For Mrs. Dalloway, and her novel, urban contiguities and the movement thereby necessitated, becomes a mark of modernity, of life both opening itself back up in a new but familiar way in the post-WWI period, but also of how life may be crystallized, "struck into stability," as Lily Briscoe repeats throughout *To The Lighthouse*, both for Clarissa moving about London, and Woolf's novel following her. Thus does traffic, as one interpretation of this movement, become a possible expression of this shifting, constantly in flux dynamism, an alternative envisioning of that image of the wave, of energy through matter, that so captivated Woolf as an image of the novelistic process.

Traffic and Congestion Online

If Woolf uses traffic in *Mrs. Dalloway* as one means of offering a new type of spatiality and contiguous possibility to the modern novel—to lend some of time's "fecundity" as Fuocault put it—to the consideration of space, the use of the same phenomenon becomes, in the digital age, once more emblematic of immobility and stagnation. This is only in part due to the obvious reason, being that traffic itself implies stagnancy and immobility in space. More relevantly—and this will be explored more fully in each chapter—this stagnation occurs in that an experiential metaphor becomes an analogy of utility, and also a means of situational representation that obfuscates rather than clarifies. In this digital sense, traffic is purely a spatialization of an aspect of time, a means of explaining and naming why certain online actions might take more time than expected. The process of metaphor and analogy making for technology is not particular to the digital age—as Steven Johnson says,

> [d]reaming up metaphors for machines has, of course, a long and distinguished history. Every age comes to terms with the latest technology by drawing upon imagery of older and more familiar things. Usually this takes the form of an analogy between machines and organisms. [...] It may be that every high-tech innovation is accompanied by imaginative flashbacks of this sort, but our own historical moment has added an unusual twist to this long tradition. Organic, low-tech metaphors once belonged to those lagging behind the mechanic power curve, the Luddites and the antediluvians, the poets and the novelists [...]. In today's society, the task of translation has migrated to the technicians. In the age of the graphic interface, with its visual analogies of trashcans and desktop folders, imaginative flashbacks have become programming feats, conjured up by high-tech wizards hacking away in assembly language. Where the Victorian novel shaped our understanding of the new towns wrapped around the steel mill and the cotton gin, [...] the interface makes the teeming, invisible world of zeros and ones sensible to us. There are few creative acts in modern life more significant than this one, and few with such broad social consequences.[60]

The "user-friendliness" of an interface, then or now, graphic or tangible, is based upon the success of its analogies; the ways in which it makes its processes and behaviors understandable and performable via intuition. It is important to separate this practice of analogization from metaphoricity in that the usage of metaphors as a predominantly linguistic means of relativizing the entire digital "world" is the larger phenomenon in which

[60]Johnson, Steven. *Interface Culture: how new technology transforms the way we create and communicate.* San Francisco: Basic Books, 1997, pp. 16-7.

I am interested, while certain analogies are subsidiary instances of the bigger issue. To take one example used in a later chapter, to "search" is the operative metaphor for understanding and relativizing interaction with the Internet, whereas all of the particularities of this digital activity—from the use of a mouse as the means of cursor manipulation, to the "window" of the browser itself—are smaller, behavioral analogies used in the service of the umbrella metaphor. These analogies are utilitarian and performance-concerned in nature, whereas these larger operative metaphors are still in the realm of cognition or knowledge: to say, for instance, that data acquisition is *like* colonial / precolonial exploration does not give the user any direct guidance as towards interaction, but rather towards conceptualization, whereas the deletion of files via dragging their icons into that of a trash can is a direct analogy of use. Added to that, the regressive nature of these metaphors and their subsidiary analogies—whether regressive in the "imaginative flashback" of the user of a graphical interface who understands how to manipulate the screen via visual analogies, or the overall metaphor of envisioning the early Internet via now-crumbling American infrastructure—delimits, automatically and immediately, the indubitably progressive nature of technological innovation. This regression, in which lay understanding is promoted / created through analogies to prior systems, will be explored as a key issue in each chapter, highlighting not just each phenomenon's "flashback" moment, but also how all of my objects of interest regress to distinctly imperial forms and fashionings of space.[61]

Traffic, then, as a metaphor for speed and net connectivity, clearly builds upon the metaphor of the Internet itself as a road / highway / freeway, etc. (a metaphor that has, in 2017, its own "flashback" element to it, though it has not been replaced by a more successful analogue. Keep in mind, too, that many of its subsidiary metaphors (such as traffic) have remained viable and sound less dated). As Tim Greene argues, as certain metaphors of Internet likeness drop out of relevancy, these subsidiary ones linger: "Specific technologies glommed onto the term [Information Superhighway] as well. Broadband Internet access, for instance, was a way to avoid traffic jams on the onramp to the superhighway."[62] One major shift in the use of the image of traffic is that it is in no way the traffic of *Mrs. Dalloway* or even the ancient Roman world, in that it is traffic outside of areas congested and constricted by people and an urban infrastructure not designed for the presence of vehicles. This is traffic that produces and perpetuates itself; it is the image of car on car on car, bumper to bumper, on some kind of roadway explicitly designed for this motion or lack thereof.

One cannot help but think of Los Angeles in this context, that sprawling city in which, as Reyner Banham says,

> the freeway system in its totality is now a single comprehensible place, a coherent state of mind, a complete way of life, the fourth ecology of the Angeleno. [...] There seem to be two major reasons for their dominance in the city image of Los Angeles and both are aspects of their inescapability; firstly, that they are so vast that you cannot help seeing

[61]This separation between digital metaphors of conceptualization and analogies of utility is important for me in terms of argumentative clarity, and also a mark of difference with many technological critics / developers in that they tend to use the two terms interchangeably.

[62]Greene, Tim. "Metaphor mania: The Internet is...". *Network World*. January 7, 2008. http://www.networkworld.com/article/2289804/lan-wan/metaphor-mania–the-internet-is–.html.

> them, and secondly, that there appears no alternative means of movement and you cannot help using them. There are other and useful streets, and the major boulevards provide an excellent secondary network in many parts of the city, but psychologically, all are felt to be tributary to the freeways.[63]

This version of traffic as movement is different in two distinct ways; that it is occurring away from the city center is mentioned above. The other is that traffic in this sense is predictable and routinized; it is not the result of a random event, but rather an inescapable aspect of daily commuting and transportation (rush hour). The sterility and predictability of this type of traffic is what is conveyed by this digital metaphor. It is a conditioning metaphor, used to explain delays that, were the system better designed, might not be an issue (consider the massively faster connection rates for Internet users elsewhere in the world versus the United States). There is none of the chance / happenstance implied by the motion and proximity of objects and people in *Mrs. Dalloway*: online "traffic" does not force users into new paths or motivate different motion; it merely describes the activity of waiting.

Thus is the metaphor of digital traffic a degradation of its possibilities and imaginings in the modern era, and so too is it a flattening of traffic in the Roman imperial sense, which informs, I argue, this entire discussion. As I showed earlier, traffic in urban spaces in the Roman empire was, in many ways, a confusion of spaces. Roman law made a road into a legally-sanctioned public / private space, upon which certain movements were permitted, while the nature of crowded urban areas directly challenged the clarity, as well as the ability to monitor, this usage. Traffic in the sense of the digital metaphor has become almost purely emblematic of this type of monitored and sanctioned movement—relegated to the freeways, guaranteed at certain times, traffic has its own ensured time and space. Thus does the use of this particular metaphor not just liken an online activity to another physical world phenomenon with which we all have experience, the usage of this particular likeness instructs as well as explains. For in this type of sanctioned traffic, one simply sits and waits, for traffic to move, as it always does, but also for the end of the journey; the freeway system is there to link destinations as quickly as possible by land. This is, I think, one crucial, but telling, flaw of this metaphor; for online traffic, there is no destination at all, there is merely the hope of less traffic. To carry out the metaphor, if slow connectivity / response times online are one aspect of traffic (versus the more current use of the term to mean how many visitors one site receives in a given time), then being online is simply driving, on a pre-ordained path upon which one has been given permission to move, forever. And while this may in fact be an accurate metaphorical description of being online, it betrays the system's complete lack of a telos, which no metaphor yet employed accurately or acutely conveys.

This mini example of traffic hopefully gives an overview of my following four chapters both in terms of general structure, but also in terms of some thematic arch. All four chapters deal with a literal object or experience, that, under imperial rule, either comes into being (as with say a map of empire), or needs to be radically recontextualized under a new political structure (as with shadows to tell the time). In so doing, I am interested in

[63]Banham, Reyner. *Los Angeles: The Architecture of Four Ecologies*. Berkeley: University of California Press, 2000, pp. 195-6.

finding the ways in which these objects / experiences are already, in a Roman context, picking up aspects of the metaphorical / symbolic, etc., aspects that, I think, help them veil themselves later in history as somehow other than the distinctly political phenomena they are. And as many of the early Internet's language comes from that of industrialization and urbanization, my consideration of some of the slightly later (and in the case of Ballard, much later) British novels are efforts to some middle ground, pointing back to the British empire (with its Roman ancestry) and simultaneously forward to the digital age.

SHADOWS

Introduction

This chapter looks at the transformative representational properties of empire, whereby this political form takes formerly temporal or conceptual notions and makes them into spatial and visual representations thereof. The most fundamental of these shifts is the transference of time-dependent *imperium*, once a faculty of the state itself, into the far more localized, but also harder-to-define, *imperium* from which we translate empire itself. I will examine both the larger global views informing such a shift—such as Greek and Roman conceptions of astrology and astronomy—to the smaller changes such a shift demanded—such as ways of "telling" time, to the individual subject capable of telling this time. Of particular interest here are empire's relations with the sun, and efforts to qualify it as an internal aspect of empire, but also to quantify it as an external model for its own logic of motion and access. My overarching argument for this chapter is that empire continuously makes such representations, and later abstractions as a better means of quantifying, and thus regulating, the world around it. Thus will I look at the British Empire's standardization of time, eventually making the case for virtual reality's continuation of these imperial methods of knowing and coding the Earth.

A Concept of Empire

Returning to Hardt and Negri's distinction between the "practice" versus the "concept" of Empire, I will focus, in this first chapter—arguably the most conceptual of the four presented here—on one aspect of the "concept of Empire": the abstraction of time and its measurement. As I do so, I will return to an assertion made earlier, namely that at this point in the conceptual evolution of Empire, it is almost impossible to separate the concept from the "practice of Empire". The difficulty of this separation has to do with empire's concept of itself at this early stage *was* its practice, as it sought to articulate itself via abstractions and representations just as much as militaristic activity. The ways in which Empire must build itself around certain abstractions (and by this I mean everything from measurements to classifications, etc.) of the physical world—a neutral statement insofar as it is a necessary logical step—is a theme that I return to in every chapter.

Of particular interest in this oscillation between practice and concept is the evolution (linguistically, socially, etc.) of the word *imperium* from a temporary power vested in

the State itself into an indefinite form of spatial expansion. For such an evolution to be not only possible but also comprehensible, the process requires myriad recalculations and abstractions of previously held notions of political time and space. As Indra K. McEwen argues,

> *imperium* was, like the title *imperator*, entirely time-dependent until Augustus became the single and permanent Imperator in whom *imperium* was perpetually renewed. When the locus of *imperium* became the body of the Imperator who ruled the world, its localization transformed a hitherto temporal phenomenon into a body of power whose objective reality was at once spatial and—as in the Prima Porta statue—"canonically" measurable.[64]

Though McEwen's argument links the shift of *imperium* directly to the visible body of the *Imperator*, it is precisely this transference that allows for those almost-oxymoronic characteristics of Empire from Hardt and Negri, as infinite in both time and space, bound to no one individual. Nonetheless, McEwen is a helpful starting point in that it is in the Augustan era that historians have pointed to an undeniable shift from previous Republican modes of government towards a recognizable imperial rule.

In *de Architectura*, the ten-book compendium on architecture as it stood in the early Roman empire, Vitruvius addresses himself and his opus to this same Augustus, ruler of Rome and the world:

> While your divine intelligence and will, Imperator Caesar, were engaged in acquiring the right to command the world (*imperio potiretur orbis terrarum*), [...] while all foreign nations were in subjection awaiting your beck and call (*gentes omnes subactae tuum spectarent nutum*), [...] I hardly dared, in view of your serious employments, to publish my writings and long-considered ideas on architecture [...].
>
> But when I saw that you were giving your attention not only to the welfare of society in general and to the establishment of public order, but also to the providing of public buildings intended for utilitarian purposes (*de opportunitate publicorum aedificiorum*), so that not only should the State (*civitas*) have been enriched with provinces by your means, but that the greatness of its power (*majestas imperii*) might likewise be attended with distinguished authority (*auctoritates*) in its public buildings.[65]

In this opening passage, we can read Vitruvius as attempting to make sense—or feigning to attempt, as the case may be—of the nature of Augustus' power, and his own in relation. In his first honorific, *imperator*, Vitruvius addresses Augustus by what had once been a Republican title for a commanding officer, which could also be conferred either by the troops or the senate as a mark of honor. This title can be thought of as a residual mark of the non-permanent transfer of *imperium*, in the older sense mentioned above as what had once been thought of as the might of the Republic, with clear temporal limits upon its usage with any one individual. In other words, *imperium* as power, influence or rank could not be measured other than by how long any one person has held *imperium*. In our American political system, a comparable title is President—though the office itself may be addressed metonymically by s/he who holds this title, the authority resides in the position, not the person, and is measured in four-year terms.

[64]McEwen, Indra. *Vitruvius: Writing the Body of Architecture*. Cambridge: The MIT Press, 2003, p. 278.

[65]Vitruvius. I. i. *The Ten Books of Architecture*. Translated by Morris Hicky Morgan.New York: Dover Publications, Inc., 1960, p. 3.

And yet, it is clear by Vitruvius' averred hesitation that while Augustus may wish to take Republican titles, it is not clear that he will behave by Republican traditions. Augustus' maneuvering between tradition and a revolutionary shift in the Roman power structure is a shrewd calculation based upon immediate historical circumstances of civil war or internal political strife, as seen in the recent murder of his adoptive father, Julius Caesar. In addition, the Republican modes of government were no longer suitable for Rome's political and geographical layout (the acquisition of Carthage and Corinth in 146 made Rome's expansionist thrust in the Mediterranean and beyond undeniable).[66] But at the same time, a return to the age of Kings was equally problematic. Thus, in his transformation into Augustus from his birth as Octavian, we find the simultaneous entry of a new mode of government, which was to become empire.

At the outset, the Principate—so-called after Augustus' labeling of himself *princeps civitatis / princeps senatus*, further exemplifying the hybrid nature of the early empire's use of Republican language in a new way, the term refers to Rome until the mid third century—is characterized by this synthesis of prior, as well as emerging, power formations, a curious set of tensions between two existing political situations of sovereign and senatorial rule out of which emerged the unique configuration of empire. Empire is land acquisition through force, but rather than bear one name (as in Alexander the Great), it bears the name of a locality, long understood to be the site of senatorial and popular rule.[67] In this way, empire is evolving as an internally contradictory concept / practice, a point which can go from very simplistic—what is "good" for the center is not what is "good" for the peripheries—to the far more complex: imperial power exercised therein and without is of a sovereign nature, yet it must also be felt to be participatory in so far as subjects, and by this I mean Roman subjects, not foreigners, both comprise and create empire. Suffice it to say, such a government forms a likewise new and hybrid political subject who is both an actor and recipient of imperial rule, an idea I will explore later on. These are all, to return to Hardt & Negri, contradictions between concept and practice, contradictions that eventually culminate in the most inexcusable contradiction of all, namely the concept of peace through the practice of bloodshed.

But it is not simply the case that an old, monarchical form of power (the rule of Augustus) was being called by the relatively new name of Republic. On the one hand, Rome's land holdings far exceeded anything in its history; Polybius opens his history of the rise of Rome with the "desire to discover by what means and under what system of government the Romans succeeded in less than fifty-three years in bringing under their rule almost the whole of the inhabited world, an achievement which is without parallel in human history."[68] And on the other, while Augustus holds many of the offices and

[66]Rome's expansion into the known world beyond Italy long preceded any notion of empire. It is important to keep in mind that Rome already had the land-holdings of empire once there was a governance system to match it; in other words the existence of, and not the desire for, Roman land beyond Italy was the first fact of the Roman empire. The Punic wars had given Rome Sicily, Carthage, and large parts of Spain; the Macedonian wars had yielded the eastern Mediterranean; and the continued subjugation of Greek provinces came long before Augustus. The early Principate merely continued this expansion, notably into Egypt.

[67]This idea, of the transformation of Rome itself into a metropolis rather than a city-state, will be addressed in its own chapter, "Cities".

[68]Polybius. I.1. *The Rise of the Roman Empire*. Translated by Ian Scott-Kilvert. New York: Penguin

roles of the prior statesmen of the Republic, his continual request for and acceptance of them—*imperium* without end—creates its own unique form of power. As Cassius Dio reports, the Senate votes *Imperator* onto Julius Caesar not as transitory title, but as personal name. In an American context, it would be a presidential inauguration as a baptism of sorts, in which the power of a once independent position were made entirely dependent and specific in the precise name of one man and his descendants. As Ronald Syme summarizes,

> it was [...] something distinct alike from the traditional imperatorial salutation and from the designation of a commander in possession of *imperium*; it was precisely the title of imperial power borne by the Emperor in his own day. Further, the title was to pass to the sons and to the descendants of Caesar [...] [Dio] affirms that Octavianus now adopted the hereditary title that had been conferred upon Caesar. Moreover, Suetonius also records the bestowal of the *praenomen imperatoris* on the Dictator.[69]

Though there is much argument over the veracity of this exact situation—*imperator* as *praenomen*—suffice it to say that the term *Imperator* means something distinctly different in imperial contexts than it did in Republican ones.

By Book III of *de Architectura*, the title clearly means emperor, just as it is clearly Augustus' name. Indeed, many of the highlighted words in Vitruvius' passage are undergoing similar transformations at just this time—what is *imperium*, let alone in relationship to this idea of the *orbis terrarum*? Is there a *civitas* in the old sense, or is something else being called by its name? In these shifting terms, what can be thought of as *aedificia publica* versus *privata*? And what of the subject of the book itself, *architectura*? What, for Vitruvius, makes architecture a clearly-delineated field in a way that it had not been before Augustus and empire? As McEwen argues, for Augustus, architecture is the means by which empire is created, thereby making these terms, and hence the emperor and the architect, mutually constitutive:

> in sum, the fit between the Vitruvian body of architecture and the Augustan body of empire leads to the inevitable conclusion that architecture first acquired precise delineation as a discipline—as *the* discipline, the one that "demonstrates everything the other arts achieve"—in mutual dependence with the imperial project of fashioning the world as a single Roman body.[70]

In many ways, architecture itself is the innovation which puts many of these terms into conversation—architecture, for example, relates *imperium* to the expanse of *orbis terrarum*—just as it provides many of the answers.

This Vitruvian *corpus architecturae*, however, is not strictly concerned with building as we may think of it. Early on, he states what he considers the three "departments" (*partes*) of architecture: *aedificatio, gnomonice, machinatio* (I.III). *Aedificatio*, whose English cognates of edifice and edify carry over the Latin's literal and metaphorical aspects of types of building, is then split into those building projects of a public nature and location, and those of private ones (*una est moenium et communium operum in publicis*

Books, 1979, p. 41.

[69]Syme, Ronald. "Imperator Caesar: A Study in Nomenclature" in *Historia: Zeitschrift für Alte Geschichte*, Bd. 7, H. 2 (Apr. 1958), p. 176.

[70]McEwen. pp. 302–4.

locis conlocatio, altera est privatorum aedificiorum explicatio). Of public building, there are three additional sub-divisions, whose resultant descriptions and divergences occupy Vitruvius for several books.

But it is not until the last two books that the author returns to the other two-thirds of architecture: devices to measure time; and machines. Book IX's preface ends with an invocation to Augustus, and the plan for the following section: "In this I shall set forth the rules for dialling, showing how they are found through the shadows cast by the gnomon from the sun's rays in the firmament, and on what principles these shadows lengthen and shorten."[71][72] In his turn to the natural, or rather astronomical, world, Vitruvius asserts that Nature herself is the first architect, a claim that seems to be at odds with his earlier definitions. On the one hand, Nature as Architect is a straightforward proposition in that both are fundamentally organizing forces, giving shape and reason to space. But on the other hand, many others, and Vitruvius himself earlier, envision the architect as a person of cunning, whose inventions and efforts at organization are either directly in opposition to Nature (think of the *ur*-Architect Daedalus and his human wings and labyrinth), or he is a person of mere utility, whose inventions and efforts work to reveal Nature's own next-order mysteries (as the ever-unfriendly Seneca says, the "banausic" inventions of architecture require "human ingenuity, not human wisdom."[73]).

This seemingly problematic relationship between the Architect and Nature is, as we recall, much the same as the relationship between *imperator* and *imperium* during the early Principate. Does the *imperator* merely hold non-self-originating *imperium*, an *imperium* which must always reside with the *civitas*? Or does the *imperator* create this *imperium* by virtue of his being, whether this be an earthly manifestation of divine will or military might? Or does the *imperator* possibly work against *imperium*, directly in an effort to become / as a result of being *imperator*? I bring up this analogy in that both the Architect and the Emperor (though the former is a subsidiary of the latter) are working in that strange brew of competing historical, political, and social influences. If the Architect in the Roman sense is faced with the task of giving visual organization, it is in a world increasingly informed by an evolving sense of power vested, in large part, in the cohesiveness of that exact visual organization (this is an idea looked at in every chapter, from roads, to cities, to maps). Thus is architecture, and I mean that in all its Vitruvian broadness, responsible for giving physical and graphical representation to

[71] *in hoc de gnomonicis rationibus quemadmodum de radiis solis in mundo sunt per umbras gnomonis inventae quibusque rationibus dilatentur aut contahantur explicabo.*

[72] In the chapters that follow, there is no discrimination between what we would now keep distinct as astrology on the one hand, and astronomy on the other. This overlap is in no way unique to Vitruvius—it is a "cosmic" thinking which he clearly inherits from the Greeks (Anaximander in particular, as we will see), and which is seen in other Roman works, such as Manilius' *Astronomica*. I bring this up in order to underscore the temptations of anachronism, in that what may sound paradoxical to modern ears would not have been so situated in its own time—the calculations required for determining astronomical distances and relationships were no lesser than those required to figure out under what astrological sign one's birth occurred.

[73] Seneca. *Epistles*. 90.10-13. As quoted by Kevin Greene in "Inventors, Inventions, and Attitiudes Towards Innovation" in *The Oxford Handbook of Engineering and Technology in the Classical World*. Edited by John Peter Oleson. Oxford: Oxford University Press, 2008, p. 803.

empire. Such a responsibility requires, in many ways, reconfiguring the world under this new power sign, a reconfiguration whose magnitude is put in better perspective in comparison with more ancient means of figuring and representing the earth.

Anaximander & Representational Thinking

Anaximander, the archaic mathematician/philosopher/architect from sixth-century BCE Miletus, is often described as one of the first pre-Socratic thinkers to reject mythological thinking in favor of a "rational" approach. Yet, this "rationality" does not have "irrationality" as its opposite, but rather "unrepresentability". By this I mean that Anaximander's rationale was to see the world as ordered by geometrical rules and thus was inherently given to representation, particularly as model. He is the Vitruvian *mathematicus nonpareil* in that not only does he help invent the field of geometry, he puts his theory into practice, as opposed to the more theoretical knowledge of the *architecturus*. As Robert Hahn says,

> Sambursky identified Anaximander as the first to make use of the "scientific model" as a means of description or as a method of explaining phenomena. In matters of cosmology, Anaximander's model stands at the beginning of a process whose culmination includes a modern globe and a planetarium; it offers a model, at least roughly to scale, of cosmic dimensions in such a way that the whole and its parts can be conveniently studied.[74]

Geometrical representation via model was radically different from other efforts, both contemporary and previous, of cosmic thinking. Neither allegorical nor mythological, like the cosmogonies of Hesiod and Homer,[75] Anaximander and Thales before him "found in geometry their model—their reason—for affirming a vision of a highly articulate universal order."[76] The very articulateness, however, did not diminish the divinity of this universal order, and Greek architects "offered a geometrical vision of the divine cosmos by imposing a geometrical order on the house of the eternal: the Greek temple."[77]

This "geometrical vision" made possible both literal and metaphorical new perspectives and views in and of the cosmos. As Hahn argues, the intelligibility of geometric representations is oftentimes contradictory to empirical knowledge; it imposes a systematic organization onto phenomena perceived as change.[78] How then, can we think of what several classical sources report as the inventions of Anaximander, as geometrical representations of his cosmic thinking? Diogenes Laertius II, among others, speaks of a gnomon, sundial, and map at Sparta, all credited to Anaximander, who

> was first to discover the gnomon and set it up on the sundials in Sparta, according to what Favorinus says in Universal History, in order to mark the solstices and equinoxes,

[74]Hahn, Robert. *Anaximander and the Architects: The Contributions of Egyptian and Greek Architectural Technologies to the Origins of Greek Philosophy.* New York: SUNY Press, 2001, p. 164.
[75]Ibid. pp. 163-76
[76]p. 166.
[77]p. 167.
[78]p. 166.

> and also he constructed markings to show the hours. He was the first to draw an outline of the earth and sea, and he also constructed a (celestial) model."[79]

Though Hahn argues that all four components were one and the same—the gnomon sat in the middle of the sundial, earthly, and celestial map alike—suffice it to say that all three visions were clearly interrelated in a project of creating new and shifting old perspectival positions, and thereby fundamentally altering the subject position and capabilities of the viewer.

Leaving aside, for the moment, the unique question of the earthly map—let alone what a celestial map might have looked like!—let us focus on the idea of a seasonal sundial, or horologium.[80] Just like the two maps, the horologium works on a principle of scale: some far larger aspect is being reduced into a model form, for the benefit of the perspective which cannot see the whole. Though this may seem like overstating a simplistic point, it is difficult to imagine much of the cognitive work we may now take for granted—a model of a part only makes sense in so far as that model can fit into an equally-scaled conceptual model of the whole, even if this whole is not represented. And yet, this must all be metaphysical modeling in some sense, as empirical evidence as gathered via lived experience does not lead to totalizing views, but rather fragments thereof.

Thus, the horologium is an active model of the sun's movement over the surface of the earth over the course of time. The understanding of this model is based upon repetition, a repetition which is physicalized and made permanent by the installation of the gnomon and its surrounding dial. Realizing and depicting this repetition is, in essence, making the passage of time understandable in the non-cosmic, non-eternal scale of human lives as they are measured by hours, days, and years. In this way, the geometric scaling-down of the earth's movement relative to the sun results in a more metaphorical scaling-down of time's movement as well, understood now as the movement of the gnomon's shadow on the earth around it. But, in an idea I will return to, this model also completely relativizes the viewer's perspective both in terms of the aforementioned scale, but also in that the same gnomon cannot "tell" the same hour at different places: as Anaximander knew, the sundial yielded the same results in the east-west passage between Miletos and Sparta, but the readings were significantly different to the south, in the Egyptian colony of Naucratis.[81]

Such empirical differences, then, do two things. On the one hand, in the sense of the fragment of the whole, perspectival cognition shifts and becomes relative to place in that what may be empirically true in one location may not hold true in another.[82] But in the sense of the whole of which the gnomon aids in modeling, there must likewise be a resultant change to explain such discrepancies—in other words, the archaic view

[79]Diogenes Laertius II, 1-2. As excerpted by Hahn in *Archaeology and the Origins of Philosophy*. New York: SUNY Press, 2011, p. 145.

[80]It was not until the eighteenth century that this became the name of a constellation in the southern hemisphere. In the sense used here, it is any ancient device by which to tell the time if not of day, than of year.

[81]Hahn. p. 156.

[82]I should make it clear that this is not a cognitive process available to all viewers; though Anaximander surely knew of the different readings, it is not known if this was a common idea.

of the earth as flat could not accommodate what the geometric model thereof showed. Hence, for example, Hahn offers one possible revision to the flat-earth model in the archaic period, which contends that the earth fell away towards the south, accounting for "observational differences [...] in the sightings of the altitude of heavenly appearances on the changing horizon, the sun and in the night sky."[83]

Before we turn to the Augustan sundial at Rome, I want to highlight the important features of Anaximander's building projects of the archaic period: 1) geometric modeling, which functions according to notions of scale, both requires and enables conceptual thinking about different relationships between the part and the whole; 2) geometric representations which model the earth and its surroundings necessarily alter the sense of local and distant space for the viewer; and 3) the *mathematicus* is able to perfectly synthesize theory and practice through this modeling, a synthesis which separates him from the Virtuvian *architecturus*. Though the first two points are inherently linked, it is helpful to keep them separate in that the first point is one of the object itself, while the second is a consideration of the subject that such an object creates.

Because Anaximander's representational thinking / modeling is of a scientific nature, it is helpful to label it as an early form of abstraction, a labeling that will help put it into conversation with later phenomena in this chapter. But so too is it the creation of a non-verbal, visual metaphor, one that is important to see as such. Indeed, what is enabled and produced by representational modeling—different conceptions of the relation between the part and the whole, and the thereby necessitated shift in orientation for the viewer of this object with respect to the part and the whole—is also a fundamental aspect of metaphoric propositions, whereby one "thing" is understood in terms of another. Though I am convinced that all persistent and successful metaphors bear some aspects of many of Lakofff and Johnson's categorical divisions, it is helpful to use their language here in order to better highlight aspects of this metaphor, whose evolution I am tracking in this chapter.

Anaximander's horologium is best categorized as an ontological metaphor—though it is surely conceptual, orientational, etc. as well. Lakoff and Johnson define an ontological metaphor as, essentially, a metaphor that gives objecthood or substance to ephemeral experiences / concepts:

> Understanding our experiences in terms of objects and substances allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind. Once we identify our experiences as entities or substances, we can refer to them, categorize them, group them, and quantify them—and, by this means, reason about them.
>
> When things are not clearly discrete or bounded, we still categorize them as such, e.g., mountains, street corners, hedges, etc. Such ways of viewing physical phenomena are needed to satisfy certain purposes that we have: locating mountains, meeting at street corners, trimming hedges. Human purposes typically require us to impose artificial boundaries that make physical phenomena discrete just as we are: entities bounded by a surface.[84]

By providing a physical, visible representation of time's passage via shadow-work, Anaximander's horologium (and objects like it) actually supplies the base metaphor of time's

[83]Hahn. p. 176.

[84]Lakoff and Johnson. p. 25.

ontology and inherent quantifiability that will come to inform all later Western metaphors of time. Thus, by seeing "it" travel, as a shadow across the earth, does time become something to be seen, and, delimited within the sign-producing unit of the horologium, a something to be read. In other words, it is a metaphoric operation that allows the gnomon of Anaximander's horologium to be seen as the device by which the sun's passage across the sky is taken down onto a distinct, and distinctly marked, plot of land. Keeping this in mind for future work, we can now look at Augustus' gnomon for, among other things, this metaphor's political evolution.

Gnomonice

In his *Vita* of Augustus, the historian Suetonius famously reports that the emperor found Rome brick and left it marble.[85] In the autobiography of sorts that Augustus left upon his death (which was itself to be etched into tablets at the entry to his mausoleum), called the *Res Gestae*, Augustus details the extent to which he claims to have rebuilt Rome:

> I built the Senate House, and the Chalcidicum adjacent to it, the temple of Apollo on the Palatine with its porticoes, the temple of the divine Julius, the Lupercal, the portico at the Flaminian circus, [...] a *pulvinar* at the Circus Maximus, the temples on the Capitol of Jupiter Feretrius and Jupiter the Thunderer, the temple of Quirinus, the temples of Minerva and Queen Juno and Jupiter Libertas on the Aventine, the temple of the Lares at the top of the Sacred Way, the temple of the Di Penates in the Velia, the temple of Youth, and the temple of the Great Mother on the Palatine.[86]

The list continues much beyond this point, but such a substantial citation shows Augustus' marble legacy as public buildings concerned with: divinity, Roman tradition, and personal/familial memorialization. Of the Campus Martius, in the northwest of Rome, bound by the Tiber on the west and the Via Flaminia on the east, which housed his mausoleum and gnomon, Augustus says almost nothing.

Pliny the Elder, however, in the section of his *Naturalis Historia* dedicated to monuments, describes this gnomon. As he speaks of the obelisks of ancient Egypt, and their dedication to the sun-god and designed mimicry of the sun's rays, Pliny mentions the startling fact of some obelisks' removal to Rome. Such transportation was inarguably more difficult than their quarrying, and the ships needed to transport such objects[87] were themselves marvels, such that Augustus had one of them enshrined in-port. What was to become the gnomon of the Campus Martius horologium possibly originated, Pliny tells us, as far back as the nineteenth dynasty in Egypt, roughly 1200 BCE:

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[85] *ut jure sit gloriatus [urbem] marmoream se relinquere quam latericiam accepisset*: "so he deservedly bragged that he himself left in marble the city which he received in brick." Suetonius, *Divi Augusti Vita*, XXVIII. *The Twelve Caesars*. Translated by Robert Graves. New York: Penguin Books, 1957, p. 61.

[86] *RGDA* 19.1-2. Translated by P.A. Brunt & J.M. Moore. Oxford: Oxford University Press, 1967, p. 26.

[87] Pliny earlier mentions two Alexandrian obelisks, both of which survive, both as Cleopatra's needle, one in London and the other in New York.

CAMPUS MARTIUS
with position 2, the *solarium*, just south of the mausoleum

"the obelisk set up by the late Emperor Augustus in the Circus Maximus was quarried for King Psemetnepserphreus who was king at the time that Pythagoras was in Egypt; it is 85 feet high [...]. The monolith in the Campus Martius is about 10 feet shorter; it was quarried for Sesothis." This Sesothis is probably Herodotus' Sesostris, whom the historian claims led an Egyptian kingdom into Europe. How fitting, then, that Augustus uses precisely this object in what Pliny calls a "remarkable" way:

> namely to cast a shadow and thus mark the length of days and nights. A paved area was laid out commensurate with the height of the monolith in such a way that the shadow at noon on the shortest day might extend to the edge of the paving. As the shadow gradually grew shorter and longer again, it was measured by bronze rods fixed in the paving. This device deserves study; it was the result of the brainwave of Facundus Novius. Novius placed a gilded ball on the apex of the monolith so that the shadow would be concentrated at its tip; otherwise the shadow cast would have been very indistinct. He got this idea, so it is said, from seeing the shadow cast by a man's head.[88]

Pliny's description is notable for two reasons in particular, both of which are taken from McEwen's reading of this passage. The first is that Facundus Novius, though it is not included in this translation, is called a *mathematicus* by Pliny, not an *architecturus* (*ingenio Facundi Novi mathematici*). Pliny clearly associates the gnomon with mathematical, and thus geometrical, innovation, rather than that of architecture.

The second is that Novius' *ingenium*, translated here as "brainwave," is to remake the obelisk after human form. As McEwen argues,

[88]Pliny. *Naturalis Historia*. XXXVI.72. *Natural History: A Selection*. Translated by John Healy. New York: Penguin Books, p. 351.

> attaching a "head" to the pyramidal cusp, which thus became shoulders, restored correct proportional relation between the monolith and its shadow by making it anthropomorphic, and transformed the obelisk from an effigy whose "argument" was the sun's rays into a gnomon whose significance was the unifying power of the man who was their mediator.[89]

There is much argument concerning what exactly this gnomon's significance was at the time of its construction. McEwen, following, with some qualifications, the German classicist Buchner, argues for the gnomon as the center of a horologium which told the time hour by hour on a daily basis. The arguments against this interpretation are numerous and convincing, especially given that a vertical gnomon could not have accurately told the time of the day at Rome's longitude.[90] Peter Heslin and others argue for the gnomon as the center of a solar meridian which would point true north at local noon, and mark the year's solstices and equinoxes.[91] Such an interpretation seems more in line with both Pliny's description and the archaeological evidence.

The similarities between the two arguments, however, are greater than not: both camps recognize that the sheer scale of the obelisk, and its importation to Rome, must have been of "symbolic rather than utilitarian" function.[92] Whatever the specifics of the interpretation, the key components—the obelisk, the sun, Augustus, the Campus Martius, etc.—remain the same for both, as does the underlying assumption: that some aspect of the Augustan regime is being symbolized. To return the the idea of Anaximander's ontological metaphor, we can see how one side of this proposition has been drastically narrowed and revised. If the original ontological nature of the horologium concerned giving coded and visual form, however ephemeral itself, to time's passage, Augustus' gnomon introduces a new component into the sign system. Anaximander's horologium produced a geometrical model of scale, in which the sun's passage over the earth was relativized to a shadow's movement over a specific piece of land. Augustus' gnomon, however, seizes upon the symbolic capabilities of the shadow-casting device and "further ontologizes" the metaphor by directly associating the object that the shadow casts with the human form, and not, to be sure, any human form, but the form of the Emperor himself, Augustus' own body. Thus does Augustus' horologium—whatever its exact time-telling functions were—associate the passage of time with the body of the Emperor and thus with the might of empire as well, thereby repurposing not only the metaphor but so too the action of "telling" the time as a new facet of imperial power.

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[89]McEwen. pp. 249-50.

[90]Only at equatorial longitudes would a gnomon vertical to the earth's surface correctly tell the day's hours. At any other longitudinal coordinate, the gnomon's angle from the horizontal must correspond to that location's angle of rotation on the earth's axis; in other words, the gnomon's line must be parallel to that of the earth's axis.

[91]Though it is unnecessary for the argument I am making, I am drawn to those classicists who argue for the obelisk doing such specific shadow-work. As Paul Rehak has recently claimed, "Augustus could have the horologium so constructed that its shadow could point to significant structures on significant days, as on the fall and spring equinoxes, when the gnomon's shadow traced the city's latitude line straight across the pavement from west to east during the course of the day, falling finally at sunset toward the open doorway of the Ara Pacis" (Rehak, *Imperium and Cosmos: Augustus and the Northern Campus Martius*. p. 69).

[92]Heslin, Peter. "Augustus, Domitian and the So-Called Horologium Augusti". *The Journal of Roman Studies*, Vol. 97 (2007), p. 6.

As almost all who have written on the subject have pointed out, the obelisk's erection in 9 BCE corresponds with Augustus' continuation of Caesar's efforts to improve and clarify the Roman calendar. Commonly kept by the priests at the *pontificum collegium*, the Roman calendar was in such disarray that the first year in which Caesar's new calendar was utilized, he mandated the so-called "year of confusion" be made of 445 days in order to sort out all issues.[93] In the 36 years between Caesar's death and Augustus' own calendar reforms, the calendar's festivals and rites had again fallen out of synch with the seasons, leading Augustus to import the Egyptian system of time-telling, which declared the solar year to be 365 $\frac{1}{4}$ days. The Julian calendar reforms, about which I will go into more depth, remained the means of time recording for the Western world until the Gregorian reformation of the late sixteenth century, which remeasured the Julian calendar by mere minutes.

Ovid's *Fasti* & the Julian Calendar

The Roman calendar, dating back to the age of kings, was, by the time of the late Republic, a complete mess. In his short reign, Caesar began many administrative projects, all of which can be loosely organized around the task of quantification. From his cadastral measurements to his calendrical reformation, all of Julius Caesar's means of counting soon became Augustus Caesar's. In 46 BCE, Caesar and the Alexandrian mathematician / astronomer Sosigenes

> brought the Roman republican calendar, which consisted of alternately 355 and 377 or 378 days a year (based on lunar months and intercalation), into synchronization with the solar year of 365 and a quarter days. This system overcame the problem inherent in the archaic calendar, traditionally attributed to Numa, which was a result of measuring the solar year on the basis of twelve lunar months: twelve lunations are shorter than the time period that constitutes a solar year, and thirteen are longer. Thus the calendrical year would tend to creep ahead of, or fall behind, the solar year.[94]

The authority required to reconcile the solar and the civil year was remarkable, even at the time. As Plutarch says, the calendar reforms "gave offence to those who looked at Caesar with envious eyes and resented his power. Certainly Cicero, the orator, when someone remarked that the constellation Lyra would rise next day, remarked: 'No doubt. It has been ordered to do so.' "[95]

This alleged quote from Cicero is interesting here for two reasons. The first is for the more general, and generally-accepted, idea that such a drastic and rapid overhaul of time-measurement in Rome shifted the agency from time's actual passage to the means of its measurement; in other words, the measurement, and not the time, comes first. The second reason stems from the first in that this statement is literally hyperbolic—Lyra,

[93]Cowan, Harrison J. *Time and its Measurement: From the Stone Age to the Nuclear Age* Cleveland: World Publishers, 1958, p. 27.

[94]Gee, Emma. *Ovid, Aratus, and Augustus: Astronomy in Ovid's* Fasti. Cambridge: Cambridge University Press, 2000, p. 9.

[95]Plutarch, as cited by Holleman, A.W.J. "Cicero's Reaction to the Julian Calendar (Plut., Caes. 59): January 4th (45) *Historia: Zeitschrift fur Alte Geschichte.* (3rd Qtr., 1978), p. 498.

of course, will rise, independent of Caesar. And yet, accurate calendrical measurements do in fact make the referencing of stars, or shadows for that matter, as time-markers obsolete. As many have remarked, up to the modern calendar, the sense of time that calendars measure often pre-dates, antiquatedly so, the sense of time in which one lives, or relativizes that prior sense of time and its measurement.[96] Though Emma Gee calls this process one of irony, we might better classify it as an evolution in this ongoing process of representational and metaphoric thinking: "The irony is that, for practical (agricultural) purposes, the Julian calendar rendered astronomical observation obsolete: one no longer needs to look at the stars if the written calendar is in line with them."[97]

At this juncture, it is important to distinguish, as best I can, between the ontological metaphor provided by the original horologium versus the increasingly abstract representations created thereafter. Augustus recast the horologium's gnomon as not the object by which metaphoric thinking allowed the representational model to be understandable / legible but instead an aspect of central importance to the metaphoric understanding of the device—it is the sun, in conjunction with the body of the Emperor, that makes time's passage both known and possible. Though this is surely an "abstraction" in the more evaluative sense, it is more of a shrewd political usage of a potent ontological metaphor, rather than technological abstraction in the sense I will now turn to.

As these modes of representation become more and more mediated—and by this I mean, essentially, farther from the experiential phenomena thereby being represented—the representation looks less like its supposed origin, and instead, more simply like itself. In this way, such mediations cease being representations and become abstractions instead. This is not necessarily a self-evident logical step, so an analogy to more straightforwardly aesthetic terms may clarify: the work of art that realistically and mimetically attempts to replicate the world is, in these terms, the representation. The work of art, however, that takes this representation through another lens of mediation, be it Impressionism, Cubism, etc., then becomes, in these terms, an abstraction. And as we are discussing not works of art but works of quasi-science/quantification, these abstractions are not aesthetic but technological. This practice of technological abstraction is one that we have seen before with the gnomon, in that it takes a measurement from the empirical world, and transforms it into a differently-legible scale of measurement, which then eclipses the first. For example, sunrise to sunset—an empirical measurement—becomes abstracted through the values of (largely arbitrary) time measurements of days, and, later, hours, minutes, and seconds. I call attention to this means of abstraction, and also how this abstraction tends towards greater precision, as I will return to it. For the time being, suffice it to say that such an operation, in the efforts to standardize and simplify measurement, often makes the means of those original measurements obsolete or illegible.[98]

[96]This is perhaps even clearer with our own Gregorian calendar, whose work days, market days, and day of rest reflect a distinctly agricultural way of life which is largely gone but for this organizational structure.

[97]Gee. p. 5.

[98]This process is, I think, very similar to many arguments made about modernity and modernism; the former destroys the latter, in its own name, etc. In other words, this is an argument inherently about progress.

Returning to the Julian calendar, however, it is important to note that it did not exist as an object as we currently think of it, but instead as an authority given to *Collegium Pontificium* to order not only the days, but also what could be done on any particular day. As Emma Gee says,

> the Caesarian calendar was itself a pastiche of the work of different parapegmatists and astronomers; it should be considered not as a document canonical in the keeping of Roman time, but as a textualisation of this history of chronology up to that point.[99]

This textualisation, or rather an almanac of the civil value of days, came to be known by shorthand as *Fasti*, coming from the adjective *fastus*, meaning "not forbidden," and hence, "lawful for the transaction of business" (*OLD*). But within the category of *ne-fastus* (N in the almanac), or a "forbidden day," Rome was a complex of feast days, or *feriae*, both public and private:

> The marking of Julius Caesar's anniversaries alongside those of the state cult initiated the process of the incorporation of the personal cult of that individual into the state religion, the history of the city, and the Roman collective consciousness. What seems to have facilitated this process was the merger of private with state anniversaries.[100]

In other words, the private observances of the family of Julius, and later Augustus, Caesar, became civil, and thus public *feriae*, an increase of some twenty—from forty-nine to sixty-nine—state-sanctioned feast days by the time of Augustus' death.[101]

This almanac of recurring days, then, was far more concerned with civil practice than any celestial observations that may have informed such practice: "whatever the multiplicity of the Julian calendar, there is almost certainly a body of astronomical theory which underlay it, even if this theory did not manifest itself in inscribed form."[102] And yet, in Ovid's unfinished elegiac-couplet companion to this almanac (an uphill poetic battle if ever there was one!), the poet immediately speaks of the heavens, and continues to do so (often with seemingly little concern for astronomical exactitude) for the rest of the poem. As Geraldine Herbert-Brown and others have pointed out, this motif, within an already strange project, is not nessarily self-explanatory. Right from the opening couplet (*Tempora cum causis Latium digesta per annum / lapsaque sub terras ortaque signa canam.* (Of the times organized throughout the Latin year, with their causes, and the rise and fall of the constellations beneath the earth, will I sing.)), the poet clearly parallels the calendrical organization of the Latin year with celestial movement; indeed, this exact parallel will be his focus.[103] Arguments for this parallel are varied, though I am drawn to Newlands' work which sees Ovid's inclusion of the stars as emblematic of an opposition to the "'normative values' of the Roman state. [...] Ovid's carelessness about dates is in reality a device calculated to give him the freedom to position his Greek star myths so they challenge the points of view encoded in the Roman material."[104]

[99]Gee. p. 15.

[100]Herbert-Brown, Geraldine. *Ovid and the* Fasti: *An Historical Study.* Oxford: University of Oxford Press, 1994, p. 22.

[101]The ever-increasing count of Roman feast days, what Juvenal will eventually refer to as the mass appeasement of bread and circuses, by the fourth century numbered 175.

[102]Gee. p. 16.

[103]Herbert-Brown. "Ovid and the Stellar Calendar" in *Ovid's* Fasti: *Historical Readings at its Bimillenium.* Oxford: Oxford University Press, 2002, pp. 101–28.

[104]Gee. p. 2.

In many ways, Ovid's star myths, or his astrological reasons for the days, are as equally valid as their astronomical prompting: once the calendar ordains the days, the stars' literal movements across the sky take on the function of myth in that they serve the same practical function of etiology. In many ways, Rome under Augustus became an astrological city, nowhere more evidenced than in Augustus' production of coinage emblazoned with the emblem of Capricorn, the first "sign in which the Sun began to rise again after the winter solstice. Thus the zodiac sign became the sign of a new age of peace after the civil wars."[105] As Tamsyn Barton argues, "astrology emerged as the Roman Republican system began to collapse, a coincidence which, in my view, was no accident. Astrology belonged with the sole ruler, as the state diviners belonged with the Republic."[106] So strongly did Augustus align his political power with the fate ascribed by the stars that he, so Suetonius and Cassius Dio record, published his horoscope within a state edict. Astrology, as it connects to the divine authority of the political rule being established at Rome, becomes increasingly prevalent both in historical and literary records. Thus, Ovid's inclusion of astrological motifs within his *Fasti* is in keeping with a larger movement within the culture of the Principate.[107]

And yet, Ovid's astrology, as I have mentioned above, is more in keeping with Greek mythology. Midway through book I (January), Ovid clearly aligns himself with this more ancient trajectory:

> *felices animae, quibus haec cognoscere primis*
> *inque domus superas scandere cura fuit!*
> *credibile est illos pariter vitiisque locisque*
> *altius humanis exeruisse caput.*
> *non Venus et vinum sublima pectora fregit*
> *officiumque fori militiaeve labor;*
> *nec levis ambitio perfusaque gloria fuco*
> *magnarumque fames sollicitavit opum.*
> *admovere oculus distant sidera nostris*
> *aetheraque ingenio supposuere suo.*
> *sic petitur caelum: non ut ferat Ossan Olympus,*
> *summaque Peliacus sidera tangat apex.*
> *nos quoque sub ducibus caelum metabimur illis*
> *ponemusque suos ad vaga signa dies* (I. 297–310).

> Lucky souls, astronomy's founding fathers, who troubled
> to learn these things and ascend to the higher realms.
> I can well believe they also transcended human folly
> when they rose above human heights.
> Too high-minded to be distracted by wine and women,
> civic duty or military service,
> they weren't bothered by trivial ambitions, the purple
> of status or hunger for great wealth.

[105]Barton, Tamsyn. *Ancient Astrology.* London: Routledge, 1994, pp. 40-1.

[106]Ibid. p. 38.

[107]Recall that the *sides Julium*—the comet seen at the games given in Caesar's honor after this death, which was taken as a sign of not only his deification, but of his catasterism, or celestial apotheosis—is also versified by Ovid, in his *Metamorphoses.*

> In their imagination they approached the distant stars
> and subjected heaven to their intellectual might.
> That's how to aim for the stars, not like the Giants did it,
> piling Mount Ossa on top of Pelion.
> I too will survey the heavens with them to guide me,
> and assign the right dates to the constellations.[108]

As shown here, Ovid clearly sees his addendum to the Roman calendar as an additional step in this same process which began with (Greek) astronomical mythology. As Frederic Jameson, in his book on science fiction describes this type of thinking,

> [t]he first forms of perception and articulation impose themselves as the staring light of the planets, the slow separation from each other of those lights from the wheeling rise and fall of the thronged numbers behind them. What defines this perception, however, is a reversal of vision in which it is the stars that look down on us and hold us in their blinding field of vision.[109]

Ovid's approach to distant stars, then, is clearly of this first mode of perception, as is all astronomical mythology in which the human is gazing upon the stars, a division which includes essentially all etiological narratives about the stars' orientations and alignments (think of Cassiopeia, bragging of her daughter Andromeda's beauty, both cast into the night sky forever). And yet, in an astrological mode of perception, Jameson's "reversal of vision," the gaze shifts, and it is the stars that gaze upon us. In this mode of thinking, the heavens are not the stellar resting place of characters of human narratives. Instead, the motion in reversed, and it is the stars who dictate, in terms of birth, and preside over, in terms of celestial movement, human lives on earth.

This reversal of astrology is, as I have alluded to earlier, especially important for the early Roman empire in its various efforts to reconsider and refashion the world in its own image. Beginning with Julius Caesar's catasterism, the sky above Rome was becoming populated not just with the imperial family, but with clues to that family's functionings on earth. As Gee argues near the end of her book,

> Caesar had to reform the calendar, because of his future divinity. Ovid's logic in tying calendar reform and astral apotheosis together should now be clear. Because the dictator is to be akin to the stars, he has to know about the stars. By both calendrical reform and astral apotheosis, the ruler takes his place in the cycles of time. Calendrical reform—the control of time as well as space—is part of world empire: the natural year is now identical with the Roman year and its Julian festivals. The Julian family, whose festivals were grafted into the Roman year, is now part of the cycles of astronomically driven time. In astral apotheosis, the presence of the ruler is superimposed on the *mundus*, so that he participates in time as one of the heavenly bodies.[110]

With an unsettling finality, not only do the stars, in the astrological sense, celestially orient themselves for good or bad auspices of the human lives playing out beneath their gaze, so too do the most powerful of these human lives become the stars themselves, ensuring the continuity of such power.

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[108]Ovid. *Fasti*. Translated by James Frazer. Loeb Classical Library, 1931.

[109]Jameson, Frederic. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso, 2005, pp. 94-5.

[110]Gee. p. 162.

If we think back to the idea of the horologium as an ontological metaphor that began this section, both its evolution as a political metaphor, as well as the abstractions of time that such a process of metaphorization aided in, have colluded in this final, for the time being, step. As the components of the metaphor, or the abstractions thereof, become increasingly removed from their experiential prompting or similarity—recall, this prompting and / or similarity is, for Lakoff and Johnson, a requirement of the metaphor—a strange, and lasting, reverse trajectory occurs, whereby the means of time's measurement, whether they be the horologium's gnomon or the movements of the stars, become first synonymous with imperial power formations, and second, eclipsed by the notion of time's passage itself, which has now also been rendered as a facet of empire. If Anaximander brought the sun down onto the earth, Roman imperial time markers push themselves back into the heavens, thereby making time, and the natural order it produces, internal to empire.

Personal Time

The Roman calendar, Augustus' gnomon, and other time-telling devices, were decidedly public objects, whose creation and installation were the state's responsibility. But in the Principate, the past idea of the state was transforming into the new reality of imperial power as held and exercised by Rome both as a hierarchy of *imperium* and a locality. How then were these objects, and particularly the obelisk on the Campus Martius—the most public and visible of all time-telling devices—interpreted by the citizens of Rome, for whom they were undoubtedly intended?

Just after his description of the gnomon, Pliny adds, somewhat mysteriously, that some thirty years after the obelisk's placement, its measurements stopped agreeing with the calendar: "either the orbit of the sun itself is out of phase or has been altered by some change in the behaviour of the heavens, or the whole earth has moved slightly off-centre" (Pliny. XXXVI.73).[111] In other words, the monument's symbolic function far outlived its utility, a utility of some thirty years. If not the time itself, then what story about time does this object tell?

As McEwen says, the *imperium sine fine* "that Jupiter promises the Roman people is *temporally* "without limit"—a power endlessly renewed—not a spatial entity. Because *imperium* had no body, before Augustus took the name Imperator there was, as conventional usage now designates it, no Roman "empire." "[112] By this argument, then, all of Augustus' building projects were, in some aspect, efforts at self-spatialization, and thus, the manifestation and spatialization of *imperium*—in other words, Augustus' gnomon told the story of Augustus. Though I agree with this argument in many ways, I think that it over and underexamines two crucial points. First, it overly considers Augustus' position, in so far as it seems as though empire would crumble without him, which it surely did not. Second, it underexamines the confusion of the time period—McEwen's transfer of *imperium* from the state to the *imperator* to the building presupposes not

[111]The Campus Martius was partially composed of reclaimed swamp, which archaeological excavations show shifted, in some places by feet, before the reign of Domitian (Heslin).

[112]McEwen. pp. 277-8.

only a citizenry who could understand these maneuvers, but a sense of *imperium* steady enough to handle such transference.

Agreeing with McEwen's underlying assumption, which she takes from Vitruvius' stated ambitions for architecture (that empire must spatialize itself in order to exist, which it does through architectural means (recall that fundamental land demarcations, such as walls and other boundary lines fall under architectural practices))—where, if not Augustus, does this spatializing ability come from, and how is it understood? Returning to the discussion concerning the former sense of the word *imperium*, from which all later senses of empire stem, the idea of power as vested in the state is axiomatically mutating into the power which that state exerts. This logical fallacy in which *imperium* is both the cause and the effect of empire has both predecessors and decedents, and a brief detour into one such instance might help better explicate this situation.

In more ancient law, this logical fallacy is the originary law which tells itself as law, the "illegal" first law which must give credence to itself and to the laws which follow. Such a situation in which cause and effect are interchangeable returns us to the idea of fate and the lack of self-invention imposed by astrological thinking, an idea that stems from equally ancient modes of narrative, legal and tragic alike. As theorists from antiquity to the present day have argued, there is a clear relationship between tragedy and the law. Summarizing a point from Aristotle's *Poetics*, Christoph Menke says that one of the reasons tragedy is the genre of law is that "the history of tragedy started when '[the] number of actors was increased from one to two by Aeschylus.' This way in tragedy, just as in the legal court, two sides can be present at the same time."[113] The supposed difference between tragedy and the law, however, is that the former metes out vengeance, while the latter proffers justice.

But, as Menke argues,

> To Euripides' Orestes the claim of law to be categorically different from revenge has become unintelligible; it is supplanted by the phenomenal evidence of their similarity. For, as a matter of fact, both law and revenge, the violence of legal punishment and of the act of vengeance, look the same. Their difference is a—*merely*—formal one, a difference in the form of judging. From the point of view of the one facing the threat of legal sentence, its formal difference from an act of revenge loses its force. Law and revenge, though formally different, in practice appear alike.[114]

From the perspective of the subject of law, justice is equivalent with revenge and thus the law's verdict functions like a curse: "the violence of law—as Plato puts it—is the 'curse of the law.' "[115] From the perspective of the Law, however, the curse of the law is distinct from revenge in that it requires its subject to also sentence himself (Oedipus blinds himself): "the curselike violence of legal judging is due to the fact that its legitimacy, by which it overcomes revenge, demands the convict's self-sentencing; the violence of law is the curse of self-sentencing."[116]

Referring to Benjamin's "Critique of Violence," Menke goes on to argue that "the

[113]Menke, Christoph. "Law and Violence". *Law and Literature*, Vol. 22, No. 1 (Spring 2010), p. 4.
[114]Ibid. p. 6.
[115]p. 7.
[116]p. 9.

violence of law is due to its working as—*like*—fate."[117] Distinguishing "mythical law-making" whose end is power, from "divine end making," whose end is justice, Benjamin says that "[l]awmaking is power making, and, to that extent, an immediate manifestation of violence."[118] To perpetuate its power, law renders itself impartial, partially through this requirement of self-sentencing. But "[p]aradoxically, ironically, or fatefully, this program of granting the subject the authority of self-judgement under the rule of law ends with the subject being completely saturated with law; no difference shall remain. Like fate, law asserts itself completely."[119] A law, however, is always written, and power does not accrue to only the Law itself, but to those who practice it, namely, the state. Such the same for *imperium*—it does not, at the outset, miraculously generate its own source of authority, it merely disguises a threat—military aggression and reprisal—as such. But just as with the law, once this original axiom passes into belief or acceptance, just the organizing principle, and not the fallacy, remains. Likewise does *imperium* "paradoxically, ironically, or fatefully" create its subjects in an uneasy relation to itself as both its subject and object.

Of specific interest in this chapter, however, are the ways in which *imperium* fashions subjecthood around changing concepts of time and space. As time becomes if not better measured, then certainly more politicized, with the "time" of the high-up rulers and their families entered into state-sanctioned days of business or holiday, so too do individuals' interactions with it. One means of measuring or gauging the changing nature of Roman person time is through various works on the Roman concept of *otium*, loosely translated as leisure, as it shifts in literature and historical documents during the early empire. *Otium* has a long and varied history in Roman culture, as the sense of time necessary for both the idleness of the poets—ranging from the quiet life of domestic ease of Horace's *Satire* 1.6 to the unbridled luxury of Ovid—to the freedom necessary for the pursuit of higher learning, as with Cicero and Pliny, for example (cf. Pliny's *Epistle* 1.3 which encourages that books be considered a form of work: *hoc sit negotium tuum, hoc otium, hoc labor, haec quies* (this [study] should be both business and leisure, work and rest), and the beginning of Cicero's *de Oratore*, which, as W.A. Laidlaw says, "links leisure and letters [...]."[120]). Overall, concepts of *otium* "contained an element of doing as one pleased, in one's own good time" or, relatedly, "doing nothing at all: uninvested money was called idle, and the industry of the aqueducts could be favorably compared to the pyramids' sloth"[121] Speaking of developments slightly later in the early empire, J. P. Toner argues that

> Leisure discourse became the vehicle for the expression of elite concerns over the transformation of Roman society, and held a double significance. On the one hand, leisure was all that was left to the elite since, with the end of the republic, they were denied their traditional position of political authority; on the other, that very leisure which had traditionally been their preserve, and to which they had retired, was increasingly encroached upon by the lower orders.[122]

[117]Menke. p. 10.
[118]Benjamin, W.. *Reflections*. Translated by Jephcott, E.. New York: Schocken Books, 1978, p. 295.
[119]Menke, p. 11.
[120]Laidlaw, W.A. " 'Otium' ". *Greece & Rome*, Vol. 15, No. 1 (Apr., 1968), p. 45.
[121]Toner, J.P. *Leisure and Ancient Rome*. Oxford: Blackwell Publishers Ltd., 1995, p. 23.
[122]Ibid. p. 31.

In this changing political order (and earlier in the Republic), if there is no clear sense of agreement on not only what precisely connotes work versus pleasure, there is also no consensus on which use of time is necessarily "better" for the individual: for every Seneca, decrying those "worthless people [spending] the whole time playing on the playing field, or skulking in a cook-shop, or wasting their time hanging about in some gathering,"[123] there is an Ovid, giving explicit directions on how to make the most of one's free time, as in his *Ars Amatoria*. In this way, personal time as a category is shifting, both by becoming more public, and by one particular measure of it—leisure; i.e. not the circumscribed time of labor—becoming likewise available to more of the population.

Returning to Anaximander's geometrical representation which served as a model of the divine order, and his sundial which brought the cosmic movement of the sun down onto an ellipse of Spartan earth, we can see how equivalent geometrical representations in the Augustan age—just as at Sparta, there was a map of the known world near the gnomon, which I will talk about elsewhere—served not to illustrate the divine, but the changing political order, and the changing concepts of time such politics brought. In many ways, the might of Augustus' gnomon was more literal than symbolic in that it read as precisely what it was—a massive obelisk brought from newly-conquered Egypt into Rome through innovations in transportation and building. It did not, in most modern senses, tell the time, but it did tell of the *imperium* which brought it there, and of its own *imperium* as it cast its shadow on the huge plane around it. The novelty of this *imperium*, regardless of its old name, is not only that it can be geometrically and geographically represented, but that its representation *is* its *imperium*, a point made centuries later in Borges' "On Exactitude in Science," in which the map of empire is the empire itself. In the terms used throughout this chapter, this is another step in the evolution of representation and abstraction. Going further still from any observable natural phenomena, the technological abstraction becomes not just a highly removed and mediated representation thereof, but the abstraction becomes all there is; at this point, a part of the gnomon's meaning, figured here as technological abstraction, never points away from itself as a device by which something else is accessed (the time of day), but instead is an entirely self-referential sign system, speaking only of itself.

Edmund Buchner famously, and probably erroneously, argued that the gnomon's shadow pointed slightly northwest on Augustus' birthday, directly onto his temple dedicated to the Roman peace, the Ara Pacis. Though several classicists have stated the physical impossibility of such an occurrence, no one has debated the sentiment behind the argument concerning the nature of imperial rhetoric and public monuments in the early Principate. Though such entirely propagandistic and self-referential building projects existed, there were ones of a less obvious nature as well, more inclusive of the public. Though I accept that the emperor was clearly aligning himself with the power and authority of the sun via the Campus Martius gnomon, such a statement leaves out those members of the Roman *civitas* who also stood upon the earth, also casting their own shadows. Referring to the answer of the Sphinx's riddle, McEwen says that "upright and

[123]Seneca the Younger as quoted by Toner, p. 27.

two-footed at midday, architecture's ultimate referent is also the measure of time."[124] She does not, however, follow this thinking to Rome and realize that whatever the sun did to the gnomon, it also did to its human observers, thereby making any possible lesson a relative one. This tension, or oscillation, between the abstraction of political power as represented via different building projects, and the specificity of individual or communal relations to those projects, recurs in the early years of the Principate. As empire's architecture demonstrates its very nature in that it demonstrates how and where it takes up or repurposes space, people necessarily become imperial subjects—itself an oscillating position for those who live in the "center" of empire— as they interact with these spaces. Thus, though the gnomon undoubtedly cast the largest shadow, it is false to imagine it penetrating an empty landscape, as all visual recreations do. Instead, the gnomon's shadow falls onto a landscape populated with smaller, human forms, whose shadows repeat the gnomon's *imperium* again and again, this time through the imperial device of their own bodies, both as subjects and creators of empire. This is a uniquely visual version of the process mentioned earlier whereby individuals become lawful subjects not just by accepting the Law's power, but by internalizing it under the mirage of the "authority" of self-judgement, whereby the individual performs on herself the Law's violence. In this imagined recreation of the Campus Martius, the body of each imperial subject becomes itself as such via the guarantee of casting a shadow in the light of the sun. These bodies and their shadows, then, are the subjects created by the dual logic of empire, whereby their physicality, their ability to cast a shadow, enables them to tell the time, and tell themselves into the graphical abstraction of empire on the earth around them—this is the perpetuating and creative aspect of empire. And yet, it is only via *imperium* that these bodies are at all legible in these new terms—this is the subjugating and subjective (but not conquering or colonizing) aspect of empire.

Up to this point, I have been discussing the metaphoric nature of time measurement with respect to its productive rather than receptive, aspects: all those ways in which Roman imperialism came to associate itself with time. But to return, yet again, to Anaximander's horologium, and the experiential basis, or the sense of similarity necessary for a metaphor's functioning, all of the Augustan regime's efforts at associating time and its markers with the body and family of the empire also open the possibility of bodily association with time, albeit on a relative scale, for individual subjects of empire. I highlight this point not so much to argue for the merits / demerits of such a process, but to show that the general process of meaning making prompted by metaphoric structures holds true, even as these specific structures are being drastically reconfigured. By providing the ontology of the Emperor's body as one means of understanding, Roman metaphors concerning time create new grounds of experience or similarity via which these metaphors can be understood, and each Roman body becomes its own, smaller and localized, device for telling the time, under the larger, imperial sign-system, a newly coded part for the whole.

[124]McEwen. p. 232.

The Sun Never Sets

Regarding the human form as its own time-telling device can be taken as perhaps the most intimate and personal version of relative and localized notions of time. This relativity and localization became a greater problem as the devices for measuring time became more sophisticated, but with no better sense of how to account for the differences in time depending on location, as recorded as far back as Anaximander's gnomon in Miletos versus Naucratis. Indeed, sundials continued to be the most accessible and pervasive time-telling instruments in Europe well past the Renaissance, though pendulum clocks, water clocks, and marine chronometers continued to advance the science of time-telling. And yet, during the so-called "horological revolution" of the late 17th and early 18th centuries in Britain—a period also known as the Augustan age—some have argued that both empires (Roman and British) showed a similar disinclination towards rationalizing their time systems, and a similarly rapid technological and urbanization boom once they finally did.[125] Indeed, it is not until this very boom that the process of technological abstraction tracked throughout this chapter is called by the more modern name of systematization. As Samuel Macey argues, urbanization and a Protestant work ethic led to Britain's systematization of not just the hour, but of the minutes and seconds therein:

> The ability to measure small durations of time gave to the Protestant north a control of the seas through chronometers. [...] In 1657, the needs of urban domestic timekeeping were first met by the revolutionary pendulum escapement of Huygens that reduced the error in clocks from 10 minutes to 10 seconds per day; in 1761, Harrison's most famous chronometer, H4, lost only 5.1 seconds in a stormy sea voyage of 81 days from London to Jamaica [...]. The clocks of the horological revolution brought about the mean solar day because their relative accuracy made it more obvious that sundials (which had earlier been used to regulate clocks) varied from the mean day by as much as 16 minutes owing to the equation of time [...].[126]

Closely linked to the rationalization of time's measurement into ever smaller units is the issue of its standardization across stretches of space—the same issue of Anaximander's sundial in Miletos versus Naucratis. Via astronomical calculations at the Royal Observatory, Greenwich, in London, the relatively small island of Britain standardized time across itself midway through the nineteenth century, but it took decades for the rest of the world to not only do the same, but to agree to a global systematization. Though many have shown that the growing urgency for such systematization was prompted by unique circumstances of the time period, which I will go into, it is my argument that such urges—which in the classical period were satisfied by the quantification and qualification of the spatial and political world under imperialism—have definite precursors. Empire demands spatial quantification and qualification in order to show its existence, and, hence, its purpose. Any innovations in these fields are always, by nature, imperial. By the time of the British Empire, these tasks of quantification and qualification have

[125]Recall that the Roman calendar, when Julius Caesar reformed it, was off by some nintey days. Similarly in Britain, September 2, 1752 became, during the same day, September 14, 1752.

[126]Macey, Samuel. "The Concept of Time in Ancient Rome". *International Social Science Review*, Vol. 65, No. 2, p. 77.

become those of systematization and standardization. As both the means of and the measurements themselves become ever more sophisticated and precise, the process of technological abstraction, with its beginnings, in this context, in the sundial and calendar, becomes ever more opaque. It is not my argument that any latter set of abstractions replaces the former, but rather continues to build upon the foundations of the first.

Specific to this historical moment, however, such a standardization of time was the result of many transportation issues, especially those of trains. As Clark Baise says, in the ten-year period between 1875-85,

> the contradictions between new technology and old time-reckoning passed from inconvenience and inefficiency to urgency and, finally, to danger. Ships of different nationalities could not communicate their positions at sea, due to competing prime meridians. Railroad accidents were daily events, an inevitability considering that trains on the same track might be employing different times. Meanwhile, technology continued to evolve; the velocity of the culture continued to increase.[127]

Standard time, so the story goes, came to its creator, Sanford Fleming, when he had missed a train.[128]

Dividing the world's circumference into longitudinal swaths, each of which would have its own local time in relation to the mean time of the Prime Meridian, which was to be Greenwich, Standard Time recreated time on earth. As many have noted, this recreation was entirely arbitrary from a scientific point of view—there is little sense of "natural" or "terrestrial" time in Standard Time. As Blaise argues, Standard Time effectively banished sundial time, the entirely place-dependent and solidly physicalized representation of time in favor of a "sophisticated abstraction."[129] This peculiar tension between the specificity of measurement versus the abstractness of concept is, I have been arguing, inherent in imperial efforts of not just spatial, but also temporal, quantification, and thereby any effort at standardization. This process in which the very specificity ensures its abstraction is, as we recall, the basic movement of what Emma Gee called the "irony" of the calendar, and what I have been calling technological abstraction more broadly—the accurate recording of the stars' movements ensured that they no longer need be consulted.

In 1870, France's government took elaborate and painstaking measures to standardize the meter as a unit of length, with engineers "hammer[ing] and smelt[ing] their way to a tough, durable iridium-platinum alloy"[130] over the course of fourteen years. The result: a meter stick nestled in a bed of velvet, locked in a vault below the Breteuil Observatory in Paris, which only three keys, held by three separate officials, could open. As Peter Galison says,

> this was a remarkable moment. **M**, the most precisely forged and measured object in history, the most individually specified humanmade thing, had become, by its burial, the

[127]Blaise, Clark. *Time Lord: Sir Sanford Fleming and the Creation of Standard Time.* New York: Vintage Books, 2000, p. 72.

[128]Ibid.

[129]p. 212.

[130]Galison, Peter. *Einstein's Clocks, Poincaré's Maps: Empires of Time.* New York: W. W. Norton & Company, 2004, p. 87.

> most universal. Here was an object manifestly in France and yet not in France, religiously redolent and yet stridently rational, absolutely material and yet completely abstract.[131]

And when the object of standardization, which is, as I have argued, another way of naming the process of abstraction, is *itself* an abstraction, almost all material aspects become lost in said process. Thus, by time's global standardization in the late nineteenth century, almost any sense of the sun's movement across the earth, let alone the body's ability to demonstrate this passage by its cast shadow, has been lost. Indeed, for Lefebvre and others, this is the decisive moment of modernity, in which time, in its abstraction, becomes completely separate from the space in which it occurs:

> With the advent of modernity time has vanished from social space. It is recorded solely on measuring-instruments, on clocks, that are as isolated and functionally specialized as this time itself. [...] Our time, then, this most essential part of lived experience, this greatest good of all goods, is no longer visible to us, no longer intelligible. It cannot be constructed. It is consumed, exhausted, and that is all. It leaves no traces. [...] It is, rather, the time needed for living, time as an irreducible good, which eludes the logic of visualization and spatialization [...]. Time may have been promoted to the level of ontology by the philosophers, but it has been murdered by society.[132]

This returns us to Anaximander's "rationality," the opposite of which was unrepresentability. Here, though, the specificity of scientific standardization has rendered a concept un-model-able, beyond representation or visibility: a clock can only represent itself. The trajectory I am outlining, then, is circular: what began with the Greeks as an effort to translate Lefebvre's "natural, lived time" of the "sun, moon and stars" down onto the earth through geometric models, has become so specialized and rarefied, that the ability to express and understand this sense of time has again disappeared, "been murdered," according to Lefebvre.

And yet, many empires, perhaps most famously the British, have described their landholdings as those upon which the sun never sets. Though the literal meaning is clear, the more metaphorical alignment between the empire, and the natural, cosmic, movement of the sun, is also understood as a subtext, thereby returning us to the solar and astrological imperialism of Rome, and also political might as understood through an individual subject's body. Indeed, many noted British novelists of this time period deal with just this tension between time's abstraction versus its lived experience. This is similar to Jameson's idea presented earlier concerning modernism and imperialism. As the connection between imperialism and spatializing efforts like map-making is clear, Jameson argues for a key facet of the modernist "style" stemming from "representational dilemmas of the new imperial world system,"[133] particularly an individual's experience of space versus a "non-empirical space beyond space [...]."[134] Just such a representational dilemma is occurring here too, in the disjunct between personal / individual time and a "non-empirical time beyond time" which is, as I have been arguing, just as much an aspect of the imperial world system.

As the novel becomes modern, and thus more

[131]Galison. pp. 89-90.
[132]Lefebvre. pp. 95-6.
[133]Jameson. *The Modernist Papers*. p. 164.
[134]Ibid. p. 161.

> totalizing and encyclopedic in its aspirations, endeavoring to contain and connect diverse nationalities, discursive communities, and class factions within one overarching, eschatological framework, it demands new narrative forms of conceptualizing time and space capable of managing those totalities. [...] In a sense this problem is similar to the one facing the architects of the standard time system, which was presented as the ideal map for reading the time and space of an increasingly globalized world. The aspirations of the literary modernists and the standard time advocates can thus be understood as fundamentally similar.[135]

To combine Barrows' argument with Lefebvre's, however, we end up with the modern novelists siding with those who, for Lefebvre, put the final nail in social time's coffin. Suffice it to say, I think Barrows has it wrong in assessing these two camps' "aspirations" as similar, but correct in correlating them in responding, I think very differently, to the new notions of time, and the increasing disappearance of representations of time that in any way synch up with the lived experience of time passing.[136]

But one of post-colonial theory's biggest arguments has been to show that these novels, particularly the British novels of the height of the empire, are imperial ideological tools without comparison. As Said argues in *Culture and Imperialism*,

> The novel is an incorporative, quasi-encyclopedic cultural form. Packed into it are both a highly regulated plot mechanism and an entire system of social reference that depends on the existing institutions of bourgeois society, their authority and power. The novelistic hero and heroine exhibit the restlessness and energy characteristic of the bourgeoisie, and they are permitted adventures in which their experiences reveal to them the limits of what they can aspire to, where they can go, what they can become.
>
> [...]
>
> By the 1840s the English novel had achieved eminence as *the* aesthetic form and as a major intellectual voice, so to speak, in English society. Because the novel gained so important a place in "the conditioning of England" question, for example, we can see it also as participating in England's overseas empire.[137]

Virginia Woolf is certainly a British novelist, though more associated with the decline, than the height, of the British empire. Indeed, if British novels of imperial decline, as John Marx argues, imagine "the world as an array of discrete yet interconnected localities" which abjure "the Victorian fantasy of a planet divided into core and periphery, home and colony in favour of the new dream of a decentred network of places and peoples," then such a frame of mind is more similar to the Roman world as it became an empire. I will use Woolf's work as an example of the British novel's preoccupation with time and its representation, though I do not think that she is particularly singular in this.

In all of her major novels, Woolf manipulates time in different ways. Somewhat playfully in 1928's *Orlando*, the narrator juxtaposes the time of the natural world with the time of the novel:

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[135]Barrows, Adam. *The Cosmic Time of Empire: Modern Britain and World Literature*. Berkeley: University of California Press, 2010, p. 3

[136]Consider, as a thought experiment, how intertwined the passage of time becomes with devices of its measurement such as the hands of a clock moving over its face, to the sound such movement makes, etc.

[137]Said, Edward. *Culture and Imperialism*. New York: Vintage, 1994, p. 72.)

> [h]ere he came then, day after day, week after week, month after month, year after year. He saw the beech trees turn golden and the young ferns unfurl; he saw the moon sickle and then circular; he saw—but probably the reader can imagine the passage which should follow and how every plant and tree in the neighborhood is described first green, then golden; how moons rise and suns set; how spring follows winter and autumn summer; how night succeeds day and day night; how there is first a storm then fine weather; how things remain much as they are for two or three hundred years or so, except for a little dust and a few cobwebs which one old woman can sweep up in half an hour; a conclusion which, one cannot help feeling, might have been reached more quickly by the simple statement that "Time Passed" (here the exact amount could be indicated in brackets) and nothing whatever happened.[138]

Just the year before, Woolf had indeed put just such a "simple statement" into one of her novels, the famous middle section of *To The Lighthouse*, entitled "Time Passes". But instead of an exact amount, or nothing whatever happening, the majority of that novel's "action"—including World War I and the death of the protagonist—is bracketed off ("[Mr. Ramsay, stumbling along a passage one dark morning, stretched his arms out, but Mrs. Ramsay having died rather suddenly the night before, his arms, though stretched out, remained empty.]").[139] As Ann Banfield notes, following E.M. Forster's assertion that "in a novel there is always a clock," Woolf seems to be offering different versions of what exactly that clock might measure, or not:

> [r]evising *To The Lighthouse* and with "no idea" of the next work, Woolf [...] records in late 1926, "I am now and then haunted by some semi-mystic very profound life of a woman, which shall be told on one occasion; and time shall be utterly obliterated; future shall somehow blossom out of the past . . . my theory being that the actual event practically does not exist—nor time either."[140]

This "semi-mystic very profound life" was to become that of Clarissa Dalloway of *Mrs. Dalloway*, whose original title was *The Hours*.

The novel opens and closes with a quote. Walking in London, prompted by the famous opening line, "Mrs. Dalloway said she would buy the flowers herself,"[141] Mrs. Dalloway gazes into Hatchards' shop window, full of open books and reads "*Fear no more the heat o' the sun / Not the furious winter's rages*".[142] This particular book must be open to a page of dialogue from Shakespeare's *Cymbeline*, and the line sticks with Mrs. Dalloway for the rest of her day, and hence the rest of the novel, running through her head as her party continues into the night: "There! the old lady had put out her light! the whole house was dark now with this going on, she repeated, and the words came back to her, Fear no more the heat of the sun."[143] As many literary scholars have noted, "the heat of the sun" is convention for noontime, a motif throughout the book, even after the hour itself is struck. As Molly Hoff argues, Woolf, taking many of her cues from classical literature, uses the

[138]Woolf. *Orlando*. Hertfordshire: Wordsworth, 1995, p. 47.
[139]Woolf. *To The Lighthouse*. New York: Harcourt, Inc., 1927, p. 128.
[140]Banfield, A. "Time Passes: Virginia Woolf, Post-Impressionism, and Cambridge Time". *Poetics Today* 24:3 (Fall 2003), p. 475.
[141]Woolf. *Mrs. Dalloway*. New York: Harcourt, Inc., 1925, p. 3
[142]Ibid. p. 9.
[143]p. 186.

> midday topos or noonscape [...] and the related fear of the sun [...] for the structure it provides as a timeless moment that sacralizes the events that fill it. It is a paradoxical capsule of concentrated time in which sequential events become simultaneous and ceaseless activity reposes in relative narrative silence.[144]

Indeed, much of Clarissa's actions are completed before noon: she prepares for her party later in the day, and receives an unexpected visit from Peter Walsh. In the languid hours following noon Richard Dalloway returns home, as "Big Ben was beginning to strike, first the warning, musical; then the hours, irrevocable. Lunch parties waste the entire afternoon, he thought, approaching his door."[145] The sound of Big Ben reaches Clarissa inside, where she sits, annoyed at her writing table: "why should she invite all the dull women in London to her parties?"[146] The sound grows louder in her mind, drowning out her own thoughts: "the sound of the bell flooded the room with its melancholy wave; which receded, and gathered itself together to fall once more, when she heard, distractingly, something fumbling, something scratching at the door. Who at this hour? Three, good Heavens! Three already!"[147] As he prepares to leave again, Richard reminds Clarissa of her mandated bed-rest following noon: "How like him! He would go on saying "An hour's complete rest after luncheon" to the end of time, because a doctor had ordered it once."[148]

The reader stays with Clarissa as she rests, as space narrows around her, "lying on the sofa, cloistered, exempt,"[149] and her mind opens onto her past, to her adolescence, then onto her daughter's own approaching adolescence, and, as Big Ben strikes the half hour, her attention moves outside, to the same old lady on whom she looks later that night:

> How extraordinary it was, strange, yes, touching, to see the old lady (they had been neighbours ever so many years) move away from the window, as if she were attached to that sound, that string. Gigantic as it was, it had something to do with her. Down, down, into the midst of ordinary things the finger fell making the moment solemn. She was forced, Clarissa imagined, by that sound, to move, to go—but where?[150]

In terms of the plot, this passage is notable in that Clarissa does not know her neighbour's name, nor her motivations. Though she continues to be fascinated by, and physically very close to her, the old lady remains without her own perspective in the novel. Clarissa's interest in but ignorance of the lady-across-the-way puts her, interestingly enough, into the novelist's position in that, watching the stranger's actions, she infers and narrates a cause—namely, the sound of Big Ben—onto them.

This passage's themes tie into these plot aspects in strange and delicate ways. Clarissa imagines that her neighbour is somehow on the string of sound made by Big Ben's chiming. This is a striking image that attempts to increasingly physicalize and

[144]Hoff, M. "The Midday Topos in *Mrs. Dalloway*". *Twentieth Century Literature*, Vol. 36, No. 4 (Winter, 1990), p. 449.
[145]*Mrs. Dalloway.* p. 117.
[146]Ibid
[147]p. 118.
[148]Ibid.
[149]p. 121.
[150]p. 127.

manifest time's presence in an almost antiquated way, in that Clarissa is attempting to link time's passage—here understood the hour and half-hour mark translated into a bell's toll—directly onto the bodies of those individuals around her. The minute hand pointing to half-past on the face of Big Ben (already described with so many bodily metaphors), becomes additionally humanized, into a finger, pointing down, towards the old lady. In many ways, this effort to physicalize time, to make it cohere and stick into something, is one of the major aims, both of Clarissa Dalloway, and the novel itself. Woolf's own metaphor for this process is "crystallization," which Banfield summarizes as "the process by which something enduring is made out of a moment's impressions."[151] Just as a gathering in the form of a party is one instance of this for Clarissa Dalloway, so too is it for Mrs. Ramsay of *To The Lighthouse*:

> Mrs. Ramsay's gathering together the disparate company around the table stills, solidifies: "Mrs. Ramsay saying 'Life stand still here'; Mrs. Ramsay making of the moment something permanent (as in another sphere Lily herself tried to make of the moment something permanent)—this was of the nature of a revelation. In the midst of chaos there was shape; this eternal passing and flowing [...] was struck into stability."[152]

For Woolf, then, the novel too becomes a means of making a moment into something permanent, a way of striking movement into stability. In the terms I have been using, such an ambition is deeply anti-imperial in that it goes against the imperial sense of progress, whose sense of forward-motion cannot support such permanences, other than its own existence. The Roman gnomon, first in this imperial process of the quantification and translation of time, allowed, however briefly, for this quantification and translation to be understood against the measure of one's own body. In Woolf's London, such intimate measurements have become increasingly difficult, even as time becomes more intrusive, as seen in Big Ben's constant presence.

Big Ben, however, presages another clock within the novel, the "clock which always struck two minutes after Big Ben".[153] If Big Ben strikes the time of political and social order, this slighter clock, "with its lap full of trifles,"[154] strikes the unending time of the domestic interior, the intimate time of Clarissa's experiences, full of remembrances of chores and tasks yet to be done. Although the clock of lived time runs parallel to political / social time, it is always slightly behind, the former jarring the latter into some kind of concord; it is, in effect, what gets Clarissa from one room into another, from the interior room watching the old lady, back into the room of her guests and her party. This is not, however, a necessarily happy movement, but moreso constant disruptions. This is not the solution to what Clarissa considers the "supreme mystery": "here was one room; there another."[155]

In many ways, the solution to that mystery is this novel itself, able to penetrate all the rooms of London, offering itself and its abilities as one possible route out of the space of imperial time, into the permanence of one solitary day. If imperial time finds its narrative and aesthetic counterpart in the pre-modernist novel, Woolf and others'

[151]Banfield. p. 493.
[152]Ibid. p. 494, quoting Woolf *TTL*, 240-1.
[153]*Mrs. Dalloway.* p. 128.
[154]Ibid.
[155]p. 127.

writing seeks, in part at least, to reverse the trajectory again, by giving measurements of time that begin and end with the individual's perception of it. This includes the rigorous one-day-only structure of *Mrs. Dalloway*, but so too the loops and caves of memory as they open up before characters. This is a theme nowhere better explored than in Proust's *In Search of Lost Time*, about which Woolf famously wrote Roger Fry in 1922, and a description that might just as well apply to her own work:

> My great adventure is really Proust. Well—what remains to be written after that? I'm only in the first volume, and there are, I suppose, faults to be found, but I am in a state of amazement; as if a miracle were being done before my eyes. How, at last, has someone solidified what has always escaped—and made it too into this beautiful and perfectly enduring substance? One has to put the book down and gasp. The pleasure becomes physical—like sun and wine and grapes and perfect serenity and intense vitality combined.[156]

This does not leave us with Mrs. Dalloway as an overtly anti-imperial figure, or with Woolf as an "anti-Augustus," but rather with the idea that just as empire is non-static and evolving, so too is the status of the imperial subject and the possibilities of compliance or resistance available to her.

Digital Shadows & the Closed Sky

As has been well documented, what we now think of as the Internet came out of military technology, specifically that of the American military in its Cold War confrontation with Russia. This is not to say that any entity like the modern Internet was necessarily envisaged or imagined, but rather came out of a variety of disparate programs, many of which had substantial financial backing from a sub-branch of the Department of Defense, the Advanced Research Projects Agency, or ARPA. From corporations like IBM to private research institutions like MIT, ARPA money went far and wide. In speaking of such funding with reference to the Electrical Engineering department at MIT in the 1960s, Stewart Brand says,

> The beauty was, that being at the very top of the Defense Establishment, the agency had little Congressional scrutiny and little bureaucratic pettiness to contend with. There was instead clear and immediate individual responsibility, able to take creative chances and protect long-term deep-goal projects.[157]

Unsurprisingly, this combination of deep pockets and shallow oversight fostered tremendous technological creativity. While many of the innovations from this period may seem tangentially related to the Internet as we know it, this tension between the Internet's origings and its perceived evolution—"what is now an anarchic zone of commerce and free speech was at first a tightly controlled investment in national defense"[158]—remains

[156]Woolf. *The Question of Things Happening: The Letters of Virginia Woolf: Volume II: 1912–1922.* Edited by Nigel Nicolson. London: Chatto & Windus Ltd. 1976. p. 566.

[157]Brand, Stewart. "Fanatic Life and Symbolic Death Among the Computer Bums". *II Cybernetic Frontiers.* New York: Random House, 1974, p. 61.

[158]Moschovitis, et al. *History of the Internet: A Chronology, 1843 to Present.* ABC-CLIO, 1999, p. 33.

a constant in its (often self-told) history. Against this narrative of drastic change, I intend, in these final sections on the digital age, to introduce a diversity of ongoing flows and differences.

At MIT's Electrical Engineering department, a graduate student named Steve Russell invented a computer game in 1962, often touted as the first, called *Spacewar*. *Spacewar*, developed in post-Sputnik America, involved spaceships shooting at each other against a backdrop of the night sky, involving "real-time interactive programming," whose largest developmental issue was in "learning how to talk to a computer program and have it answer back."[159] In a promotional brochure released by the Digital Equipment Corporation (which would later buy *Spacewar*), some of the computing advances that made the game possible are highlighted:

> The PDP-1 computer used in *Spacewar* is performing calculations at speeds up to 100,000 per second as it interprets the operator's switch actions and sends positional information to the display at a rate of 20,000 points per second. To give some idea of the complexity of the computer's task, we might mention that in storing and plotting the relative positions and speeds of the spaceships, rockets, stars, and sun, PDP-1 is referring to Newton's laws of motion stored in its 4096-word core memory. Thus the operators must compensate for gravitational attraction when the spaceships come close to the sun.[160]

As the game spread across the country, from the Artificial Intelligence Lab at Stanford, to IBM (who, in the 1960s counted the Department of Defense a client, rather than vice versa), this idea of the game's reality—as mentioned above in its coding-in of Newtonian gravity, etc.—became increasingly central to its development. One of the game's later additions, the "last resort" of hyperspace (accessed by pressing both the left and right commands, with the hopes of being lifted into a new star field), played upon the inherent discrepancy between efforts towards reality, and efforts towards interactivity, in that non-scripted object-interaction (i.e. realistic interaction) rarely results exactly as desired. Thus, the hyperspace feature worked at random, sometimes supplying the player with more time and new space, and sometimes not.

But *Spacewar*'s greatest nod to realism, rather than reality, came in the creation of the starfield behind which the game's action takes place. The night sky was that of a forty-five degree swath of the equatorial night sky, from 22 $\frac{1}{2}^\circ$ N to 22 $\frac{1}{2}^\circ$ S. The program, called Expensive Planetarium, was written by Peter Samson, who was, according to Russell, "offended by my random stars":

> Using data from the American Ephemeris and Nautical Almanac, Samson encoded the entire night sky (down to just above the fifth magnitude) [between the aforementioned latitudes], thus including most of the familiar constellations. The display can remain fixed or move gradually from right to left, ultimately displaying the entire cylinder of stars. The elegance does not stop there. By firing each display point the appropriate number of times, Samson was able to produce a display that showed the stars at something close to their relative brightness.[161]

[159] Kuhfeld, Albert. As quoted by Brand. p. 58.

[160] "PDP-1 Computer and Spacewar". Promotional brochure by the Digital Equipment Corporation, 1963. Stable URL: masswerk.at/spacewar/pdp-1-computer-and-spacewar.html.

[161] Graetz, J.M. "The origin of Spacewar". *Creative Computing*, August, 1981. Stable URL: wheels.org/spacewar/creative/SpacewarOrigin.html.

This idea of the "elegance" of programming comes up repeatedly, and somewhat puzzlingly, in that it seems to mean differently in this context than in more conventional usage. Rather than describing a stylistic or aesthetic decision of simplicity—the elegant touch as being one of removal, rather than addition—the term here seems to indicate instead a type of feint towards this, though, in truth, the means of its production are laborious and highly-designed. On the one hand, the elegance of Expensive Planetarium seems to be in its very uselessness, at least for the purposes of game-play; it is utterly without utility, an addition made after prior, more simplistic ("my random stars") iterations. On the other hand, this elegance is an evaluation of a design element's mimetic qualities; the ability of an object or interaction, in other words, to, on some level, trick its user. In the interactive sense, this mimetic quality is often goal-oriented in that one interaction is designed to resemble another in that knowledge of one will make the other possible—think, for example, of the graphical-user interface interaction of "throwing away" electronic items in the trash can. But in the object sense, such imitations' "reasons" can be harder to theorize, as, in the case of Expensive Planetarium, the reason of the design seems to be exactly itself; a technological imitation there because it can be.

Expensive Planetarium, glowing behind *Spacewar*

In this particular context of digital display, then, elegance is better understood as another form of representational/technological abstraction. As many have argued, technological sophistication as a whole is a distinct form of abstraction, often of forms of labor. As Malcolm McCullough says,

> Histories of technology reveal the increasing abstraction of work. Successive levels of invention have freed us from hunting down our next meal, breaking our backs in the fields, sweating over the forge, and numbing our minds with accounting. Each level forms a layer over the old, rather than casting it aside, as in the stages of natural growth. This means that even if new abstractions eventually become the most prominent methods, they do not replace existing activities so much as transform or complement them.[162]

[162]McCullough, Malcolm. *Abstracting Craft: The Practiced Digital Hand.* Cambridge: The MIT Press, 1998, p. 28.

My argument is that the abstraction necessary in digital sophistication, or data structures—what McCullough defines as the organization of "symbols for specific purposes. [Data structures formulate] vocabulary and operators useful to some specific end, whether its records of symbols is to be treated as a document or an artifact, as real or virtual"[163]—is, in fact, an abstraction of an abstraction; digital abstraction is the abstraction of a concept, not of an "existing activity."

To finally combine my discussions of technological abstraction and ontological metaphors, then, it is helpful to return to the original definition of an ontological metaphor, so-called in that an "abstract entity is *personified* (made into a person) or *reified* (*objectified*—made into a thing) as a more concrete entity"[164] such that it "radically reframes the ontological status of [an] abstraction."[165] In this way, the fundamental metaphor in this chapter—Anaximander's ontologizing of the time via the horologium—is the primary reification from which all later abstractions stem. But the farther we get from the basis of this original reification—just as the means of this reification become increasingly sophisticated (how, in other words, time becomes a "thing" to be "measured" in ever more precise degrees)—the easier it is to lose sight of the metaphoric nature of the first proposition. Time has no substance, nor any of the other attributes it has picked up along the way—money, spatial movement (the time ahead), etc. As its "thingliness" becomes more and more abstracted, we get increasingly self- and non-referential systems of measurement and representation. To return to the more general conversation at hand, as these systems of representation and measurement become not just more abstract, but more sophisticated too, the metaphoric aspect in which, we recall, one "thing" is made sense of in relation to another, recedes and ultimately drops away, and the sign-system becomes caught in a loop, referring blankly and exclusively to itself.

In the terms of this chapter, I have been looking at different forms of quantification, which are, necessarily, abstractions—take, for example, the sundial, which is a geometrical scaling-down of the sun's movement across the earth. The means of measurement enabled by this device—the shadow—however, is an entirely analog component, though the markings on the ground are digital.[166] The sundial as a system, then, is analog, depending as it does upon a continuous input. It may be helpful to counter-imagine this system with the classic example of the digital system: the smoke signal. Though the component of communication there—smoke—is also analog and continuous, the system depends upon discrete intervals, comprised of smoke, in order to make meaning. Thus, I am not trying to make the argument that digital systems are new, and analog old; indeed, any effort to count is a digital act. Instead, I am arguing that prior to data structures, measurement and quantification were linked to the analog world, even insofar as the world, both spatial and temporal, became translated into different abstractions: the sundial; the water-clock; the map, etc. Data structures, however, take these abstractions, these quantifications both digital and analog, and abstract these abstractions into

[163]McCullough. p. 96.

[164]Dancygier, Barbara and Sweetser, Eve. *Figurative Language*. Cambridge: Cambridge University Press, 2014, p. 62.

[165]Ibid. p. 62.

[166]This is based upon the fundamental definition of the digital and the analog, in which the former is discrete, while the latter is continuous.

"pure data," the 1s and 0s of binary code languages. If abstraction can be thought of as existing within the plot of representation, though perhaps on the axis opposite realism (recall here the analogy made earlier to the world of aesthetic representation and realism versus different schools of expression, such as Impressionism, Cubism, etc.), digital abstraction is its own peculiar category in that its final outcome, or "representation"—for our purposes that perfect simulacrum of the night sky, Orion's stretched-out shield—is, in fact, entirely abstract, or, perhaps better-understood, entirely conceptual. In other words, in what McCullough calls one of digital media's biggest advantages, data systems "operate on abstractions as if they were things."[167]

But, continuing along this line of thinking, digital media also *produces* abstractions, also as if they were things. The logical loop here is additionally troubling in that these concepts/abstractions masquerading as objects resemble, and as in the instance of Expensive Planetarium, completely mimic, concrete objects of experience. All of this belabors, and perhaps additionally opacifies, well-known critiques of virtual reality, the most famous of which is Baudrillard's:

> Today abstraction is no longer that of the map, the double, the mirror, or the concept. Simulations is no longer that of the territory, a referential being, or a substance. It is the generation by models of a map without origin or reality: a hyperreal. The territory no longer precedes the map, nor does it survive it. It is nevertheless the map that precedes the territory—*precession of simulacra*—that engenders the territory, and if one must return to the fable, today it is the territory whose shreds slowly rot across the extent of the map. It is the real, not the map, whose vestiges persist here and there in the deserts that are no longer those of the Empire, but ours. *The desert of the real itself.*[168]

Though Baudrillard marks the reign of the copy with no original as that of hyperreality, and thus current culture, such abstractions have long imperial histories.

Returning to Vitruvius and the imperial aims of architecture, we can find one such origin of this mode of representation which simultaneously produces its own object-referent. Architecture serves as both the manifest representation of empire—it is the extent to which power occupies space—just as it *is* that empire itself. On the conceptual level, this is a hermeneutic circle, one which has had startling potency. Empire's sign-systems are almost entirely self-referential, and meaning—which in the Foucauldian sense of knowledge is surely a form of imperial power—must come from within imperial boundaries. And yet, they are not *entirely* self-referential in that the specificity of the imperial hermeneutic circle is that it must exist in opposition to what, at a threshold point, it is not. To mix metaphors, the strength of imperialism's hermeneutics depends upon the acknowledgement that there is an exterior, an outside, an Other. We saw this same logical process in the development of law as a self-referential system of power that also depends upon a sense of the exterior—the lawless, chaotic world—to guarantee its success.

In this way, Empire as concept, or as a power-formation, is an analog concept. By this I mean two things: first, that fundamental to imperialism is quantification, which I have been arguing throughout this chapter. Originally in the measurement of land and time,

[167]Dancygier and Sweetser. p. 98.

[168]Baudrillard, Jean. *Simulacra and Simulation.* Translated by Sheila Faria Glaser. Ann Arbor: The University of Michigan Press, 1994, p. 1

the Roman empire quantified the world and the objects within it. Secondly, the Romans did so via analog measurements (and also analogous measurements, in which the empire is linked with the sun). But, such analog efforts at quantification, as they became more specific, and certainly more standardized, eventually gave way to digital quantification, which is not only an inherently different means of quantifying the world, but also a radical shift in what *can* be quantified. Although imperial/analog quantification, especially of time, depend upon increasingly abstract abstractions—from one's cast shadow to the chiming of Big Ben—there remains the sense of direct measurement of an entity. Digital quantification, however, measures abstractions, in the sense that information about the world is transformed into abstract data, to then be quantified.

And yet, this aim to quantify and measure the world remains at the center of the Internet, or at least the Internet's largest engines. In this way, the Internet is a digital rendering of the analog concept of empire. If empire generally, and the Roman empire specifically, are self-referential and self-producing hermeneutic circles that also rely on a sense of the outside and the external in order to make its sign-system meaningful, then the digital realm is an even more powerful form of hermeneutics, one which does away with any sense of the external in that it is, in its knowledge of the world, capable of totality. The digital, as a model of the world, can be a totality in that it actually aims to reproduce the world as such in the terms of pure data, a reproduction that, unlike the propagation of empire, does not necessarily depend upon the world and its inhabitants as is.[169] Thus we can read the starfield produced by Expensive Planetarium as neither part of a pattern by which to measure the passage of time—as with early astronomy—or the assertion of celestial dominance over time—as with Roman astrology. Instead, the stars of *Spacewar* are a perfect simulation, signifying nothing, inhabiting a closed sky.

[169]Think here of later projects like Google's Google Maps, and, even more self-referentially, the Internet Archive's WayBack Machine, a cached preservation of the early Internet.

CITIES

Introduction

Looking at both the literal and conceptual impacts of urban and geographical planning, this chapter focuses on how Rome as imperial center came to be, and how it propagated itself across its holdings. On the more literal side will be particular aspects of ancient Roman urbanism, particularly how that city dealt with its trash and other unwanted substances, and how such metropolitan concerns repeat themselves in the British "city novel" of the nineteenth century. More conceptually, I will focus on the metaphor of the city formed within the ancient metropolis; i.e. the gridded city as manifested in imperial holdings and this particular practice of urban planning's effects on information design.

The Eternal & the Gridded City

In the coming pages, I will focus on water and refuse as a means of highlighting aspects of urban planning relevant to this dissertation that are both literal and conceptual. The reasons for this are twofold: not only did water, with its vast network of aqueducts, become a potent symbol of the Roman empire, but water, particularly for a city located on a river, is a uniquely fluid and conceptually clear means of proving a point that seems problematic even now: refuse can not truly disappear. Any waste, human or otherwise, that found its way into the the city's sewers also eventually found its way into the Tiber—and, whether through the river's annual flooding, or the continued use of the river for bathing, fishing, and recreation—eventually found its way back into Rome.[170] In this way, pollutants, contagions, and all those liquids flowing unwanted and unpredictable places, are symbolic of one version of urbanization, which I am calling after Rome the Eternal City, to be later juxtaposed with Rome's massive urbanization of its land holdings via gridded outposts, an idea that will be returned to with Le Corbusier's Radiant City. The Eternal City is unplanned and unplannable both because of the catastrophic—ecologically and socially—nature of urban living, and also because of the untold many individual movements that make up the urban.

As Stephen Dyson and Richard Prior argue, individual life in ancient Rome—whether

[170]Romans were still eating from the Tiber in the third century, as Galen notes the "difference in quality between fish caught upstream from those caught downstream from the *Cloaca Maxima*" (Galen VI.722–3k as cited by Taylor, Craig. "The Disposal of Human Waste: A comparison between Ancient Rome and Medieval Londonp. *Past Imperfect*, Vol. 11, 2005, p. 63).

that of those whose "experience of Rome would have been surprisingly local, focused on a specific neighborhood or region, where they would spend much of their lives with limited contact with the larger *urbs*,"[171] or that of those "less anchored by social status and occupation to a specific neighborhood"[172]—was shaped by movement. This same idea of urban experience being one of movement and flows has been reiterated all over literature and critical theory, from Martial's itinerant bather who frequents baths all around town (*Nec Fortunati spernit nec balnea Fausti, // Nec Grylli tenebras Aeoliamque Lupi: // Nam thermis iterumque iterumque iterumque lavatur* (He spurns neither the baths of Fortunatus nor the baths of Faustus, // neither the gloomy baths of Gryllus, nor the windy baths of Lupus: // he bathes again and again and again in the waters (*Epigrammata* 2.14.11-13))[173] to de Certeau's *Wandersmänner* who both come to know the city and tell the story of it by walking in it.[174] In his famous third satire, we follow Juvenal's narrator walking through Rome in a text that has been returned to again and again for evidence of life in the first century. And the evidence is certainly striking! From the threat of collapse[175] to that of chamber pots sailing from high-up windows,[176] to street brawls,[177] to burglars in the night,[178] Juvenal gives us an image of a constantly shifting, and constantly threatening, metropolis. My interest, however, is not so much in the specific content, but more so in the form, as this literary device of walking through a city in order to best capture the city remains, even through the modernists, the most frequent. As we will see in Dickens' London and Melville's Manhattan, a sense of movement, or lack thereof, is often the only means of giving narrative organization to the reader in a setting of random and arbitrary occurrence. In historical terms, the Eternal City, full

[171]Dyson, Stephen L. and Prior, Richard E. "Horace, Martial, and Rome: Two Poetic Outsiders Read the Ancient City". *Arethusa*, Vol. 28, Issue 2 (1995), p. 246.

[172]Ibid. p. 247.

[173]Martial. *Epigrammata*. Translated by Ker, Walter. *Epigrams*. Cambridge: Loeb Classical Library, 1993.

[174]The opening of *Mrs. Dalloway* and her walk through London is another famous example of this trope.

[175]*nam si procubuit qui saxa Ligustica portat // axis et eversum fudit super agmina montem, // quid superest de corporibus?* (For if that axle with its load of Ligurian marble breaks down, and pours an overturned mountain onto the crowd, what is left of their bodies?(III.257–9)). Translated by G.G. Ramsy. *Juvenal and Persius*. Cambridge: Loeb Classical Library, 1918.

[176]*Respice nunc alia ac diversa pericula noctis: // quod spatium tectis sublimibus unde cerebrum // testa ferit, quotiens rimosa et curta fenestris // vasa cadant, quanto percussum pondere signent // et laedant silicem* (And now regard the different and diverse perils of the night. See what a height it is to that towering roof from which a potsherd comes crack upon my head every time that some broken or leaky vessel is pitched out of the window! See with what a smash it strikes and dints the pavement! (III. 268–72)).

[177]*Ebrius ac petulans, qui nullum forte cecidit, // dat poenas, noctem patitur lugentis amicum // Pelidae, cubat in faciem, mox deinde supinus; // [ergo non aliter poterit dormire: quibusdam] // somnum rixa facit* (Your drunken bully who has by chance not slain his man passes a night of torture like that of Achilles when he bemoaned his friend, lying now upon his face, now upon his back; he will get no rest in any other way, since some men can only sleep after a brawl (III. 278–282)).

[178]*Nec tamen haec tantum metuas. Nam qui spoliet te // non derit clausis domibus, postquam omnis ubique // fixa catenatae siluit compago tabernae. // interdum et ferro subitus grassator agit rem* (Nor are these your only terrors. When your house is shut, when bar and chain have made fast your shop, and all is silent, you will be robbed by a burglar; or perhaps a cut-throat will do for you quickly with cold steel (III. 302–5)).

of unplanned movement and unwanted—from a governmental perspective—substance, is the opposite of the gridded, or Radiant, city, ruled as it is by sanctioned spaces and practices. Before approaching either of these more conceptual aspects of urban planning, though, a (somewhat) brief exploration of the literal structure of ancient Rome is foundationally necessary.

Maxima Roma

Only twice in the *Aeneid* does Virgil refer to Rome as *maxima Roma*, an epithet picked up by later poets. Thematically, however, Rome's unsurpassable greatness remains the poem's constant etiological prompting. In book VIII, this prompting comes to the fore undisguised, as Evander, founder of Pallanteum and king of Acadia, shows Aeneas the sites of the future Augustan Rome. Indeed, Aeneas and his men find Evander and his son Pallas performing rites at the Altar of Hercules, a Roman site intact until its destruction in Nero's fire of the first century AD. At certain points of book VIII, the poetic register itself shifts, into what some critics have described as "voice-over" mode, in order to "make [...] past-present juxtapositions from the inverse temporal perspective." [179] These necessarily anachronistic"voice-overs" point towards the narrative's association with the poem's "present"—that of Augustan Rome. As Evander takes Aeneas into his home, such switching becomes constant:

> No sooner said than, moving on, he points out
> the Altar of Carmentis, then the Carmental Gate
> as the Romans call it: an ancient tribute paid
> to the nymph Carmentis, seer who told the truth,
> the first to foresee the greatness of Aeneas' sons
> and Pallanteum's fame to come.
> [...]
> From there he leads Aeneas on to Tarpeia's house and the Capitol, all gold now
> but once in the old days, thorny, dense with thickets.
> Even then the awesome dread of the place struck fear
> in the hearts of the rustics, even then they trembled
> before the woodland and the rock.
> [...]
> So,
> conversing and drawing near Evander's humble home,
> they saw herds of cattle, everywhere, lowing loud
> in the Roman Forum and Carine's elegant district.[180]

I begin here with Virgil's project of returning Rome to its mythical roots in that it is a strangely difficult imaginative trick, in and of itself, to imagine an urban space before its urbanization; to imagine, in short, the city as it was once the country. Although this form of geographical nostalgia is poetically generic in the sense of the pastoral—a genre Virgil also had much experience in—my intentions here are more straightforwardly archeological. What did the land of Rome look like, and what were its characteristics?

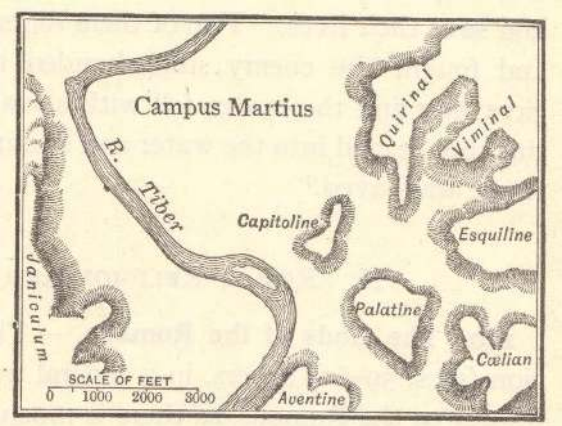
[179]O'Rourke, Donncha. "*Maxima Roma* in Propertius, Virgil and Gallus". *The Classical Quarterly*. Vol. 60: Iss. 02 (Dec. 2010), p. 472.

[180]Virgil. *Aeneid* VIII.338–61. Translated by R. Fagles. New York: Viking, 2006, pp. 252–3.

Geographical Rome

As is well known, Italy's geographical layout—from the continental river plains and mountain ranges of the north, to the peninsular coasts of the South, as well as the islands of Sardinia and Sicily—includes an unusual diversity of habitats, climates, and regions. Trans-nationally, however, Italy is notoriously hilly/mountainous; only one-fifth of the total land surface is below three-hundred meters.[181] The majority of this one-fifth lies in the north, in the fertile plains of the Po River. Peninsular flat land is scarce, especially to the east of the Apennine Mountains. Flat coastal land bordering the Tyrrhenian Sea to the west of the Apennines, however, is slightly more abundant, as well as more fertile with volcanic soil, found elsewhere only in Naples. Located slightly inland, but positioned both to the east and the west of the Tiber River—and thus easily communicable with the sea—Rome's

> natural amenities were combined with a series of 'hills' from whose lower slopes issued freshwater springs and whose heights made convenient refuges from floods, summer heat, and animal and human predators.[182] The hills were in reality irregularly shaped ridges or spurs created by tributary streams running down the edges of the larger valley which had been cut through the plains by the river.[183]



The Hills of Rome

Indeed, Italy's geographical amenities in this precise location seem to lend, at least to some classical authors, a sense of Rome's predestination for greatness. As Livy records the fourth-century BCE soldier Camillus:

> Gods and men chose this place to found a city for excellent reasons: these health-giving hills, the river near to hand that conveys provisions from places inland and up which goods from abroad are brought, the sea conveniently close by, but not so near that we are

[181]Cornell, Tim and Matthews, John. *Atlas of the Roman World*. New York: Facts on File, Inc. p. 11.

[182]These hills are usually numbered as the seven to the east of the Tiber: the Capitoline, Palatine, Caelian, Esquiline, Quirinal, Aventine, and Viminal. Those to the west, including the Janiculum and Vatican, are not included in this traditional count.

[183]Claridge, Amanda. *Rome: An Oxford Archaeological Guide*. Oxford: Oxford University Press, 1998, p. 5.

> exposed to danger from foreign fleets—the very heart of Italy, a place uniquely fitted to promote the growth of our city.[184]

If it is difficult to retroactively think of the land with no city in it, it would be undeniably harder, however, for Romans of the early Republic to have imagined the city Rome was to become.

Ancient Rome at its height— classically thought of as from the last century BCE until, at the very latest, the move of the capital of the Roman Empire to Constantinople (formerly Byzantine) in 324 CE—remained the largest city to have existed in Europe until the Industrial Revolution.[185] Following the work of other classicists and archaeologists, Robinson estimates the mid-second-century population as "a million plus".[186] Though this may seem small by the current astronomical numbers of global metropoles—including Rome's own current population (of a larger area) of almost triple this number—consider that in 2000, seven US states, plus the District of Columbia, had fewer than one million people, and that, also by 2000, only half of the US population had lived in a metropolitan area of at least one million people.[187] I bring up these statistics to illustrate two points, with the first being the information they represent. The second is that such statistical thinking is itself an imperial, and urban, invention—the need, in other words, to keep track of ever-increasing populations in a possible diversity of places, though under a singular knowledge / power structure. Statistics are, I think, a particular branch of efforts of standardization and regulation, a topic which is treated in more depth in the first chapter. My interest in this chapter is not only in how Rome physically built itself as an imperial capital, but the new modes of thinking such a space entailed and demanded. There is, as Robinson and others argue, a shift nearing the end of the Republic in which "Rome" the word ceases to be synonymous with the politics and social life practiced therein, and becomes, more straightforwardly, a city in the more modern sense of a distinctly urban space: "until the late Republic it is not at all easy to distinguish between Rome, the city state (and nascent imperial power), and the City of Rome [...]."[188] It is worth pointing out, for future argumentation, that this process by which "Rome" refers, increasingly over time, to the city of Rome, understood as the center of the empire, is not a metaphoric one, but instead metonymic, in that a part of substituting for the whole, or "we are using one entity to refer to another that is related to it."[189] What are these means of urbanization which create the, at that time, utterly unique metropolis Rome?

As Dionysius of Halicarnassus has it, Rome's greatest achievements, and those which enabled it to become the City of Rome, are three: roads, sewers, and aqueducts. Though there are doubtless other innovations for this list, these designations are a helpful starting point. The Roman road system, the *cursus viarum*, is addressed in its own chapter, so I

[184]Livy *Ab Urbe Condita*. V.54.4. Translated by T.J. Luce. *The Rise of Rome*. Oxford: Oxford University Press, 1998, p. 340.
[185]Robinson, O.F.. *Ancient Rome: City Planning and Administration*. New York: Routledge, 1994.
[186]Ibid. p. 8.
[187]US Census Bureau. *Demographic Trends in the 20th Century: Census 2000 Special Reports*. November, 2002.
[188]Robinson. p. 2
[189]Lakoff and Jonhson. p. 35.

will first focus on the last two in tandem, with an eye towards how water moved in and out of the city. In the last section on the city of Rome, I will look at the opposite of flowing water—the Roman construction of walls, not so much in the city proper but as they were built in the gridded cities of various imperial outposts. My argument is that Rome becomes a distinctly new urban entity not just through certain building techniques, but more so through the constant issues such building projects seek to address; what has, in short, come to be known as urban planning. Of particular interest in this chapter will be the ways in which Rome handled its trash, which seems to be even more of a dilemma today than two-thousand years ago.

The *Cloaca Maxima*

In Book 32 of *Naturalis Historia*, Pliny gives us the wonderfully bizarre image of Romans, circa 33 BCE, sailing through the sewers of Rome: "In [Milo's] day leading citizens still marveled at the network of sewers, generally acknowledged as the greatest achievement of all. Hills were tunneled into in the course of its construction, and Rome was a 'city on stilts' beneath which men sailed when Marcus Agrippa was aedile."[190] Cassius Dio, writing some hundred years after Pliny, focuses the image by naming the sailors: "Agrippa agreed to be made aedile, and without taking anything from the public treasury repaired all the public buildings and all the streets, cleaned out the sewers, and sailed through them underground into the Tiber."[191] Made clear by Pliny's placement in his chapter including other Roman monuments, the sewers, or *cloaca maxima*, held a strange position within Rome as both a functional and necessary aspect of city life, and an ingenious feat, a subterranean monument. Highlighting Pliny's mention of the "seven rivers [that] join together and rush headlong through Rome,"[192] Emily Gowers likens the *cloaca* to Rome's version of inverted pyramids, which also, in essence, remakes the Nile below Rome:

> When Pliny describes its course as seven streams from the seven hills flowing into one channel, that sounds like an underground, backwards-flowing version of the seven-mouthed Nile. [...] Just as Frontinus sets up the aqueducts as Rome's 'necessary' alternative to the 'otiose' pyramids of Egypt, so the sewer's glory lay awkwardly in its functional role.[193]

Not just in its functionality, but so too in its durability: originally built by Tarquinius in the sixth century BCE, the sewer is still partially in use. The *cloaca*'s enduring presence reminded imperial Romans not only of the enormity of the task undertaken in the age of Kings, but also of the plot of the former city: "this is the reason," Livy says, "why the old sewer system, which originally followed its course though public lands, now runs in many places under private dwellings, and the result is a city that resembles one built piecemeal rather than laid out according to a master plan."[194] From the Rome

[190]Pliny. *NH* 32.104. Translated by John F. Healy. *Natural History: A Selection*. New York: Penguin Books, 1991.

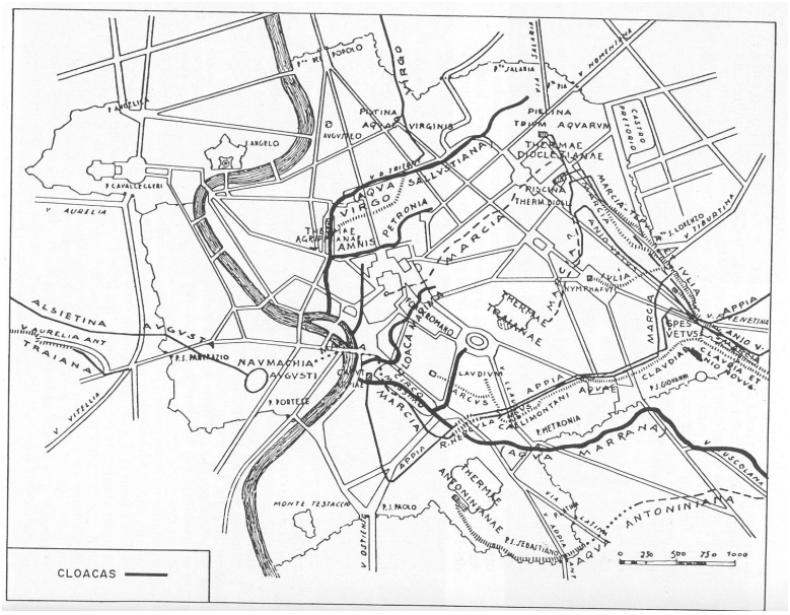
[191]Cassius Dio. *Historia Romana*. Translated by Earnest Cary. *Dio's Roman History*. Cambridge: Loeb Classical Library, Vol. V, 1914, p. 429.

[192]Pliny. 32.105.

[193]Gowers, Emily. "The Anatomy of Rome from Capitol to Cloaca". *The Journal of Roman Studies*, Vol. 85 (1995), p. 25.

[194]Livy. V. 55

imperial Romans considered ancient, two factors of city life remained—and remain—unchanging. The first is that access to water, both in order to remove waste and to drink, is one of the first priorities of urbanization. The second is that the city, in terms of the buildings and spaces which may surround such infrastructure, is constantly changing and evolving, from more minute changes of neighborhood, to categorical shifts between public and private land. This interaction between the constant needs of a population, and its shifting arrangement within an urban space, remains a key component of urban organization and planning.



Ancient Roman Sewer System

Originally built in order to drain the then-marsh of the land which was to become the Forum, Pliny relays that there was "such a mass outbreak of suicides as citizens tried to escape from their exhaustion [that] the king [...] crucified the bodies of the suicides, so that they might be gazed on by their fellow citizens and torn to pieces by wild animals and birds of prey."[195] Largely subterranean, little is known about how this massive drain was made, nor to what degree it functioned not just as a conduit of natural waste water, but of human waste as well. By the first century CE, we know from archeological and literary records alike that it served both of these purposes. In the case of natural waste water—the *cloaca* as drain—the channels continued to not only dry out certain parts of Rome, but to remove the effluent from the ever-spreading and increasingly water-hungry *thermae*, or the famous Roman baths. In the case of human waste—the *cloaca* as sewer—the erection of many public latrines around Rome, and their connection via plumbing to the *cloaca*, make it clear that the channels also ran with human sewage. Though I have been and will continue to talk of the sewer system in straightforwardly archaeological and historical terms, the sewer is of conceptual interest here for a number of reasons. The first is due to its uninterrupted nature, and by this I simply mean that it continues beneath the land between and among the built environment. The sewer,

[195]Pliny. 32. 107.

then, is a more lasting record of urban design and movement than the architecture atop it (this is Livy's point from earlier). Secondly, the sewer system is the most immediate and unavoidable form of "waste management," a term that has come to encompass far more aspects by today. I will return to this with the tremendous eWaste produced by the placeless digital world at the end of this chapter.

Returning to the issue of water more generally, its distribution and consumption within Rome was of such a massive scale that it led to a uniquely bureaucratic position, that of *curator aquarum*, or Water Commissioner. The indisputable splendor of the aqueducts crisscrossing the empire, and the beauty of the nine (by the mid-first century) running at almost imperceptible slopes into Rome from distant springs and lakes, are in stark contrast to the waters' treatment once within Rome. As Frontinus, *curator aquarum* at the end of the first century, explains in his treatise *De Aquaeductu*, the waters carried by the various aqueducts were of differing qualities, and originally intended for different purposes:

> Whilst diversion made practical sense in theory, it was not always intelligently carried out; good water could be wasted or contaminated by bad. Frontinus[196] says that the Anio Vetus which ran at a lower level than the others kept its pollution to itself, though by the end of the first century AD it did draw some of its water from the Marcia [the cleanest water available in Rome]. [...] With obvious anger [Frontinus] says "even the Marcia, so charming in its brilliancy and coldness, is found serving baths, fullers, and even purposes too vile to mention" (Frontinus, 91).[197]

If the water meant for drinking and bathing risked pollution, and this water's administering often became insanitary, then the water and spaces explicitly intended for insanitary purposes were that much more problematic. Very few latrines, public or private, were directly connected to the *cloaca*. The possible reasons for this are varied, but it is definite that a link to the *cloaca* also meant the inverse in that the vermin and animals[198] the sewers housed, as well as the yearly flooding of the Tiber which would reverse the flow of water therein, would thereby be granted access to the interior. In addition to the latent threat of the sewers, there was money, then and now, in waste disposal.

While there are many instances in Roman literature of men publically relieving themselves at random (there is even a grave with the "hopeful plea" of *Ne quis hic urinam faciat* (Let no one urinate here) insribed on it[199]), there were public urinals—large jars—whose contents were often bought on contract by fullers,

> for cleaning woollen material, such as togas. (It seems likely that many fullers were also

[196]Frontinus. *De Aquaeductu*. Translated by Bennett, C.E.. *Stratagems. Aqueducts of Rome*. Cambridge: Loeb Classical Library, 1925, 67, 90–2.

[197]Dodge, Hazel. " 'Greater than the Pyramids': the Water Supply of Ancient Rome" in *Ancient Rome: The Archaeology of the Ancient City* ed. Jon Coulston and Hazel Dodge. Oxford: Oxford University School of Archaeology, 2011, p. 181.

[198]In the favorite anecdote of anyone writing on this topic, the third-century author Aelianus, in his history of animals, tells of an octopus who nightly swam from the sea, down the Tiber, through the *cloaca*, and up through the drain of a fish merchant. Once in the home, the octopus helped itself to pickled fish, and then reversed its trip back to the sea (Aelian, *HA* 13.6).

[199]Robinson. p. 122.

> laundrymen, particularly as we do not hear of public wash-places for women, though the Tiber may have been used where it was not embanked for docks and other purposes.)"[200]

As Craig Taylor argues, this collection of urine by fullers "reveals an area of private enterprise in the disposal and commercial exploitation of human wastes in Rome and was such a prosperous business that the emperor Vespsian [69 CE–79 CE] put a tax on it.[201] Solid waste, which Scobie estimates at the height of empire as some forty- to fifty-thousand kilograms daily,[202] was also collected, both by the urban poor, and neighboring farmers. Martial and Petronius mention chamber pots, which must have been the most common latrine in crowded tenements. These were often emptied directly into the sewers by slaves, or, as several famous records, literary and legal alike, attest, flung directly out of windows into the streets below.[203]

Individual houses, however, mostly had cesspits for both domestic and human waste, often situated within the kitchen. As Scobie notes, though "a cesspit in a kitchen would have the practical advantage of enabling cooks to dispose of kitchen fluids and garbage without physical invonvience, [...] the risk of food contamination in such combined kitchen/latrine areas must have been very high indeed."[204] But, as Scobie also shows, the emptying of these cesspits by *stercorarii* for agricultural purposes on the outskirts of Rome

> provided a group of unskilled workers in the towns with work which was a source of regular pay, even though the work must have involved a high health risk. It seems, then, that *stercorarii* performed the same functions in Roman towns as *koprologoi* at Athens who, according to a recent writer, were not public slaves, but private entrepreneurs."[205]

The enterprise of waste removal was not limited to excrement, and Martial, among others, speaks of the corpses of those with no one to bury them rotting in the streets. If not carted out of the city, the corpses of slaves and derelicts were left as carrion to dogs and vultures, and Scobie even mentions an island in the middle of the Tiber as "the traditional centre for depositing such slaves who had not been killed by their owners when they had become either incurably sick or debilitated by old age [...]."[206]

As for the garbage that was not deemed offensive enough to the senses to be taken outside of the city, the Romans built one of the first recorded land fills of sorts. Still standing in the northwestern region of Rome, the one-hundred-and-fifty-foot high Mount Testaccio is made entirely of broken amphorae from Rome's incredible importation of olive oil: "an enormous number of amphorae filled with olive oil came by ship from the Roman provinces into the city itself, where they were unloaded, emptied, and then taken to Mount Testaccio and thrown away."[207] Estimated as the remains of some twenty-five million amphorae, the archaeologist Heinrich Dressel argues that the hill was used "as a

[200]Robinson. p. 122.
[201]Taylor, p. 56.
[202]Scobie, Alex. "Slums, Sanitation, and Mortality in the Roman World". *Klio - Beiträge zur Alten Geschichte*. Volume 68, (Issue 68), p. 413.
[203]Robinson. pp. 119–23.
[204]Scobie. p. 410.
[205]Ibid. p. 414.
[206]p. 419.
[207]Lobell, Jarrett. "Trash Talk". *Archaeology*, Vol. 62, No. 2 (2009), p. 21.

dump from the reign of Augustus until the mid- to late third century AD."[208] Measuring almost a mile in circumference, the majority of the hill's girth, Dressel argues, are the remnants of a "tax payment in kind from the provinces of Hispania (roughly modern Spain), especially Baetica."[209]

Inside Mount Testaccio

Whether attempting to remove it entirely or incorporating it into the city itself (Mount Testaccio is now home to many nightclubs, carved into its sturdy exterior), the very presence of systematic means of waste removal and disposal—and the inherently related issues of sanitation, public health, and living conditions—is undeniably urban, in ancient and modern contexts alike. Indeed, the sewer records the progress of the metropolis, with its expansions, population distribution shifts, reformations of public and private land, more accurately than the shifting city standing over it. Metropolitan living and movement, in all its calamity, cannot be predicted (though certain practices, such as the aforementioned statistics attempt to do so). The opposite of this, certainly from a governmental perspective, is the gridded city, to which I will now turn.

The Gridded City

In many ways, the gridded city is the idea of the city and urban organization that empire has about itself, while the metropolis is the reality. The spontaneity of factors that contribute to the making of a metropolis—rapid population growth and its resultant effects of additional housing, industry, and commerce—do not readily combine with the meticulous foresight of gridded plans. Jumping ahead two millennia, Manhattan remains

[208]Lobell. p. 22.
[209]Ibid. p. 23.

the only city to truly defy this classification, as it is a global metropolis existing on a grid. But as de Tocqueville wrote back home to Europe during his two-month stay in New York, the regularity of Manhattan's grid somehow detracted from its potential urbanity:

> In a letter to his friend, Ernest de Chabrol, [de Tocqueville] described the island site of New York as "admirable," but complained about the lack of noteworthy public monuments and added that "it does not resemble in the least our principal cities in Europe." "To a Frenchman the aspect of the city is bizarre and not very agreeable," he wrote to his mother. "One sees neither dome, nor bell tower, nor great edifice, with the result that one has the constant impression of being in a suburb. In its center the city is built of brick, which gives it a most monotonous appearance. The houses have neither cornices, nor balustrades, nor portes cochères." The only good thing he found to say about New York was that although the streets were badly paved, all had sidewalks.
>
> The monotony that he comments on was also the result of the Commissioners Plan of 1811, which divided almost the entire island of Manhattan north of Washington Square into a regular gridiron consisting of 155 cross-streets at two-hundred-foot intervals, crossed by a dozen north-south avenues more than seven miles long. The blocks were divided into 25-by-100-foot plots. It was a real estate agent's dream, but it was not much more than that.[210]

In addition, Manhattan manages to remain pristinely gridded in that, since the end of the nineteenth century, it has been a "municipal corporation," and many of the urban and architectural aspects of the metropolis are to be found in other buroughs. Queens, for example, has no grid, while Brooklyn and the Bronx have partial ones.[211]

While Rome itself does and did not exist on a grid, all of its imperial outposts, in varying degrees of articulation due to an area's natural geography, did. Though there is some disagreement as to where the original grid plan came from—"opinion varies among the Greeks, the Italians, and the Etruscans,"—it is clear that "Rome serves as the great transmission-belt of other people's ideas to modern times."[212] Most Roman colonies followed the same general layout:

> the lofty citadel and sanctuary later called the *arx*, often with a three-roomed temple (the *Capitolium*), and often cut off from the secular part of the city by a separate wall; the rectangular grid of streets, with the main north-south street (the *cardo*) and the main east-west street (the *decumanus*) planned proportionately wider than the others; an ambitious sewage disposal system; blocks of flats called *insulae*, with party-walls and shops on the ground floor.[213]

[210]Rybczynski, Witold. "Alexis de Tocqueville, Urban Critic". *City Journal*, Summer, 1993.

[211]Also consider that de Tocqueville found Boston the most charming of American cities, both for its "society," and its urban look. Boston has been described by many as a "geometrical nightmare," with streets that "curve, wind, and sometimes spiral."

[212]MacKendrick, Paul. "Roman Town Planning". *Archaeology*, Vol. 9, No. 2 (June 1956), p. 126.

[213]Ibid. pp. 126–8.

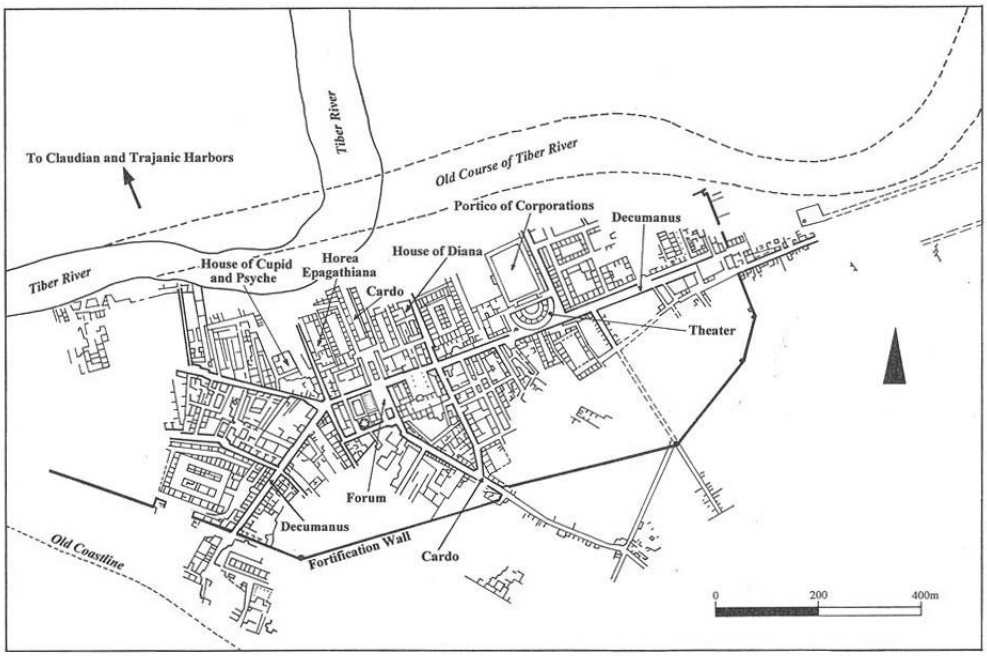
Timgad, in modern Algeria, built in the first century CE

Two of the most famous of the Roman colonies, due in large part to their preservation and thus excavation, are Pompeii in southern Italy by the Bay of Naples, and Ostia, just to the west of Rome where the Tiber meets the Tyrrhenian Sea. Unlike Pompeii, however, Ostia was founded as a Roman colony, perhaps, judging from Cicero's reference to King Ancus Marcius' role in it, the first of all the Roman colonies in the fifth century BCE.[214] Archaeological evidence goes as far back as the fourth century, with the thick walls that made it a fort "guarding access to the Tiber River and to Rome," which, "during the Punic Wars, [was] used as a military port."[215] Though it is unclear just how Ostia governmentally related to Rome during its proper Republican period, Ostia continued to serve as Rome's most important and active port, through the Republic and Empire. As Christer Bruun argues, Ostia shared a cultural, and not just geographical, closeness with Rome not found in other coloniae, though the imperial designation, at least in principle, seemed to still apply to the port city after its rebuilding in the late first century BCE: "these identical inscriptions [*senatus populusque romanus coloniae ostiensium muron et portas dedit m. tullius cicero CO(n)S(ul) fecut curavitque...*], from the 2nd century CE [on the main city gate, the Porta Romana], in Fausto Zevi's sensational restoration, reminded the people of Ostia that it had originally been Marcus Tullius Cicero the consul [...] who gave Ostia its walls."[216]

[214]Cicero, *De Re Publica*. Translated by Keyes, Clinton. *On The Republic, On The Laws*. Cambridge: Loeb Classical Library, 1928, II.3.5: *In ostio Tiberino, quem in locum ... rex Ancus coloniam deduxit.*

[215]Gates, Charles. *Ancient Cities: The Archaeology of Urban Life in the Ancient Near East and Egypt, Greece, and Rome*. New York: Routledge, 2011, p. 367.

[216]Bruun, Christer. "Civic Rituals in Imperial Ostia" in *Ritual Dynamics and Religious Change in the Roman Empire* ed. Hekster, Schmidt-Hofner, Witschel. Leiden: Brill, 2009, p. 127. (The senate and people of Rome gave gates and walls to the colony of the Ostians...)



Ostia, Gridded Port City

Just what it meant to be a Roman colony differed from region to region,[217] though the same basic prinicple of a distant governing body remained true for all. As with many other imperial aspects, colonial governship was partially manifested via architecture, from the gridded layout of the colony itself to the buildings contained within. This imposition of an external sense of order, both legal and aesthetic, onto a territory carries with it the etymological root of the word *colonia*, from the verb *colo*, which means to found a settlement, just as it means to farm and cultivate (it is also the root of the English word "culture"). Colonies cultivated and developed local areas in so far as they did not necessarily make them Roman—Rome alone had that prestige—as they "romanized" them. The distinction between the two is valuable in that many writing on Roman colonies use the term "romanization" to refer to the ways in which the colony resembled the colonizer. But, as I have been arguing, the Roman colony's resemblance to Rome was superficial, despite its common features of baths, *insulae*, and theaters.

[217]See, for example, the map below, in which Roman colonial areas were separated into those in which the Roman senate was able to appoint a governor (senatorial provinces), and those in which the right rested solely with the emperor (imperial provinces).

The Height of the Empire

Unlike the Greek colonies about which Thucydides writes, Roman colonies were merely satellites of the "founding city," never enjoying the "complete independence" and "prosperity [from] agriculture [and] trade" that allowed the Greek cities of southern Italy and Sicily to "make their mark in the Mediterranean and [be] accepted as full-fledged members of the Hellenic world."[218] A Roman colony was not "autonomous from the mother city that founded it, but a town initially established in order to assure military control or political domination of a region [...]."[219] In this way, while spatial and cultural romanization of the provinces meant the importation of certain crystallizations of the Roman civic way of life (the aforementioned buildings, as well as Roman religious cults), it was only insofar as to ensure the protection and continuation of the original, propogating center. Romanization, in the particular meaning outlined here, aids in creating those orientational metaphors latent within Rome's urbanization process of its holdings, in that it creates a distinct sign-system of center / periphery / colony. The gridded cities of Roman engineering are marked by Rome in the sense that they are clearly designed, maintained, and surveilled by that external power structure. These same cities are also marked by Rome, the city itself, insofar as they are distinctly *not* Rome and can never be, in their original layouts of order and repetition.

The gridded city, then, is the imperial city *nonpareil* in that it is a perfect literal and metaphorical blueprint for empire's aims. It is a form of spatial extension, undeniably marked as sharing the same origin, but always with the aim of protecting and benefiting

[218]Gates. p. 311.
[219]Ibid. p. 335.

that same origin. Recall that Rome's supremacy of place was not challenged for several millennia, until a city of comparable size—Constantinople, also part of the empire—compromised its status as sole imperial metropolis. For an empire of such incredible reach, and thus containing a likewise considerable amount of colonial cities (as pictured above), that is no small feat. The gridded city, and all that it entails—sanctioned populations, controlled and supervised spaces of living, commerce, entertainment and worship—also served as the model for later European colonialism, whose queasy mixture of provincial development and exploitation remains with us today.

"Shadows" as a chapter focused, in part, on the evolution of an ontological metaphor whose origins, I argued, could be traced all the way back to Anaximander's representational, as opposed to irrational, thinking and modeling. In many ways, that chapter's work was unique within this project in that its object—a shadow—must always and already, in its relation with time measurement, be somehow metaphoric. A city, however, is not a metaphor, and need not be one; indeed, my desire in this and the next chapter is to show the ways in which metaphors are created out and off of objects with their own literal and non-metaphoric ontology in the world. Recall that if the linguistic process by which "Rome" comes to mean a city just as much as the political structure within is a metonymic one, a metaphoric valence of the imperial city becomes relevant to my argument at the moment when the imperial city begins to look beyond itself and recreate the world around it, both in and against its own image. Only in its relation with its colonies and other holdings does the imperial city foster these long-lasting metaphors that Lakoff and Johnson term "orientational": metaphorical concepts that

> do not structure one concept in terms of another but instead [organize] a whole system of concepts with respect to one another. We will call these *orientational metaphors*, since most of them have to do with spatial orientation: up-down, in-out, front-back, on-off, deep-shallow, central-peripheral. These spatial orientations arise from the fact that we have bodies of the sort we have and that they function as they do in our physical environment.[220]

With that in mind, I will follow these two modes of the city—what I have called the Eternal City and the Gridded, and eventually Radiant, City—as they are built in vastly different capacities, both in literature and online.

[220]Lakoff and Johnson. p. 14.

Capitals of the Nineteenth Century

In the famous title to his equally famous essay "Paris, Capital of the Nineteenth Century," Benjamin succintly introduces many of the themes that will continue to occupy him for the rest of his *Arcades Project*, particularly the idea that history, in the sense of time, was becoming increasingly associated with places and things in the nineteenth century, nowhere better illustrated than in the European metropolis of Paris. As he says in the 1939 edition, "what is expressed here is a feeling of vertigo characteristic of the nineteenth century's conception of history. It corresponds to a viewpoint according to which the course of the world is an endless series of facts congealed in the form of things."[221] For Benjamin, the possibility for the nineteenth century's conception of history sprang from two consecutive inventions, this time from the 1935 edition:

> For the first time in this history of architecture, an artificial building material appears: iron. It undergoes an evolution whose tempo will accelerate in the course of the century. This development enters a decisive new phase when it becomes clear that the locomotive–on which experiments have been conducted since the end of the 1820s—is compatible only with iron tracks. The rail becomes the first prefabricated iron component, the precursor of the girder.[222]

Interestingly enough, Benjamin emends this section in his 1939 edition to read "For the first time since the Romans, a new artificial building material appears: iron." I mention this correction—the Romans famously used something akin to modern concrete in much of their civic and municipal building—in order to highlight two ideas, the first of which underscores the second: though Europe had not seen such rapid building and urbanization since the Romans, such technologically progressive pushes customarily encourage singular thinking in the sense of "this has never happened before."

This is not to say that the nineteenth century's industrialization and subsequent urbanization were not unprecedented, but that periods of meteoric innovation often make comparative or analogous thinking unpopular. And, as Asa Briggs argues in his authoritative *Victorian Cities*, comparative thinking when it comes to cities often runs into two problems. On the one hand, there is the over-simplification of comparison, in which all cities resemble each other in their standardization: those vague criteria by which communities are deemed cities in the first place. To these comparisons, Briggs says "however much the historian talks of common urban problems, he will find that one of his most interesting tasks is to show in what respects citites differed from each other."[223] And on the other hand, there is the challenge of historical specifism, which makes comparisons almost clinical: consider, for example, Briggs' list of the five minimum factors of consideration for economic comparison.[224] Added to these methodological issues is

[221]Benjamin, Walter. "Paris, Capital of the Nineteenth Century Exposé of 1939" in *The Arcades Project*. Translated by Howard Eiland and Kevin McLaughlin. Cambridge: Harvard University Press, 2002, p. 14.

[222]Ibid. "Exposé of 1935". p. 4.

[223]Briggs, Asa. *Victorian Cities*. Berkeley: University of California Press, 1993, p. 33.

[224]"[F]irst, the range of occupations in the city; second, the size of industrial undertakings; third, the character of local industrial relations; fourth, the extent of economic mobility; and fifth, the vulnerability of the community to economic fluctuations." p. 35.

my problem of anachronism, which makes both aforementioned pitfalls especially deep. Hoping to find a middle ground between generalization and overspecification, then, I turn to Victorian London not so much to find topological resemblance, but to show that metropolitan needs, and literary and legal responses to those needs, remain, if not similar, inherently comparable.

The City

During the renovations of London following World War II, additional archaeological evidence of the imperial Roman city—*Londinium*, now the City of London, often referred to simply as "the City," a small part of Central London—was discovered. Though the exact dates of its establishment are unknown, "[i]t is certain in any case that the city was established very shortly after the commencement of Claudius' campaign to conquer the country in 43 A.D. [...]."[225] Excavations from the 1970s show that the ancient city, while possessing much of the habitual settlement architecture—from a harbor to roads to a forum and amphitheater, the population seemed to rapidly decline in the second century CE, for speculative reasons.[226] Nevertheless, we can imagine Londinium, built as it was (as is) along the flat river-plains of the Thames as a gridded city similar to Ostia, likewise an area of trade, though more similar to Rome in its distance inland from the sea. As Tacitus says, Londinium "did not rank as a Roman settlement, but was an important centre for business-men and merchandise."[227]

The area of this former settlement came to comprise one small fraction of nineteenth century London's whole. As seen below in Charles Booth's famous "poverty maps" from the end of the nineteenth century, in which housing conditions and income were indicated via color coding, London (of which the City of London is the small portion around the almost ninety-degree turn in the Thames) had become a massive and sprawling metropolis.

[225]Grimes, W. F. "Roman London" in *The Classical Journal*, Vol. 42, No. 7 (Apr., 1947), p. 381.
[226]Marsden, Peter and West, Barbara. "Population Change in Roman London" in *Brittania*, Vol. 23 (1992), pp. 133-140.
[227]Tacitus. *Annales* 14.33. Translated by Michael Grant. New York: Penguin Books, 1996, p. 329.

Booth's Map of 1899 London[228]

The rise of this and other major industrial cities perpetuated what Raymond Williams calls England's eighteenth-century "crisis of values," resulting from the "transition from feudal and immediately post-feudal arrangements to this developing agrarian capitalism [of] landowner, tenant, and labourer."[229] This crisis, Williams argues, plays itself out in the literature of the period, particularly, as is his focus, in the novels. By the nineteenth century, however, this crisis of values arises not in the estates of the country-side, but in the city, characterized for Wordsworth and Blake by "its loss of connection, [...] failure to identify in the crowd of others which worked back to a loss of identity in the self, and then, in these ways, a loss of society itself [...]."[230] And with England's nineteenth-century urban population exceeding that of rural areas (the first time and place in history to do so), such experiences were arguably shaping the lives of many Englanders, especially those of the working poor. Many prominent Victorian novels, particularly those of Dickens, address these issues of urban experience.

Dickens, as Williams says, created a new type of novel in order to portray city life, specifically within London:

> For what London had to show, more fundamentally, even to modern experience, than the uniform cities of the early Industrial Revolution, was a contradiction, a paradox: the coexistence of variation and apparent randomness with what had in the end to be seen

[228]Black and blue represent poverty, to the yellow of extreme wealth.
[229]Williams, Raymond. *The Country and the City.* p. 60.
[230]Ibid. p. 150.

> as a determining system: the visible individual facts but beyond them, often hidden, the common condition of destiny.
>
> Dickens's creation of a new kind of novel [...] can be directly related to what we must see as this double condition: the random and the systematic, the visible and the obscured, which is the true signifigance of the city, and especially at this period of the capital city, as a dominant social form.[231]

The overall sense of this paradoxical narrative is, Williams continues, one of movement:

> the general movement we remember—the characteristic movement—is a hurrying seemingly random passing of men and women, each heard in some fixed phrase, seen in some fixed expression: a way of seeing men and women that belongs to the street.[232]

Alex Woloch better qualifies the narrativity of this sense of movement, as well as the paradoxical element within it. Dickens' characters and their characterizations—arguably the focal points of any Dickens novel—oscillate between operating as symbol, "subordinated and thematically instrumentalized in relation to the dominant protagonist," and, alternately, as a "center of narrative interest, defined by his social positionality."[233] In other words, Dickens' novels themselves are characterized by the tension between the story-world of the plot, and the author of the text, he whose hand "takes off the housetops and shows the shapes and phantoms" and "clears the air so that people can see and acknowledge each other, overcoming that contraction of sympathy which is against nature: the hand is the hand of the novelist [...]."[234]

This movement around London, and the collecting of the multiplicty therein is nowhere better exemplified than in 1852's *Bleak House*. Released via monthly chapters, the eventual novel collects a huge number of characters and settings along the way. In the famous section on Tom-All-Alone's, a London slum, the third-person narrator, in whose voice the majority of the text is written, asks:

> What connexion can there be, between the place in Lincolnshire, the house in town, the Mercury in powder, and the whereabout of Jo the outlaw with the broom, who had that distant ray of light on him when he swept the churchyard-step? What connexion can there have been between many people in the innumerable histories of this world, who, from opposite sides of great gulfs, have, nevertheless, been very curiously brought together![235]

The answer is two-fold: on a textual level, it is, of course, that same novelist's hand that is the connexion. Thematically, too, the idea of providence returns again and again throughout the novel. Interestingly enough, however, the largest lack of providence—the two figures who somehow do not cross paths in some way—is in the curious relationship between this omniscient narrator, and the first-person narrator Esther, to whom almost half of the novel is given. As many have noticed, while Esther self-consciously narrates her sections ("I have a great deal of difficulty in beginning to write my portion of these

[231]Williams. p. 154.
[232]Ibid. p. 155.
[233]Woloch, Alex. *The One vs. the Many: Minor Characters and the Space of the Protagonist in the Novel*. Princeton: Princeton University Press, 2003, p. 208.
[234]Williams. p. 156.
[235]Dickens. *Bleak House*. New York: Penguin Books, 1996, p. 256.

pages..."[236]), "the apparently privileged narrator never even acknowledges the existence of the main character."[237] The hypotheses for this dual narrative structure are many, with the most common arguing along the lines of "[Esther's narrative's] sympathetic view of the thoughts and activities of "real" people contrasts with the detached, ironic world view of the omniscient narrator [...]."[238] Whatever the subjective emotional effect of Esther's sections, the technical results are clear in that they give the novel what W.J. Harvey calls a "pulsation," from the distant and roaming viewpoint of the omniscient narrator to Esther's perspectival "stability, a point of rest [...]."[239] In this way, if the third-person narration offers breadth, the first-person adds depth, both necessary components in Williams' aforementioned "new urban novel" of Dickens.

Indeed, both narrators are aided in this theme of urban living and the providence therein by the dual literary device and plot point of the legal case of Jarndyce and Jarndyce, in which all of the major and minor characters are to some degree involved. In his influential essay on this topic, D.A. Miller says that

> In one sense, it [Jarndyce and Jarndyce] is so illegible that we don't even have a sense, as we should with a mystery, of what needs to be explained or, more importantly, of what might constitute either the clues or the cruxes of such an explanation. In another, the suit may be read fully and at leisure in the realms of dusty warrants, in the tens of thousands of Chancery-folio pages, in the battery of blue bags with their heavy charges of paper—in all the archival litter that has accumulated over the dead letter of the orginial will.'[240]

Though Miller continues to say that the illegibility of Jarndyce and Jarndyce demands the satisfaction of the detective story within the novel, I want to isolate this characterization of the suit as both impossible and accessible in relation to certain aspects of the metropolis, or Eternal City.

In the opening of *Bleak House*, the narrator describes the case:

> Jarndyce and Jarndyce drones on. This scarecrow of a suit has, in the course of time, become so complicated, that no man alive knows what it means. That parties to it understand it least; but it has been observed that no two Chancery lawyers can talk about it for five minutes, without coming to a total disagreement as to all the premises. Innumerable children have been born into the cause; innumerable young people have married into it; innumerable old people have died out of it. Scores of persons have deliriously found themselves made parties in Jarndyce and Jarndyce, without knowing how or why; whole families have inherited legendary hatreds with the suit.[241]

Jarndyce and Jarndyce's characterizations fluctuate strangely between something animate and something not, something at times capable of its own aspect ("so complicated"), but also a passive enitity into which children can be born, to a quasi-hereditary

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[236] *Bleak House*. p. 27.

[237] Sawicki, Joseph. " 'The Mere Truth Won't Do': Esther as Narrator in 'Bleak House' " in *The Journal of Narrative Technique*, Vol. 17, No. 2 (Spring, 1987), p. 219.

[238] Delespinasse, Doris. "The Signifigance of Dual Point of View in Bleak House" in *Nineteenth-Century Fiction*, Vol. 23, No. 3 (Dec. 1968), p. 260.

[239] Harvey, W.J.. "Bleak House: The Double Narrative" in *Dickens: Bleak House—A Casebook* ed. A.E. Dyson. London: Macmillan, 1969, p. 230.

[240] Miller, D.A.. "Discipline in Different Voices: Bureaucracy, Police, Family, and *Bleak House*". *Representations*, No. 1 (Feb., 1983), p. 63.

[241] *Bleak House*. p. 16.

form of inheritance. This back and forth—and particularly the idea of an object of human fashioning that, after endless different parties of different interests, backgrounds, classes, etc., becomes larger and more complicated than any one person can know and unravel—is, as we have seen, a characteristic of the city itself. Returning to Williams' description of Dickens' "hurryingly random passing of men and women," Dickens has narrativized this sense of motion into a semi-coherent whole, much as the city itself, via neighborhoods, roads, and buildings, does.

But as Miller and others have pointed out, Dickens' narrative strategy (Jarndyce and Jarndyce) in collecting this semi-coherent whole—which, I am arguing, is also a narrative strategy for depicting the nature of the metropolis itself—is an undeniably bureaucratic one. Though on the one hand, Dickens certainly intended to satirize the bureaucratic inefficiency of the chancery system within his novel, it is striking how much his novel itself resembles the absurd case within it. Recalling the novel's serialization, Miller astutely notes that the Victorian reader, much like the law clerks with their blue bags, are constantly accumulating the story as it evolves, an evolution that also mirrors the law-case:

> Certainly, the unfolding of the novel could be though to parallel the elaboration of the suit insofar as it threatens an analogous failure to bring its ever more abundant materials to a proper or conceivably adequate summation.
>
> [...]
>
> the Victorian novel establishes a little bureaucracy of its own, generating an immense amount of paperwork and both physically and mentally sending its readers here, there, backward and forward, like the circumlocutory agencies that Dickens satirizes. On this basis, it could be argued that, despite or by means of its superficially hostile attitude towards bureaucracy, a novel like *Bleak House* is profoundly concerend to train us—as, at least since the eighteenth century, play usually trains us for work—in the sensibility for inhabiting the new bureaucratic, administrative structures.[242]

Though the administrative structures themselves may be new, bureaucracy, as we have seen as far back as the title of Water Commissioner in the first century, is not a new means of power organization. Empire, and the metropolis at its center, demand bureaucratic hierarchies as there can be no one structure—other than the conceptual ones of the empire itself or the metropolis itself—to adequately govern the whole. In this way, *Bleak House* is a perfect mirror of this form of organization, in which the novel itself is the only form capable of giving to this multitude any shape. The Victorian novel's "little bureaucracy" is, then, the most realistic means of attempting a totalizing, encompassing view of urban life. The fiction of it, however, is that there is no novelistic touch to bureaucracy—there is no intervening narrative sense to a bureaucratic whole any more than there is an underlying grid, or sense of logic, to the metropolitan whole. So while "the novel dramatizes the liabilities of fragmentation and postponement within the hopeful prospect that they will eventually be overcome,"[243] the city and its fragmentations and postponements remain.

[242]Miller. pp. 75-6.
[243]Ibid. p. 76.

I Would Prefer Not To

Much has been made recently over the subtitle to Herman Melville's 1853 short story "Bartleby the Scrivener: A Story of Wall Street". Touted by both the right and the left as a representational figure of the Occupy movement, Bartleby as the ultimate literary person who refuses to move (from Wall Street no less!) returned to American discourse some one-hundred and sixty years later.[244] Bartleby's story comes to us via his employer, a Wall Street lawyer who must record the actions of his one-time-copyist, as he was "the strangest I ever saw, or heard of."[245] Bartleby's tenure begins regularly enough, copying out long documents for the lawyer. Soon enough, however, Bartleby begins sequestering himself behind a screen, and on the third day, in response to a summoning, "without moving from his privacy, Bartleby, in a singularly mild, firm voice, replied, 'I would prefer not to.' "[246] Quickly, Bartleby ceases movement altogether, sitting "in his hermitage, oblivious to everything but his own peculiar business there."[247] Bartleby employs a delivery boy to bring him ginger-nuts, which appear to be his only form of sustenance. Bound by a curious "fraternal melancholy," the lawyer is unable to fire Bartleby, even after it becomes clear that the copyist has been living in the offices,

> without plate, mirror, or bed. The cushioned seat of a rickety old sofa in one corner bore the faint impress of a lean, reclining form. Rolled away under his desk, I found a blanket; under the empty grate, a blacking box and brush; on a chair, a tin basin, with soap and a ragged towel; in a newspaper a few crumbs of ginger-nuts and a morsel of cheese.[248]

Eventually, the lawyer must change offices as he cannot impel Bartleby to move or work, and the new renters inheret the strange tenant. Less compassioned by the lawyer's "common humanity," they have Bartleby arrested and put into the Manhattan prison known as the Tombs. The lawyer visits him there, "standing all alone in the quietest of yards, his face towards a high wall,"[249] and is told by a prison guard that Bartleby has refused to eat—"I would prefer not to dine to-day"[250]—and the lawyer, upon his second visit, finds a dead Bartleby, "strangely huddled at the base of the wall, his knees drawn up, and lying on his side, his head touching the cold stones [...]."[251]

Many readings of this curious story focus on Bartleby's negative power, what Hardt and Negri call "the absoluteness of the refusal. [...] Bartleby's behavior is indeed disarming, in part because he is so calm and serene, but moreover because his refusal is so indefinite that it becomes absolute. He simply prefers not to."[252] This absolute refusal is what Agamben—differentiating from Deleuze's definition of power as the separation of humans from their potential—calls "impotentiality," or, "what [humans] cannot do,

[244]Cf. Lee Edelman's "Occupy Wall Street: "Bartleby" Against the Humanities" in particular.
[245]Melville, Herman. "Bartleby the Scrivener: A Story of Wall Street". New York: Simon and Schuster, p. 19.
[246]Ibid. p. 32.
[247]p. 36.
[248]pp. 44-5.
[249]p. 72.
[250]p. 74
[251]p. 75.
[252]*Empire*. p. 203.

or better, can not do."[253] For Agamben, impotentiality is a uniquely human ability:

> While fire can only burn, and other living beings are only capable of their own specific potentialities— they are capable of only this or that behavior inscribed into their biological vocation—human beings are the animals capable of their own impotentiality.[254]

Regarding his impotentiality however, many of these readings of a politicized Bartleby seem to ignore precisely what it is he can not do.

While emphasizing Bartleby's complete stillness, the narrator obliquely mentions, again and again, the presence of the built world—first Wall Street and then prison—around Bartleby. Constantly surrounded by walls, as I have highlighted in the above summary, and eventually dying beside one, the lawyer earlier describes his original law offices:

> My chambers were up stairs, at No. — Wall Street. At one end, they looked upon the white wall of the interior of a spacious sky-light shaft, penetrating the building from top to bottom.
>
> This view might have been considered rather tame than otherwise, deficient in what landscape painters call "life." But, if so, the view from the other end of my chambers offered, at least, a contrast, if nothing more. In that direction, my windows commanded an unonbstructed view of a lofty brick wall, black by age and everlasting shade; which wall required no spy-glass to bring out its lurking beauties, but, for the benefit of all near-sighted spectators, was pushed up to within ten feet of my windowpanes. Owing to the great height of the surrounding buildings, and my chambers being on the second floor, the interval between this wall and mine not a little resembled a huge square cistern.[255]

Indeed, the only causal explanation for Bartleby's story that the lawyer offers has to do with the particular space of the office:

> Often it had occurred to me in my ponderings upon the subject that had that altercation taken place in the public street, or at a private residence, it would not have terminated as it did. It was the circumstances of being alone in a solitary office, up stairs, of a building entirely unhallowed by humanizing domestic associations—an uncarpeted office, doubtless, of a dusty, haggard sort of appearance—this it must have been, which greatly helped to enhance the irritable desparation of the hapless Colt.[256]

Bartleby's enclosure can be thought of as radiating inward, beginning with the street itself. Removed from the street, the lawyer's office is surrounded on all sides by not only the walls of the building in which it is housed, but so too by the walls of the larger buildings surrounding it. The windows afford little sense of landscape, and certainly no sense of motion—a white wall on one side, and a black and shaded wall on the other. Within this walled-space, Bartleby increasingly withdraws, first behind his desk, and progressively partitioning himself behind a screen. Whether or not Bartleby is capable of motion, his preference is clear, as is his eventual fate. When read against the constant motion of other city narratives presented in this chapter—from Martial's itinerant

[253]Agamben, Giorgio. *Nudities*. Translated by David Kishik and Stefan Pedatella. Stanford: Stanford University Press, 2011, p. 43.
[254]Ibid. p. 44.
[255]Melville. pp. 21-2.
[256]Ibid. p. 60.

bather and Juvenal's peripatetic Roman, to Dickens' constant hurrying, whose narrator sweeps above London, forging whatever "connexion [there can] be"—what Bartleby seems completely unable to do; his impotentiality, what he can not do, is live in a city. So greatly does motion inform the literary cannon of urban representation that to refuse it is literal death. And yet, the story is not easily resolved, as the reader is repeatedly invited to see the ways in which the city's components—its walls, buildings, offices, prisons, etc.—actually make movement physically impossible. In many ways, Bartleby lives as a building does: largely immovable; silent; impassive. Thus does the lawyer's final line read so mysteriously: "Ah Bartleby! Ah humanity!"[257] Bartleby shuns humanity, at least certainly the lawyer's somewhat maudlin concpetion thereof, instead embodying, to an untenable degree, the built world around him; not humanity, but urbanity.

[257]Melville. p.75.

The Radiant City

Le Corbusier, one of the most famed architects of the twentieth century, is often touted as one of the earliest advocates of urban planning, frequently remembered in terms of urban renewal, of the transformation of the metropolis into the gridded city. These visions of urban purity (at least of form), filter—acknowledged or not—into most mid-century discussions of urban space, what Lewis Mumford somewhat gushingly refers to as Le Corbusier's "Florence Nightingale" ethos of "new standards for light, air, and cleanliness" in his "admirable hygienic 'Esprit Nouveau' in modern architecture."[258] This level of admiration for the architect, however, often goes unquestioned, despite the glaring problems of his theories, the largest of which, as Jane Jacobs points out, is that he is a remarkably anti-urban urban planner: Le Corbusier was "[t]he man with the most dramatic idea of how to get all this anti-city planning right into the citadels of iniquity themselves [...]."[259] As Jacobs has argued better than anyone, plans of urban renewal are often implicitly or explicitly forms of deurbanization, plans which are thus inherently political. In this final section, I will focus specifically on Le Corbusier's conceptual (and partially built, in Marseilles) Ville Radieuse, or Radiant City. Though his envisioned cities have not come to pass in the built world, Le Corbusier and his ilk, I argue, have instead gone online, as the most influential thinkers of the metaphorical architecture undergirding the virtual world.

Le Corbusier's 1933 *The Radiant City: Elements of a Doctrine of Urbanism to Be Used as the Basis of Our Machine-Age Civilization* is, to say the least, a strange book. As seen in his dedication—"This work is dedicated to Authority"—the work is a fulfillment of his own prognostications made two years earlier, in 1931's *Towards a New Architecture*:

> This framework is his lodging; his town, his street, his house or his flat rise up against him useless, hinder him from following the same path in his leisure that he pursues in his work, hinder him from following in his leisure the organic development of his existence, which is to create a family and to live, like every animal on earth and like all men of all ages, an organized family life. In this way society is helping forward the destruction of the family, while she sees with terror that this will be her ruin.
>
> [...]
>
> Architecture or Revolution.
>
> Revolution can be avoided.[260]

There are two possible interpretations: on the one hand, architecture *cannot* be avoided, and thus must be picked over the less-demanding needs of revolution. On the other hand, revolution can be avoided precisely *through* architecture, which is, I think, Le Corbusier's meaning. Architecture must occur, and a precise form thereof will assuage and divert the need for revolution.

[258]Mumford, Lewis. *The City in History: Its Origins, Its Transformations, and Its Prospects*. New York: Harcourt, Brace, & World, Inc., 1961, pp. 475–6.

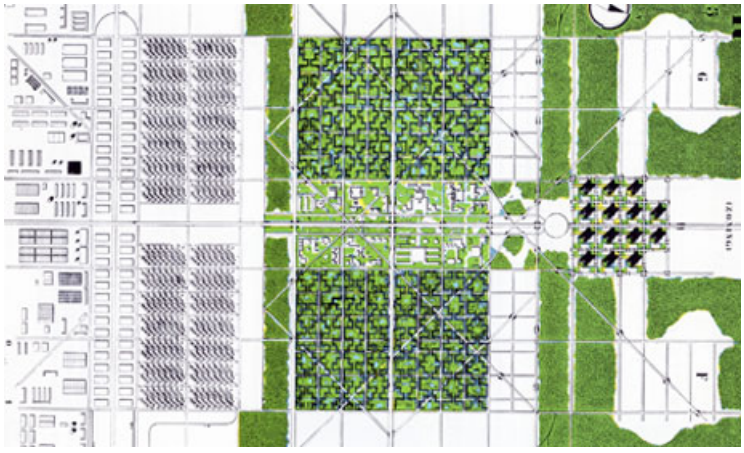
[259]Jacobs, Jane. *The Death and Life of Great American Cities*. New York: Vintage Books, 1992, p. 21.

[260]Le Corbusier. *Towards a New Architecture*. New York: Dover Publications, Inc., 1986, pp. 288-9.

This precise form of architecture is the radiant city, whose theoretical foundations are built, in equal parts, by Le Corbusier's diagnosis of the ills of 1930s Paris, and his complete dedication to "an unalterable, indisputable, essential foundation, the only true basis for any attempt at social organization: *individual liberty*."[261] From these dual pillars stem the plans for the Radiant City, which I will quote at length:

> the city (a large city, a capital) is much less spread out than the present one; the distances within it are therefore shorter, which means more rest and more energy available for work every day. There are no suburbs or dormitory towns; this means an immediate solution to the transportation crisis that has been forced upon us by the paradox of the city + the garden cities.
>
> [...]
>
> The population density of the new city will be from three to six times greater than the idealistic, ruinous and inoperative figures recommended by urban authorities still imbued with romantic ideology. This new intensification of population density thus becomes the financial justification for our enterprise: *it increases the value of the ground*.
>
> The pedestrian never meets a vehicle inside the city. The mechanical transportation network is an entirely new organ, a separate entity. The ground level (the *earth*) belongs entirely to the pedestrian.
>
> The "street" as we know it now has disappeared. All the various sporting activities take place directly outside people's homes, in the midsts of parks—trees, lawns, lakes. The city is entirely green; *it is a green city*. Not one inhabitant occupies a room without sunlight; everyone looks out on trees and sky.
>
> The keystone of the theory behind this city is the *liberty of the individual*. Its aim is to create respect for that liberty, to bring it to an authentic fruition, to destroy our current slavery. The restitution of every individual's personal liberty. Waste will also have its throat cut. The cost of living will come down. The new city will break the shackles of poverty in which the old city has been keeping us chained.[262]

As can be imagined, the visual plans for this city are incredibly repetitive and gridded, down to the amount of space (a fourteen-square-meter room called the "biological unit") afforded to each person.



La Ville Radieuse

[261] Le Corbusier. *The Radiant City*. New York: The Orion Press, 1967, p. 90.
[262] Ibid. p. 94.

Despite all of Le Corbusier's fervent protestations on behalf of individual liberty, the architect never makes it entirely clear what, exactly, this liberty will be used for: "he seems to have meant not liberty to do anything much, but liberty from ordinary responsibility. In his Radiant City nobody, presumably, was going to have to be his brother's keeper any more. Nobody was going to have to struggle with plans of his own. Nobody was going to be tied down."[263]

Though nestled in utopian language, Le Corbusier's Radiant City is a deeply conservative one, in both the political and literal valences of the word. His is a fascistic tone, remarkably similar in intention to that of Mussolini, whose excavations of the ancient Rome underlying the modern were occuring at virtually the same time as Le Corbusier's writings. This desire to return to a form of long-gone moral purity (recall Corbusier's emphasis on the family) via a highly-designed and controlled form of mechanical futurism rang throughout Europe. Unlike Mussolini's romanticization of Rome's urban legacy, Le Corbusier found Roman inspiration not in its messy metropolis ("In Rome the uglinesses are legion"[264]), but in its planning outside Rome: "Outside Rome, where there was space, they built Hadrian's Villa. One can meditate there on the greatness of Rome. There, they really planned. It is the first example of Western planning on the grand scale."[265] It is at this point that the co-establishment (as well as the cities themselves) of certain orientational metaphors begun in Roman imperial building projects becomes almost purely metaphoric. In this statement from Le Corbusier, we have both the metonym of Rome ("one can meditate there on the greatness of Rome"), as well as the city of Rome ("outside Rome"). The metonymical Rome is Roman power, prestige, and planning; it is all that, for Le Corbusier, is to be admired about the empire. The city of Rome, however, with its legions of uglinesses, is the interior, the inside to the outside exemplified by Hadrian's splendor, it is the messy home from which abroad is ordered and understood. And yet, the metonymic Rome must permeate inside and outside the city of Rome equally, if not more so within Rome itself, as it is the "head" of all these orientational metaphors.

Given Le Corbusier's imperial (in the sense of Roman urban planning), quasi-fascistic desires and visions, then, it is striking that many of his ideas of urban gridding and organization have become some of the most influential in the field of virtual design. The overlap between urban planning and information organization / architecture has recently received more attention, both metaphorically and literally. As Judith Donath introduces the topic,

> [t]he cultural and symbolic meaning of "city" helps shape our conception of what this new world should be like; using the metaphor transfers the meaning of "city" to the abstract virtual environment [...]. And, while the net is "fundamentally and profoundly anti-spatial" (Mitchell 1995), a physical metaphor makes the abstract comprehensible: our constant experience of the spatial world makes such metaphors both powerful and pervasive [...].[266]

The metaphor, as David Mitchell, who writes frequently on this topic, argues, works both

[263] Jacobs. p. 22.
[264] *Towards a New Architecture*. p. 153.
[265] Ibid. p. 157.
[266] Donath, Judith. "Inhabiting the Virtual City" a thesis presented to MIT Media Lab, 1997.

within the design systems themselves, and also as a means of describing virtuality's rapid development:

> The story of virtual communities, so far, is that of urban history replayed in fast forward—but with computer resource use playing the part of land use, and network navigation systems standing in for streets and transportation systems. The WELL, the World Wide Web, MUDs, and Free Nets are—like Hippodamo's gridded layout for Miletos, Baron Haussmann's radial patterning of Paris, or Daniel Burnhams's grand plan for Chicago—large-scale structures of places and connections organized to meet the needs of their inhabitants.[267]

And on the nature of the operating systems ran individually by these computers:

> Popular graphical user interfaces of personal computers function in much the same way as Smirke's careful architectural arrangements. Icons are arrayed on the screen, like doorways along a street, to make visible the available access points. Clicking on an icon (like knocking on a door) puts the user in a space—in this case a rectangular "window" on the screen—from which files of information can be requested.[268]

Though many writing on information design / architecture treat just such instances as visual / spatial metaphors, such a designation is a misnomer in that all of the necessary components for a metaphor are not present; there is no experiential basis by which a source domain helps make sense of a target domain, to use Lakoff and Johnson's language. To put it another way, such things do not qualify as metaphors in the Aristotilean sense, in which a metaphor causes the mind to "examine the relation" (*Rhetoric* 1410b) between the objects of comparison, and thus, to learn, and with ease. As he argues, "we learn above all from metaphors. When Homer compares old age to wheat stubble, he makes us realize and understand that both wheat stubble and old age belong to the genus of things that have lost their vigor" (1410b).[269] Returning to an idea from the Introduction, this last example from Aristotle is what literary scholars might call a "good" metaphor in Lakoff and Johnson's blended sense; it is a metaphor in which logic flows both ways. There is no such flow to these so-called digital metaphors. Instead, it is more helpful to call these instances of visual symbolization which, when put into larger interactive circumstances, much like the symbols in allegorical models / texts, take on holistic meaning. The sign-system created by these symbols mimics another sign-system in the hopes, not of that Aristotilean learning, but of utility, such that a behavior can be performed.

Visual, spatial symbols are directly employed by programmers and designers with the express goal of manipulating user behavior. This is not necessarily an evaluative sentiment; how else would a user know how to permanently delete files other than through the visual symbolism of putting items into an icon of a garbage can? My point, instead, is that these spatial symbols of user platforms are taken from the physical world of urban dwelling, a world that is rarely if ever so coherently logical. The sense of the

[267]Mitchell, David. *City of Bits: Space, Place, and the Infobahn.* Cambridge: The MIT Press, 1996, pp. 131.

[268]Ibid. p. 55.

[269]Aristotle. *On Poetry and Style.* Translated by G.M.A. Grube. USA: The Liberal Arts Press, Inc., 1958, p. 89.

metropolis from Rome onwards is one of the unplanned and unplannable, of chaos and movement. The distillation of such sense experience into utilitarian symbolization is not, I think, representative of the city as lived, but instead of the city as some wish it were. Virtual architecture follows the logic of the imperial city or colonial outpost, a space of rigid allocation in which inhabitants are implictly and explicitly instructed as to movement and behavior. And in the Aristotelian sense, it is a one-way metaphor in that we have not truly learned about both operations; though we can understand that we are to mimic behavior from one known realm, we have not resultantly learned how, for instance, to actually dispose of electronic data.

Just as imperialistic and colonial notions of space and power inform metaphors of urbanization, so too do they seep into the symbols created thereof. Though acknowledging that "even though the theories and principles developed by Le Corbusier for real life cities failed to justify their importance and utility," Amit Tungare, in an MIT Media Lab thesis promoting the architect's ideas specifically for virtual design, argues that "the same when interpreted metaphorically give a completely different meaning and sense to the virtual city environment. The drawbacks of these theories being idealistic, dictatorial and rigid for real life cities became virtues when interpreted in terms of virtual environments."[270] The terms of this rubric of metaphorical interpretation (notice again the out-of-place use of metaphor / metaphorical), whereby Le Corbusier's drawbacks become virtues, are unclear. Returning to the outlines for the Radiant City, in which there will paradoxically be untrammeled individual liberty at the same time as enormous population density, with no streets, just parks and greenways, it is more so the case that virtuality allows for these impossibilities to become feasible rather than virtues, necessarily.

Le Corbusier's famous rallying cry—"We must kill the street!"—is nowhere better emodied than in virtual space, in which movement, in the sense of navigation, is purely from site to site; there is no transitional movement in virtuality. As Marshall Berman says, Le Corbusier, through his post-war building projects, effectively transformed the city street "which had always served to express dynamic and progressive modernity" into "everything dingy, disorderly, sluggish, stagnant, worn-out, obsolete—everything that the dynamism and progress of modernity were supposed to leave behind."[271] Le Corbusier's strident anti-urbanism is nowhere more evident than in his longstanding hatred of the city street and the types of motion it affords:

> Instead of the *mouvements brusque* and *soubresauts* that Baudelaire saw as the essence of everyday modern life, Le Corbusier's modern man will make one big move that will make further moves unnecessary, one great leap that will be the last. The man in the street will incorporate himself into the new power by becoming the man in the car.[272]

Indeed, this loss of the street given by the dual enclosures of the home and the car is similar to the distinction made by de Certeau in his famous essay "Walking in the

[270]Tungare, Amit. "Le Corbusier's Principles of City Planning and Their Application in Virtual Environments". A Thesis submitted to MIT in partial fulfillment of the requirements of the degree of Master of Architecture. 2001, p. 119.

[271]Berman, Marshall. *All That is Solid Melts Into Air: The Experience of Modernity.* New York: Penguin Books, 1988, p. 317.

[272]Ibid. p. 167.

City" mentioned at the beginning of this chapter. Differentiating between the "totalizing fiction" of the skyscraper view versus the chaotic city street, de Certeau says that

> to be lifted to the summit of the World Trade Center is to be lifted out of the city's grasp. One's body is no longer clasped by the streets that turn and return it according to an anonymous law; nor is it possessed, whether as player or played, by the rumble of so many differences and by the nervousness of New York traffic.[273]

In many ways it is traffic, the congestion caused by automobiles and not the human body, that causes the modern bedlam of city streets. Especially in older cities not designed for cars, traffic has become an inescapable aspect of daily life, despite city planning at the outset or later interventions thereof. Consider, for example, Boston's infamous "Big Dig," the longest-to-complete and most expensive rebuilding of roadways in American history (from 1991–2007, costing some 14.6 billion dollars).[274] Though the city implemented a massive drivable tunnel to alleviate the burden of Boston's congestion, some aspects of traffic and human motion remain undesignable:

> a screen at the front of the room [of the Backup Operations Center of the Central Artery / Tunnel Project] shows traffic slowing at the end of a northbound tunnel: drivers are hitting their brakes as they emerge. Why? "We ask ourselves that same question," says [Jim] Murhpy. "There's nothing impeding them. It's just human nature."[275]

Thus is traffic not just a constant factor, it is also sometimes inexplicable, unpredictable, without direct cause, leaving no good answer for that oft-asked question in every gridlock: "Why aren't we moving?" This phenomenon of the unknown nature of traffic is so prevalent that there is a burgeoning field within physics and complex systems precisely oriented towards questions of traffic and flows.[276] It is especially telling, then, that this entire concept of traffic has likewise been taken into the virtual realm to make metaphorically clear slow-downs in connection times and access. There is gridlock, congestion, too much web traffic. In other words, despite the foundation at the outset of the Internet being informed by theories of pristine cities and socially/politically/historically unencumbered urban planning, the chaos of dense human presence still overrules the design. Indeed, the current "infrastructure" of the Internet metaphorically resembles labyrinthine Boston with its pandemonium of intersections and flows. This is all to say that though these imagined information cities have become as chaotic as their brick-and-mortar counterparts, it is important to understand their beginnings as conceptually distinct, part of what Martyn Dade-Robertson calls "insights into a time": "Awareness of the speed of technological advancement is not, however, necessarily matched by knowledge of its direction, leading to a form of technological determinism which is fed by undetermined technology."[277] Though Dade-Robertson is also looking forward with this

[273]de Certeau, Michel. *The Practice of Everyday Life*. Translated by Steven Rendall. Berkeley: The University of California Press, 1988, p. 92.

[274]Rosenwald, Mike. "Fixing Boston's Horrible Jams" in *Popular Science*. September 3, 2003. Online. *Popsci.com*. Accessed October 22, 2015.

[275]Ibid.

[276]Cf. the study done at Nagoya University for the critical density required for a variable number of cars on an unimpeded, closed track to begin slowing down.

[277]Dade-Robertson, Martyn. *The Architecture of Information: Architecture, interaction design, and the patterning of digital information*. New York: Routledge, 2011, p. 12.

caveat of determinism in mind, I think it is equally important to look backwards without a preconception of the "always-already" given the current evolution of information architecture and design. The indeterminate nature of the technology, which feeds this technological determinism, is made, or attempted to be made, more determined by a set of symbols of use and metaphors of comparison that, for the interests of this chapter, stem from experiences with which there is little organic similarity. Though the crowded and chaotic nature of current life online might resemble life in a modern metropolis, it is important to consider, looking backwards, that the overtures to urban architecture in digital design were distinctly un-metropolitan, mimicking instead the gridded and preordained city in which no one lives (the closest analogy at hand is, in fact, the suburb, or the "planned community.")

And yet, Berman's "last leap," by which the pedestrian becomes the driver, is not, in fact, the city dweller's final self-propelled motion. Instead, he comes to a complete rest, translating the supposed lessons of urbanity into the completely virtual navigation of the "Information Cities" of virtual life. This electornic utopia, E-topia, is beyond even Le Corbusier's dreams, in which

> proposed cities could be anywhere: free of context, history, or tradition. He had no patience for environments that had grown up independently over time. "A city should be treated by its planner as a blank piece of paper, a clean table-cloth, upon which a single, integrated composition is imposed."[278]

The Information City is all this and more, making utilitarian metaphors of even these concepts of context, history, and tradition. Virtuality's complete removal of the sense of motion so central to urban experience has attempted to create Bartlebys of all user/dwellers: inhabitants who do not stir, whose behavior is dictated solely by preference. Le Corbusier's supreme personal liberty, when read in this light, is the liberty of impotentiality, the power to not do, to not move. I return to Bartleby here at the close as he is, I think, the perfect figure not of the man of the street, nor of the car, but instead the man of the web, for whom refusal becomes the only form of agency. It is doubly interesting to think of Bartleby in this context of the early virtual in that, in my reading, I argued that it was the city itself that confined and impeded him as I read him constantly enclosed by more and more walls. In more current contexts, as we have seen and continue to see the Internet's staggering evolution, even this form of preference-driven agency fades as we can imagine Bartleby unable to exercise even the non-motion of preference as he sits, stuck in the gridlock of online traffic and a bad connection.

In chapter 1, I attempted to trace the evolution of a metaphor as it became, through procedures of systematization and measurement, increasingly abstract. This abstraction was both a distancing from the original grounds of the metaphor, which were based in human experience, but so too was it a distancing from any other sign-system of meaning, whereby technological abstraction increasingly produces and represents merely itself, an entirely self-referential hermeneutic circle. In this chapter, however, I have sought to show the status of a different type of metaphor. The establishment of Rome as a metropolis via urbanization, as well as the creation of Rome as the actor of empire via

[278]Tungare, p. 16. Le Corbusier quote embedded.

metonymy, helped foster certain orientational metaphors of inside / outside; center / periphery, etc., which would come to have a lasting impact in the fields of urban and information design, let alone other disciplines. What I have underscored however, is the inverted expectations of these metaphors in an urban context—the center is chaos, characterized by all those movements and flows from Juvenal to Dickens. The periphery is order insofar as it has been subdued and ordered by the hand of empire (recall that the periphery of empire is not the other of empire, those barbaric, unconquered lands). And yet, it is from ideas of these peripheries—peripheries that, as the world becomes increasingly urbanized, no longer exist—that designers and theorists, urban, digital, and architectural alike, have developed their metaphors and symbols in sign-systems for which there is no experiential basis. No one lives in Le Corbusier's Radiant City, and yet, the basis of these metaphors of use and design stem from this unrealized world. But, returning to a previous idea, when a metaphor, or even an entire sign-system (think of a user interface) for which there is no experiential basis becomes sedimented, the opportunities for understanding (let alone learning a la Aristotle) become equally sedimented. In other words, if the "source" domain of these visual / digital metaphors has been from the theories of Le Corbusier and his like, just because they do not have an experiential basis does not mean they have not produced meaning or understanding. Indeed, the sense of order imposed by the source domain onto the largely unknowable target domain severely delimits our capacity for understanding and interaction. The use of these early metaphors of cleanliness and elegance of design and interaction have helped create the now almost-total obfuscation of what is "actually" happening in technological processes.

eTopias & eWaste

My aim in this chapter has been to show that the city, from Rome onward, has largely fallen into two categories. First there is the metropolis, or the unplanned urban site, which builds itself before it plans itself, based upon the chaotic nature of many people living in limited space. Second, there is the planned city, which had its most successful beginnings as outposts of empire, controlled and manipulated by and from afar. While I have argued that the planned city, a failure in global urbanization, has found a second life in the imperial logic of virtual architecture, my argument is not that the Internet as we know and interact with it today resembles the pristine planning of any of Le Corbusier's imagined cities. As mentioned earlier, the chaos of the current Internet far more closely resembles the modern metropolis of ever-expanding boundaries and populations. Tracking the Internet's evolution, however, is outside the scope of this project, whose aim in those sections on the digital is to highlight particular founding moments that reveal aspects of design and intent that often, given current modes of interaction and perception, go ignored or unknown. Indeed, as I quoted David Mitchell earlier, "the story of virtual communities is that of urban history replayed in fast forward." Thus, the nature of these virtual communities is constantly shifting and morphing, never statically remaining as any one manifestation. Here at the close, however, I want to look at an often unexamined aspect of what it means for urban history to be replaying in

fast-forward, the same aspect with which I opened this chapter: all human communities, virtual and urban alike, create waste and run-off.

It is not surprising, given the Internet's globalizing bent, that its waste and effluence have followed the paths carved out by prior, more obvious, forms of imperial colonialism and industrialization. Though much scholarship has been done on the tremendous ecological strain done by urban living—take William Rees' incapsulation of this in his idea of the "ecological footprint"[279]—the simultaneous and comparable strain of virtual living is more opaque. These Information Cities require tremendous amounts of power, and this move from old forms of industry and building is nowhere more evident than in Google's continued purchasing of "old" industrial sites—power plants, paper mills, waste treatment, etc.—to house its ever-expanding data servers.[280] Finally, there is the physical effluence of all this technology: a

> typical computer monitor with a cathode ray tube contains cadmium, which is toxic to humans and can bioaccumulate in the environment. Polyvinyl chloride in cables and circuit boards can adversely affect the immune system and reproductive health. Mercury in flat-screen displays can impair the nervous system (including the brain) and kidneys.[281]

This effluence continues to flow into those same developing countries, ever the site of waste from the great imperial cities of the developed—online and on ground—world.

[279]Cf. Timothy Beatly and Kristy Manning's *The Ecology of Place: Planning for Environment, Economy, and Community*, Washington, D.C.: Island Press, 1997.

[280]Consider also Google Energy LLC, a subsidiary of Google dedicated to buying and selling energy and energy sources. See "Google to Turn Alabama Power Plant Into Data Center" on datacenterknowledge.com.

[281]Fela, Jen. "Developing counties face e-waste crisis", in *Frontiers in Ecology and the Environment*, Vol. 8, No. 3 (April 2010), p. 117).

ROADS

Introduction

In his short and famous essay "Building Dwelling Thinking", Heidegger makes many borderline-mystical assertions, all of them stemming from his two fundamental propositions. The first is that language is the "master of man,"[282] and the second, in keeping with the language of the first, is that the building is the master of the land. It is his second proposition, concerning the nature of space, that is of interest. Distilled here to a chain of causality, space, for Heidegger, is that which is allowed by a location, and location is that which is allowed by "things". The Heideggerean "thing," *das Ding*, is a concept better explicated in "The Origin of the Work of Art," but, suffice it to say, the "thing" "*gathers* to itself in *its own* way earth and sky, divinities and mortals."[283] The gathering of the fourfold—earth and sky, divinities and mortals—admits a location, and thus a space, and the "spaces through which we go daily," Heidegger says, "are provided for by locations."[284]

This is all an undeniably confusing means of introducing Heidegger's troubling argument that a bridge, understood in his terminology as a "thing," creates the land around it as location and thus creates a space:

> The bridge swings over the stream "with ease and power." It does not just connect banks that are already there. The banks emerge as banks only as the bridge crosses the stream. The bridge designedly causes them to lie across from each other. One side is set off against the other by the bridge. [...] [The bridge] brings stream and bank and land into each other's neighborhood. The bridge *gathers* the earth as landscape around the stream.[285]

I begin this chapter on roads with Heidegger mainly to help me read against the Roman philosophy of road (and bridge) building. As I will show, the Roman road network did not link the Roman empire; it *created* the Roman empire. In this way, of arguing for the priority of the building or building project in terms of understanding or recognizing space, is Heidegger an unlikely ally in eventually arguing against the Roman imperial ethos that presents itself as an essence or power distinct from its habitation of space. Indeed, though many write on the subject as the project of putting down roads of access

[282]Heidegger, M. *Poetry, Language, Thought.* Translated by Hofstadter, A. New York: Harper Colophon Books, 1971, p. 146.
[283]Ibid. p. 153.
[284]p. 156.
[285]p. 152.

and communication through an already extant empire, I will argue that the putting down of measurable, policeable, and sanctioned paths instead created the empire as an imaginable and inhabitable space. In Heideggerean language, the Roman *cursus viarum* gathered the earth around itself, as the political landscape of empire. In the first two chapters, I, in part, read certain imperial objects for their metaphoric bases, arguing for the deeply-imbedded, and, in the case of "Shadows," obfuscated metaphors informing their conceptual evolution and staying power. In this chapter, however, I am attempting to read against the sign system in which the Roman empire is metonymically or symbolically represented by its road network, rather than literally and experientially *is* its road network, the clearest and most identifiable means by which the empire creates, extends into, and maintains power over space.

What is a Road?

If bridges and tunnels can be thought of as subsidiary types of the larger category of roads (the first two being roads that must traverse different kinds of natural impasses), a road, as Heidegger argues for the bridge, is a form of building, but not *a* building. Roads are not buildings of habitation or dwelling; indeed, they are somewhat oxymoronic structures in that their solidity and permanence ensures the continuous motion of people and things. Though this is a seemingly sophomoric point, I think it is a road's curiously liminal structural status—as both functional and monumental, threshold-marking and boundary-crossing, and so on—that makes it a slippery "thing" with and on which to think. To consider a road as an object is to think of it, in some ways, against its use; a road as an object is the material of which it is comprised, the planning required for its design and implementation, and not where it goes. To think of a road as an object is also to think of it non-figuratively in this first instance of what I mentioned above as reading against this particular sign-system. A road, perhaps due precisely to its liminality and slipperiness, is a quickly figurative object, sliding into metaphors of progress, symbols of power, etc., with a hard-to-stop ease. But, unlike shadows as a means of time measurement, a road is not always-already a metaphor, but so too, unlike with cities and urbanization, is it always clear to spot how and when figurative nuances accrue.

Returning momentarily to Heidegger, the act of building, "by virtue of constructing locations, is a founding and joining of spaces. Because building produces locations, the joining of the spaces of these locations necessarily brings with it space [...]."[286] In this sense, then, the road, an act of building that gathers the earth around it as landscape, is the *nonpareil* architectural means of creating space, and, thus, the nonpareil architectural means of empire in that this translation from earth to space renders the world legible. This legibility is both inherently political in that space becomes such as it enters into the framework of ownership (part of its legibility is being read as "Roman land"), as well as inherently legal, as seen in the fact of a road being a juridical right of literal passage, a fact to be returned to at this section's conclusion. Heidegger is additionally helpful in considering the road as imperial object or *thing* in that his

[286]Heidegger. p. 158.

conception of the thing vacillates somewhat strangely between the material and the phenomenological, but all the while refusing the symbolic, or at least what Heidegger takes to be the symbolic:

> To be sure, people think of the bridge as primarily and really *merely* a bridge; after that, and occasionally, it might possibly express much else besides; and as such an expression it would thus become a symbol, for instance a symbol of those things we mentioned before. But the bridge, if it is a true bridge, is never first of all a mere bridge and then afterwards a symbol. And just as little is the bridge in the first place exclusively a symbol, in the sense that it expresses something that strictly speaking does not belong to it. If we take the bridge strictly as such, it never appears as an expression. The bridge is a thing and *only that*.[287]

This distinction between the "mere" aspects, or what I am calling the materiality, of the bridge / road, and its symbolic aspects is especially important when talking about Roman roads in that they have become especially potent symbols or metonyms of the empire. To do so does not, as Heidegger argues, express something of the road that "not belong to it," but instead misconstrues the nature of imperial power as somehow apart from space. Thus, while considering the nature of the Roman road, including its symbolic / metonymic aspects, I wish to include this aspect of powerful location-creating as an aspect of its "thingness," and not as a symbolic / metonymic expression after the fact.

At the start, then, a road is an act of building that gathers the earth around it as having recognizable attributes; the road creates the landscape, and thus both creates and links spaces. This way of thinking about roads is certainly easier when "the road" is taken in opposition to the natural world, and lies in stark contrast to it; imagine, for instance, the landscape produced by a lone road cut through vast countryside. This contrast is certainly more the case when considering Roman roads, but becomes more problematic in more (ancient) urban areas, and more modern times, both of which have almost entirely paved and developed "landscapes." These issues will be addressed throughout the chapter, but I will begin with the *via Appia*, one of Rome's oldest road.

Via Appia, Regina Viarum

The *via Appia*, named for the blind censor Claudius Appius, under whose term in 312 BCE the early portions of the road were constructed, is one of the oldest roads leaving or leading to Rome (only the *via Latina* is older), the so-called queen of the roads. The Appian Way was the first road to bear the name of its principal architect, in the sense that Appius Claudius, in his role as censor, was, as Livy tells us, solely responsible for the road's creation.[288] Famously of dictatorial tendencies, Claudius spent public money in building the road without the Senate's consent:

> In the first place [Claudius] built the Appian Aqueduct, as it is called, from a distance of eighty stades [about 9 miles] to Rome, and spent a large sum of public money for the construction without a decree of the Senate. Next he paved with solid stone the greater

[287]Heidegger. p. 153.
[288]Livy 9.29.5-7.

> part of the Appian Way, which was named for him, from Rome to Capua, the distance being more than a thousand stades. And since he dug through elevated places and leveled with noteworthy fills the ravines and valleys, he expended the entire revenue of the state but left behind a deathless monument to himself, having been ambitious in the public interest.[289]

Though later historians have argued that the road was actually paved after Claudius' censorship,[290] the Appian Way is undeniably linked to one man's political ambitions.

In this initial version, stretching from Rome to Capua (in Campania, near modern Naples), the Appian Way was primarily of military importance to a then-Republican Rome. Having just ended the war against the cities of Latium, the original via Appia was constructed during Rome's war against the Samnites.[291]

Via Appia

As the historical sources repeatedly report, the authority by which this road was created was not Republican in nature, but an authority created both by the necessities of wartime, and the changing political nature of Rome. As Livy says: [t]hree hundred and two years after Rome's founding the form of her government changed for the second time: power shifted from the consuls to the decemvirs, as it had before from the kings to the consuls."[292] Claudius was one of these ten men, and one who seemed remarkably adaptable to power shifts:

> Appius assumed the leadership of the board because of plebeian support. He changed his behavior to such a degree that instead of being considered a savage and cruel persecutor of the plebs, he suddenly turned into their champion, seeking every opportunity to ingratiate himself with them.[293]

289 Diodorus Siculus. *The Library of History.* Translated by Oldfather, C.H.. Cambridge: Loeb Classical Library, 1933. CXX.36.1-2.

290 cf. G.P. Sartorio's "Origins and Historic Events" in *The Appian Way: From its Foundations to the Middle Ages.*

291 Sartorio. "Origins and Historic Events" in *The Appian Way: From its Foundations to the Middle Ages* ed. Portella, Ivana Della. Los Angeles: Getty Publications, 2004, p. 19.

292 Livy. II.33.1.

293 Ibid.

My argument is less about the importance of Appius Claudius as figure, but that road building, even in Rome of the middle Republic, was both made possible by and emblematic of non-Republican politics. On the one hand, the war with the Samnites concerned control of Italian land outside of Rome, and on the other, the road's actual construction was not senatorially approved, as its drastic cost made majority endorsement unlikely.

Indeed, the incredible amount of resources and labor necessary for the Appian Way—or any massive public work—is often at odds with the ostensibly representational and tax-based government of the Republic. Instead, the money largely came from the military budget, and thus at least partially from war spoils and tithes paid by colonies. So too did the labor, and soldiers often built the roads intended for their own use. The literary evidence on those who did the actual building is scarce, but we do know that by the Roman empire, there existed something like a "construction industry," comprised of a variety of classes. As Janet DeLaine writes, builders—of roads, aqueducts, monuments, etc.—undoubtedly constituted the largest section of this industry, leading to the creation of *colegii* of *fabri tignarii*, associations of builders. Reading a tomb inscription, DeLaine argues that "[the inscription] suggests the training of skilled workers through the aristocratic household, or at second remove through slaves of builders who were themselves freed slaves, as a type of apprenticeship [...]."[294] But as Frontinus mentions concerning aqueduct maintenance,[295] there was a permanent body of public slaves for the task, and Pliny, writing on the building of Rome's sewers, mentions that "there was a mass outbreak of suicides as citizens tried to escape from their exhaustion" (Pliny XXXVI.107). Thus, though it is impossible to say how much, we can infer that a portion of the unskilled labor necessary for these projects was involuntary at best, provided by conscripted citizens or slaves.

On the side of engineering and design, however, there is much more literary evidence. Almost all of it dates from imperial Rome, when road building reached its peak, though it is reasonable to assume that the imperial techniques built upon those begun in the Republic and earlier, techniques that were most likely evolutions of those developed by the Etruscans. Rome's gridded city planning, as discussed elsewhere, owes much to the Etruscans' orthogonal *cardus / decumanus* layout, just as Rome's building of such settlements owes much to Etruscan technological advances. The Appian Way, then, began "at the Porta Capena within the Servian wall. It was thus the first military road built *ex novo* by the Romans, as well as the first censorial road, inasmuch as Appius Claudius was censor when he had it built."[296] The road was consistently twenty-five Roman feet across (about ten meters), fourteen of which were the road itself, while the remaining eleven feet were split in two, as walkways on either side, with the sixth-century's Procopius of Caesarea reporting that "it is wide enough to allow two carts to pass in opposite directions."[297]

[294]Delaine, Janet. "Building the Eternal City: the construction industry of imperial Rome" in *Ancient Rome: The Archaeology of the Eternal City* ed. Coulston, J. & Dodge, H. Oxford: Oxford University School of Archaeology, 2011, pp. 122-3.

[295]*On Aqueducts* 2.119

[296]Sartorio. p. 26.

[297]Procopius *De Bello Gothico* 5.14.7. Cited by Sartorio.

The road itself consists of four layers, an overview of which Statius gives concerning the *via Domitiana*'s construction (95 AD):

> at nunc, quae solidum diem terebat,
> horarum via facta vix duarum,
> non tensae volucrum per astra pennae
> nec velocius ibitis, carinae.
> Hic primus labor incohare sulcos
> et rescindere limites et alto
> egestu penitus cavare terras;
> mox haustas aliter replere fossas
> et summo gremium parare dorso,
> ne nutent sola, ne maligna sedes
> det pressis dubium cubile saxis;
> tunc umbonibus hinc et hinc coactis
> et crebris iter alligare gomphis.
> o quantae pariter manus laborant!
> hi caedunt nemus exuuntque montes,
> hi ferro scopulos trabesque levant;
> illi saxa ligant opusque texunt
> cocto pulvere sordidoque tofo;
> hi siccant bibulas manu lacunas
> et longe fluvios agunt minores (IV.3.36-55).[298]

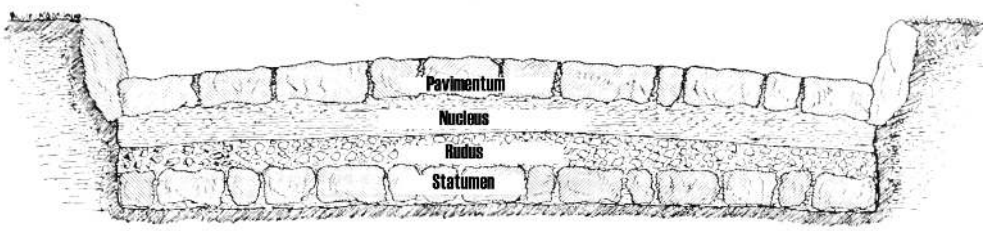
> But that which wore out a solid day,
> Now, with the road completed, scarcely a couple hours,
> Neither the stretched wings of birds through the stars
> nor vessels advance more quickly. The first task is to begin the tracks
> and to cut out the barriers and by deep
> extraction to remove the earth within;
> Next refill the excavated ditches
> and prepare the interior for a raised back,
> Lest the soil gives way, or a bad seat
> give doubt to the wedding of firmly-planted rocks;
> Then bind the road with blocks pressed close together here, abundant and crowded.
> O how many hands work together!
> These chop down forests and strip mountains,
> These smooth the rocks and even the beams with iron,
> Those fasten the stones and congeal the work
> with burned sand and dirty tufa;
> These drain sodden pools by hand
> and drive little rivers elsewhere.

The most notable of these steps, and that which belongs solely to the Romans, is an adaptation of what Statius mentions near the end: *opusque texunt / cocto pulvere sordidoque tofo*. By the early empire, and after the first laying down of the Appian Way, the Romans had invented something akin to cement, a lime mortar called *opus caementicium*, or rubble work. This cement was greatly improved upon the discovery of the binding properties of volcanic earth, which "has the great advantage to solidify without

[298]Statius. *Silvae*. Translated by Shackleton Bailey, D. R.. Cambridge: Loeb Classical Library, 2015.

oxygen, that is below water or within bulk masonry, resulting in waterproof concrete, like the building product of today."[299] As Barow elucidates the entire process:

> First, the ground is well compacted with rammers and rollers and smoothed with a topping of sand. Then squared stones are placed to form the approximately 40 cm thick *statumen*. It extends beyond the actual width of the road and defines the total width of the highway. The edges of the roadway are secured by side walls, to delimit the finishing courses. These consist of a 30 to 50 cm thick rubble base (*rudus*) and a foot thick concrete core (*nucleus*), which receives the paving (*pavimentum*) of stone slabs, or at least a layer of gravel.[300]



By the late second century BCE, the Appian Way was paved all the way to Capua, meaning that it had received this final top layer of interlocking stones (*pavimentum*), which Procopius describes (falsely attributing the deed to Claudius):

> Appius brought the paving from far away; it had the size of millstones and was very hard.[301] There is no such stone in our area. Appius had the slabs squared and smoothed. They were set so tightly that no mortar was needed. The stones are so well set that the observer believes the paving is of one piece, without joints. And though day by day many carriages drive over it and many animals trample it, no stone has become loose or is broken.[302]

Paving Stones on the Appian Way

[299]Barow, Horst. *Roads and Bridges of the Roman Empire*. Stuttgart: Edition Axel Menges, 2013, p. 63.

[300]Ibid.

[301]Procopius is probably describing volcanic rock, whose durability and water repellence made them ideal for paving.

[302]Procopius. 5.14.8-11. Cited by Barow.

Needless to say, the labor and ingenuity required for procuring the road's material itself were remarkable. The Romans built elaborate quarries, subterranean versions thereof resembling relatively shallow mines of both horizontal and vertical orientations. Excavation and transportation of stone was done a myriad of ways, most frequently with the aid of pulley systems and cranes, both of which Virtuvius describes at length as "hoisting machines," originating with the Greeks.[303] This is all to say that a road's—and in this instance, the *via Appia*'s—physical properties are the product of tremendous design, engineering, strength, and finance. But, unlike straightforward monuments (in the sense of triumphal gates, tombs, etc.), a road is rarely considered as such in that it has a definite utility: the Appian Way was the means by which one travelled between Rome and, eventually, Brindisi, some 350 miles away.

Indeed, as we see in Horace's famous rendition of taking just this trip in *Satires* I.5 when the road was relatively new (almost 200 years since its first paving!), though the road may be a central character, its importance to the narrator is not in its status as monumental object, but in the spaces and people it opens on. Stretching over 100 lines, the road is all but invisible, though the reader understands that it is also the only constant besides the narrator himself. Only a couple of times is the via Appia mentioned directly: at the opening, when it is allowed that *minus est gravis Appia tardis* (I.5.6) (Appia is less difficult to the slow), and near the end when, after a day of rain, he mentions *postera tempestas melior, via pejor* (I.5.96) (the next day the weather was better, the road worse). And yet, the poem faithfully follows the Appian's path, and one can even track the miles covered from the narrator's frequent stops. As the narrator concludes, *Brundisium longae finis chartaeque viaeque set* (I.5.104) (Brundisium is the end of both this paper and this road).[304] The very ability to ignore the road's presence—it seems to enter directly into the poem only when it impedes travel—is a testament to its success. Beginning in Rome and ending in Brundisium, the poem has served as the road itself.

The Golden Ass

The invisibility of the road in much of what we could anachronistically dub the "road literature" of the time is one version of the ways in which I mean that the Roman road system created the empire, and one that I will return to. The sense of motion and diversity made possible by the road system is central in Apulejus' second-century CE text *Metamorphoses*, or, as it is more commonly known, *The Golden Ass*. This text, often called the first Western novel, is the first in the picaresque genre as it follows the ribald, but more importantly itinerant, Lucius. In the opening preface, the narrator introduces himself to us through a riot of imperial locations and languages: "In this Milesian Tale (*sermone isto Milesio*), reader, I shall string together a medley of stories, and titillate your agreeable ears with a merrily whispered narrative, if you will not refuse to scan this Egyptian paper written with a subtle pen of Nilotic reeds (*si papyrum Aegyptiam argutia*

[303]Vitruvius. *De Architectura*. Book X.

[304]Horace. *Satires. Epistles. The Art of Poetry.* Translated by Fairclough, H. Rushton. Cambridge: Loeb Classical Library, 1926.

Nilotici calami inscriptam non spreveris inspicere)."[305] In this first sentence, the reader is alerted to a kind of double play, upon which the text will continue to capitalize. This "medley of stories" (*varias fabulas*) is understood to be literally that, as the coming pages will show, but also a medley of places and literary traditions.

Beginning in Miletus, famed city of wealth and luxury of the ancient Greeks, located in modern day Turkey,[306] the narrator then moves drastically southwest, informing us that this type of story will be told by a north African (Apulejus himself was from modern day Algeria) writer, upon Egyptian paper, with a reed from the Nile. In the next sentence, we understand that though the tales to come might be generically Milesian, they are literarily Ovidian: "It [the paper] tells how the forms and fortunes of men were converted into alien natures, (*figuras fortunasque hominum in alias imagines*) and then back again by the twist of fate into their first selves."[307] This clearly hearkens back to Ovid's epic poem, also titled *Metamorphoses*, whose invocation promises a song of transformations: *In nova fert animus mutatas dicere formas / corpora* (*Met.* I.1-2.) (My spirit moves me to tell of forms shifted into new bodies). In this section, I want to look at the ways in which Apulejus' *Metamorphoses*—and Ovid's *Metamorphoses* as well, although I lack the space for its full inclusion here—is, in fact, an experiential, and not just fanciful, account of life in the Roman Empire. Both texts deal with a looseness of identity, from its sudden appearance/disappearance (think of any of Ovid's transformations, or Lucius' turn into an ass), as well as its unsettlingly slippery nature (this is subtler in Ovid, but consider, in particular, his preoccupation with the Theban royal line in Book III and their ongoing inability to know, as the Delphic oracle commands, themselves). For Apulejus, however, this looseness of identity seems especially linked to places and their traversibility—to travel in Apulejus' world is often literally to become someone or something else.

Within in the few opening lines of *The Golden Ass*, we have geographically gone from Miletus to Egypt, and literarily, from Miletus, to Egypt, and to Ovid's Rome, all written in a Latin that the narrator soon begs forgiveness for, as it is not his native language. Schooled as a child in "the Attic tongue" (*linguam Attidem*), the narrator professes to have found the switch from Greek to Latin difficult: "with head splitting effort and with no pedagogic fingerposts, I acquired the native speech of the Romans." And though this bilingualism may result in linguistic error ("I prelude with an apology lest I should annoy the reader with any unfamiliar or harsh constructions in what to me is a foreign tongue"), the narrator finds this switch thematically suitable for the tales to come ("Yet this very change of language suits a tale of magical metamorphoses, such as you are here to read.").[308]

Thus, in this brief passage, we have an experiential account of a traversable and vast empire. Certainly by the second century, and even by the first as we saw with Horace's narrator, the very traversability of the empire is an experiential leitmotif of sorts. Just as

[305]Apuleius. *The Golden Ass*. Translated by Jack Lindsay. Bloomington: The University of Indiana Press, 1960, p. 31.

[306]A Milesian tale is a generic marker, describing a short fable, or, as Jack Lindsay glosses it, "light tale."

[307]Apuleius. p. 31.

[308]Ibid.

we saw in the chapter on cities, a constant descriptive element of both cities and the early empire is the possibility for constant motion, albeit of different types. For both Ovid and Apulejus, some aspect of this in-motion imperial experience seems representable by the metamorphosis not only of bodily form, but also of generic and linguistic ones. Central to both authors' conceptions of metamorphosis is the role of chance; a mythological chance bordering on fate for Ovid, and an almost-purely circumstantial or locational chance—luck or lack thereof—for Apulejus. Indeed, most of *The Golden Ass*' plot—both in the sense of Lucius' overarching plot line that moves the story forward, and the embedded stories that seemingly derail it—is purely happenstance, tales overheard, and / or being in the wrong place at the wrong time.

The narrative itself opens with the as-yet unnamed "I" of the narrator heading to Thessaly, a region of Greece bordering the Aegean Sea. Giving his horse a rest by walking beside it, the "I" sees "a short way ahead two fellow-travellers, with whom I presently made a third."[309] Upon hearing that the other two are trading stories, the "I," "always thirsty for every sip of novelty," offers to buy dinner if the stranger will only continue his tale. After brief dialogue—in which the stranger's "I" ("It's a fair offer and I'll be pleased to begin my story all over again for you.") appears as recorded by the same "I" who introduced himself in the preface—the "I" suddenly shifts, and our previous narrator falls back with us into the place of audience, as a new "I" takes over, that of Aristomenes, whose tale begins with a man so transformed by poverty as to have "waned into another man" (*paene alius lurore*). Aristomenes himself is a wandering merchant: "I travel the country in every direction through Thessaly and Aetolia and Boeotia, to buy honey and cheese and other foodstuffs for retail to the shopkeepers." The itinerancy and wandering of the characters of the story-world is thus mirrored in the roving representation of this world with shifting narrators and even generic shifts of dramatic scale, such as when the text, recounting an old woman's tale of Cupid and Psyche, leaves the quasi-historical Roman empire for the world of mythology.[310] The text is orgiastic, as speaking voices and identities merge and fall apart, and then merge again. This is one aspect of the aforementioned looseness of identity, in which different characters bleed into one another.

Another aspect of this looseness, however, is in the discrete, discontinuous nature of a single character's identity. This is of course evidenced in the text's central issue—Lucius' metamorphosis into an ass—but it is a theme dealt with repeatedly, in often stranger and subtler ways. Before he meets the witch Pamphile, and her assistant, Fotis, both of whom will aid, to different degrees, his transformation, Lucius stays with a friend in the "heart of Thessaly," a city, about which the narrator notes, "there was nothing that I saw as I walked about [...] which I did not believe to be something other than it was."[311] The city itself, perhaps because of being "universally acclaimed as the aboriginal crucible of the Art of Magic," is somehow shifting and slippery, constantly dissembling itself, its occupants, and its objects. Such shiftiness, it seems, reaches its peak on All-Fools-Day, when the city "alone of mankind, propitiate the most sacred

[309]Apuleius. p. 33.

[310]Even within Aristomenes' tale, the narrative "I" switches to another character, when Socrates, the unfortunate man from above, begins to relate his own story.

[311]Handy. p. 50.

God Laughter with jolly rites of festival."[312] The infamous propitiation that follows—in which Lucius, drunkenly defending his host's home, kills a trio of robbers, a trio who, it is revealed at Lucius' elaborate trial, were actually wineskins[313]—is remarkable not just for the bizarreness and elaborateness of the prank, but for the ways in which the action, and its ensuing consequences are not, from Lucius' perspective, counter-factual. In a superficial way, Apulejus' Thessaly is an anti-Kafkan world in that the individual at the center of judgement is, in fact, guilty; it is the circumstances that relieve the character of the need for reckoning. In other words, Lucius did, by his own perception kill three men, an action, as he avers in his defense, not in keeping with his identity in his hometown, "being a man who has never had his character impugned, who is highly respected in his own city [...]."[314]

My argument is not that Lucius' action somehow deeply shifts his character in the sense of psychological composition; as he argues, he should be applauded for defending a home against brigands. Rather, my interest here is in the ease with which identification and judgement, as well as its reversal, can come from the external world, but in a curious relationship with the perception of one's interior world. For instance, through this painstaking set-up, the townspeople are able to convince Lucius that in their city, he did, in fact, become somehow if not other than himself, then capable of actions heretofore unthinkable (if only because of the circumstances of their being thought have not been presented). This circumstantial, place and space dependent aspect of identity formation and maintenance becomes increasingly central just after this event with the false robbers, as Lucius seems to enter into the world of mythology.[315] After watching the witch Pamphile transform herself via ointment into a bird, Lucius tries the potion on himself:

> But no down appeared; no wings burst out, Rather, it was obvious that my hair was hardening into bristles, my tender skin was roughening to a hide. My toes and fingers lost their distinctness and clotted into solid hoofs; and from the end of my spine a long tail whisked out. My face became enormous; my mouth widened; my nostrils gaped open; my lips grew pendulous; and my ears shot hairily aloft. I could see no consolation in this

[312]Ibid. p. 69.

[313]"The bodies of butchered men were three wine bladders slashed and apertured variously—the scars corresponding in position (as far as my memory of last night's combat extended) to the wounds that I had given the brigands" (p. 76).

[314]Handy. p. 76.

[315]For both Ovid and Apulejus, a small portion of their biography is helpful here, not in the sense of explaining authorial intention, but more so to argue that though both authors seem preoccupied with supernatural metamorphoses, the possibilities for radical switches in fate was not the province of mythology alone. For Ovid, suffice it to say that he was exiled by Augustus after a self-professed *carmen et error* (a poem and a mistake) to Tomis, on the Black Sea (modern day Romania). Apulejus also got into trouble with authority, and was put on trial for sorcery, a part of his crime being the supposedly unnatural seduction of older (wealthy) widows. The evidence list included his long and flowing hair, love of poetry, use of tooth-powder, purchasing of fish, and the presence of a mirror in his home. Apulejus' spectacular defense of these charges (including a rebuttal that his hair, neither long nor flowing, is "all entwined and stuck together, much like flax for stuffing cushions, irregularly shaggy, bunched, and piled up, really inextricable" (*Apologia* 4)) is recorded in his infamous *Apologia*. This is all to say that there were a whole host of repercussions metamorphic in nature possible in the Roman empire.

> calamitous change save that I was (in every respect) enlarged even beyond the capacity of Fotis.[316]

The rest of the text follows Lucius—stolen by bandits, captive to a story-telling crone—as he tries to find rose petals, his only means of transformation back into a man.

And it is on a road in Cenchreae, a "town considered the noblest of the Corinthian settlements and bordered by the Aegean and Saronic Seas," that Lucius finally finds the rose petals. Following a dream sent to him by the goddess Isis, the ass enters into a crowd of Isis and Osiris' cult parading down the street, and, taking a floral crown from the priest, "'greedily [...] masticated the whole lot." The man emerges from the ass before a throng of religious devotees, and Lucius spends the brief remainder of the text joining the mystery cults. Ending at Rome, Lucius has joined the cult of Roman Isis, become a lawyer, and, most bizarrely, the text concludes: "not shading or hiding my baldness but freely exposing it wherever I went." This final metamorphosis, into dutiful servant, is, just like his previous transformation into ass, given via his shifting external appearance; this time, his bald head marks him as devotee, just as his bristle-hair marked him as ass.[317]

And yet, this strange final book is of a different literary nature than the ten that have preceded it. As E.J. Kenney says,

> the first fifteen chapters of [book XI] contain the most elevated writing in the novel; the sequel is curiously prosaic. [...] The account is detailed and circumstantial, and the work ends, with the narrator happily enrolled as a shaven-headed member of a college of priests [...], on what to most readers must come as a distinct note of anticlimax."[318]

Though the final transformation may seem to have superficial, if not thematic, resemblances to the previous tales, the narrative voice presenting it is changed, and is now more rhetorically sophisticated. As Osiris sends a dream to a Roman priest that a "native of Maudara [Apulejus' birthplace] was being sent to him," it is arguable that book XI in fact records the transformation of Lucius into Apulejus, the text's gifted rhetorician author from Maudara. Even this final shift in voice, however, can be thought of as in keeping with the place-dependent identities I have been arguing for in *The Golden Ass*; the bawdy and conversational "I" of Thessaly, and the rest of the novel, becomes prosaic and more serious "I" of Rome.

I am not, however, arguing for any kind of autobiographical allegory. Instead, I want to allow that the *Golden Ass*, along with Ovid's *Metamorphoses*, do in fact offer an experiential account of the Roman empire. Magic and crudity aside, Apulejus' text is preoccupied with an unpredictable fate that is inherently tied to movement and motion. If the whims of the gods are responsible for the majority of Ovid's *Metamorphoses*, then it is the roads, and their openness, that are responsible in Apulejus' world. Sheer happenstance, accidents, and chance encounters prompt the plot's events, the happy and unhappy luck of myriads of people at cross-purposes interacting with one another.

[316]Apuleius. p. 84.

[317]Lucius' preoccupation with hair, however, stays curiously consistent throughout his travels; from his obsession as a man ("it has always been the prime concern of my life to observe in public the heads and tresses of beautiful women" p. 55.), to this final note on his own bald head.

[318]Kenney, E.J. *Apulejus: Cupid & Psyche*. Cambridge: Cambridge University Press, 1990, p. 5.

Identities of all sorts, from personal to literary, bleed into one another, and individuals recognize and misrecognize one another differently from place to place. What is most curious about this, then, is that there is no attending sense of the entirety of the empire: each location in the story (which mostly takes place in Thessaly) is discrete, as is the journey that gets one there. The world of the *Golden Ass* is not traversed as a continuous entity, but rather as strange and disjointed places, just like the fractured tales, and identities, within. Though the Roman road system allows the modern mind to think of the empire as an entire system, it was not, in practice, experienced as such. Instead, the road itself, the stops along the way and the people to be met, along with the constant possibility of motion and travel, were the experience of the stretch of empire.

All Roads Lead to Rome

This argument of the experience of the road being a narrative sequence rather than overarching contiguity is reinforced by the fact that the scaled map—the artifact that can give representation to overarching contiguity—was not nearly as prevalent a means of representing geographical distance as was the itinerary, or *itineraria adnotum*. We have already seen one, admittedly poetic, example of such an itinerary in Horace's satire of traveling the Appian Way. It is difficult, but necessary, to unthink our modern association of geography with pictorial, cartographic representation, and instead to consider spatial knowledge as textually-transmitted stops along the way. As Kai Brodersen, relating the inability of the extremely learned imperial doctor Galen to know "how many cities there are on an Aegean island and how to get to the one he wants to find,"[319] says,

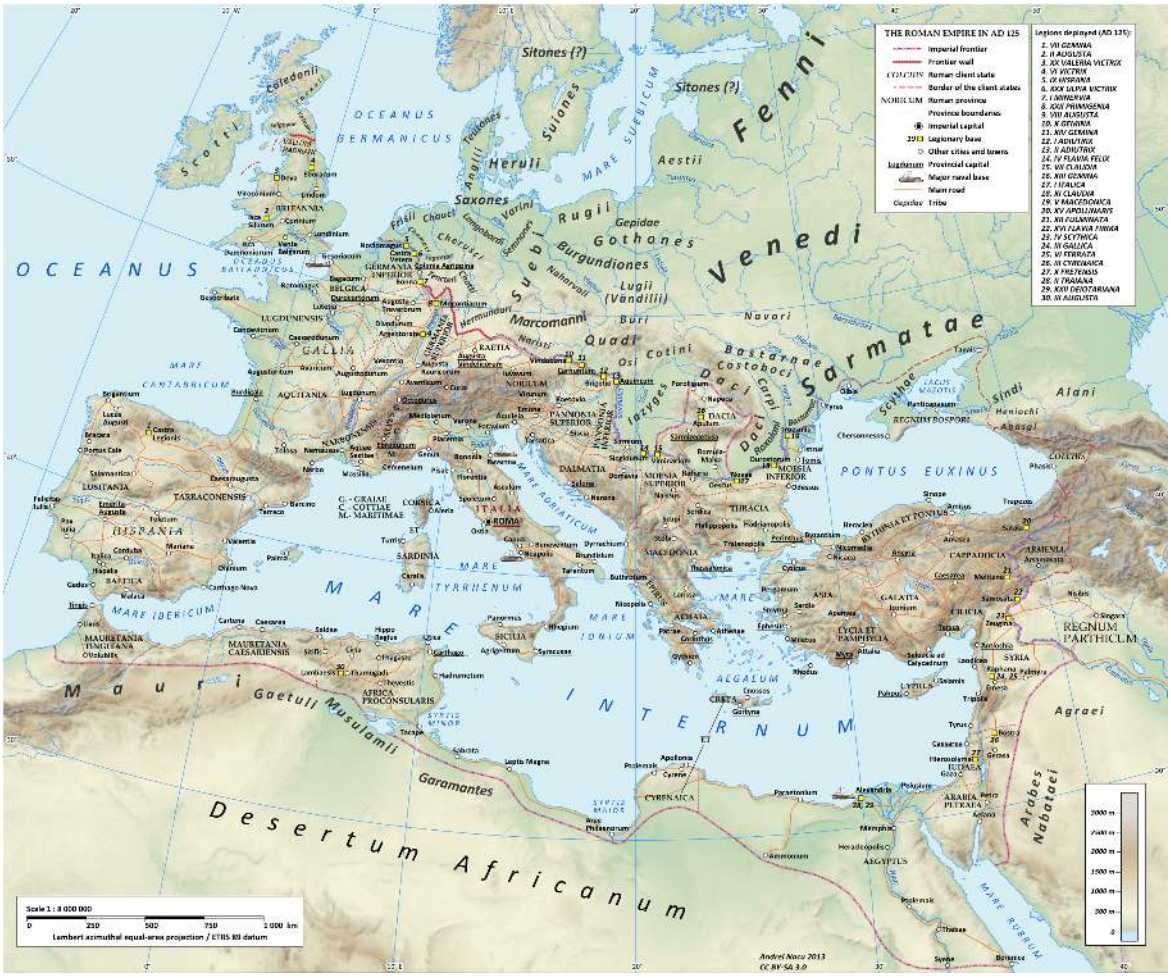
> So all Galen can think of is to ask a professional, a captain—who, as it turns out, does not know the details of the geography either and fails to get Galen to Hephaistias. Only after a second, more successful attempt does the doctor write down an itinerary for the benefit of future researchers; he does not assume that they would otherwise have access to this kind of knowledge, and he certainly does not even mention that drawing a map might perhaps be a better alternative of presenting his newly gained geographical knowledge.[320]

Though there is archaeological evidence suggesting that "the idea of representing space in a diagram was familiar already by the first century BC"[321] (and has its own chapter here), there is more evidence of these textual itineraries, often not just annotated, *sed etiam picta*, or with some illustration. In terms of "topological accuracy," these illustrations served to "show the relative position of stations to each other [...]."[322] As Brodersen argues, this type of record or diagram is closest to our modern subway maps, whose sense of resemblance is self, rather than geographically, referential (by this I mean that a subway map is distinctly a map of the subway, and not the geographical space covered *by* the subway). This *itinerarium pictum*, then, "allows you to plan travel or

[319]Brodersen, Kai. "The Presentation of Geographical Knowledge for Travel and Transport in the Roman World" in *Travel & Geography in the Roman Empire*. Ed. Adams, C. and Laurence, R. London: Routledge, 2001. p. 8.
[320]Ibid. p. 9.
[321]p. 14.
[322]p. 18.

transport from A to B successfully, and it is this method that was adopted throughout antiquity."[323]

Thus, when speaking of the Roman road system in a holistic fashion, it is more experientially accurate to think of the infinity of itineraries such a vast network allowed, rather than the incredible feat that a map depicts, of Europe, north Africa, and the middle East covered in roads. That being said, the entirety of the Roman road system is astonishing and cannot go unmentioned. Though I will expand on this in another chapter, suffice it here to say that such an entirety, is, to the modern mind, best represented visually as a bird's-eye-view map. Estimates of the network's extent vary, but most scholars agree that there were upwards of 80,000 kilometers of paved main roads in the empire, and "Forbes gives the total length of 290,000 km roads [...]. The common image of Romand roads—long, straight paved roads like the Via Appia near Rome—is only partially correct. The major part of the road-system was simpler and in the provinces gravel roads were common."[324]



Roman Road System

[323]Brodersen. p. 19.
[324]van Tilburg. p. 6.

What such a totalizing image and concept both explicitly and implicitly impart, however, is precisely this idea of a definable whole for something that can only ever be experienced fragmentarily. This oscillation between a conceptualized whole and an experienced fragment has its analogues in psychoanalytic theory, which will be returned to in the "Maps" chapter. If, in the Lacanian mirror stage, a child is forced to recognize themselves in a mirror or its like, and thus participate in a fundamental error of identification with an image of a holistic form for a corporeal experience that is always fragmentary, the Roman road network is the fragmented experience, while the map thereof is the mirror that provides the misrepresentation of an impossible unity. Returning to the idea with which I began this chapter, the map of the Roman empire's road system invites the conclusion that the empire was something other than its roads, rather than something that was created by the fact of its access via roads. The roads in this line of thinking create a structural metaphor, one that is perhaps slightly difficult to see in that the road networks are a literal structure. But spelling out the metaphor makes the relationship more clear: the roads here act as the source domain, the experiential phenomena put into comparison with the target domain, which is the empire itself. In this way, the empire is to be understood as *like* its roads, at which point all of the roads' literal aspects become vehicles for understanding the concept of empire. The empire organizes, the empire builds, the empire gives access and passage. Such a relationship thus leaves the power source in the target domain, making the actuality of empire as somewhere or something else than its roads, other than the way in which it manipulates and creates space. This is not to say that the road networks were the only facet of empire, but that, as stated earlier, they are the clearest and largest means by which Rome expanded itself over the earth. To consider the empire as something else or other than this in terms of "essence" participates in the naturalization and essentialization outlined in "Shadows" in which the imperial family cast itself into the heavens, thereby creating Hardt and Negri's aforementioned aspect in which empire "presents its rule not as a transitory moment in the movement of history, but as a regime with no temporal boundaries and in this sense outside of history or at the end of history."[325] I want to conclude this section with local instances of use and abuse, by which we will see the road system creating the lived reality of empire.

Brigandage

As mentioned above in the summary of Lucius' adventures, bandits were a prevalent issue on Roman roads. That the roads, particularly the Via Appia, were originally built for militaristic purposes does not make them exclusively the mechanisms of Roman-driven war; the famed second sack of Rome came upon its roads, entering the city through the Salarian Gate. Indeed, if natural disaster and shipwreck were the dangers of traveling by sea, then bandits were those of the roads. As Brent Shaw argues, banditry was common throughout antiquity, but became an increasing problem as the State—banditry's opposite—became both better-defined and more powerful. By the early empire, there is a "general danger associated with travel beyond town walls," with people of rank

[325] *Multitude.* p. xiv.

> known simply to 'disappear' while traveling [...] Insecurity of this type, endemic to the countryside, is to be found not only in Italy and Judaea of the first century; it was ubiquitous, though in varying degrees of intensity, in the empire in all periods of its existence.[326]

The threat was so prevalent that widespread efforts were taken against banditry. But, as the "insecurity" was in fact one inseparable from the open access of the roads themselves, policing brigandage was in fact policing the space in which it occurred in the forms of "guard posts, watchtowers, advance stations and other fortifications—to provide protection for those using the roads."[327]

Surveillance of the roads was not solely of imperial jurisdiction—often the task was left to local authorities and soldiers (interestingly enough, Shaw traces the rise of banditry to not just the oppositional influence of an organized, centralized state, but also to the role of mercenaries within this state, who often turned to banditry in times of peace.). In combination with the extensive routes of signals and relays established by the imperial army, much of the Roman roads had the opportunity to be watched, even if they were not always in practice.[328] Though many fortifications along imperial frontiers read as impediments to external enemies, they are also efforts to curb internal threats along the roads and in the cities. Thus, even when considered as militaristic object, the Roman roads were not a holistic system, but instead discrete intervals to be monitored.

Finally, then, closing by considering the road as an imperial and militaristic device lends weight to one argument for what a road is and does, the question with which I began this chapter. A road is a sanctioned and monitored path, not through an already-existing space, but *is* in fact the space. This is somewhat clearer when we consider the juridical definition of a *via* in a Roman context: a *via*

> is the most common definition of a road; it is a road accessible for all types of traffic—coaches, vehicles, pedestrians and animals—also in a legal context: it was not only *possible* to make use of it, but also *permitted*. *Via* is a combination of two other juridical terms: *actus* (*ius agendi*) and *iter* (*ius eundi*).[329]

A road, then, is a right, a legal form of permission, the right of driving (*ius agendi*), or the right of walking (*ius eundi*). Not only does a road gather the landscape around it as location, it also creates the movement upon it as correct and abiding. A road is literally a law of empire, especially on the local, experiential level of individual and group motion. The Roman roads do not cut through the space of empire, but, through routing, monitoring, and regulation, the roads create the space and experience of empire. Residing somewhere between the legal concepts of *res nullius* (that which belongs to no one (religious objects, fish and wildlife, abandoned property)) and *res communes* (that which cannot be owned or captured (oceans, air)), roads and their ilk ("harbors, ports, bridges, rivers that flowed year-round, and lands immediately adjacent thereto"[330]) were

[326]Shaw, Brent D. "Bandits in the Roman Empire". *Past & Present*, No. 105 (Nov., 1984), pp. 9-10.
[327]Ibid. p. 12.
[328]Cf. Donaldson, G. H. "Signalling Communications and the Roman Imperial Army" in *Britannia*, Vol. 19 (1988).
[329]van Tilburg. p. 9.
[330]Rose, Carol. "Romans, Roads, and Romantic Creators: Traditions of Public Property in the Information Age". *Law and Contemporary Problems*, Vol. 66, No. 1/2 (Winter–Spring, 2003), p. 96.

of the *res publicae*, that which belongs to the public, and remains public "by operation of the law."[331] Thus is the road the law of permissible motion made manifest in the Roman empire, an entity and resource open to the public precisely in accord with the law, a distinction that becomes both more clear and important as motion—hypothetically in the interests of traffic, congestion, and safety—becomes increasingly legally sanctioned (or not). Even legally, then, the Roman road not only creates the experiential empire in its traversibility, so too does the road dictate the very parameters (not just figuratively, but literally in terms of mandated road widths mentioned earlier), of this experience.

City Streets

In the preceding pages, I have tried to speak strictly of the road as an element of building distinct from its most immediate kin, the street. Doing so has undoubtedly left holes in my argument, particularly my main argument that the road creates the space around it as identifiable location. But what of when this space is not unbuilt land, or generally more pastoral in nature? What, in short, about when the road moves through the city as a street? This type of differentiation among a variety of roads was important in ancient Rome as well, if not conceptually then certainly administratively. In this section, I will look at several works of literature by authors who seem preoccupied by city streets, with an eye towards the types of urban space seemingly created by these avenues, boulevards, ways, and places.

Poe's Europe via America

As Jonathan Culler argues, "nowhere else in world literature" but in the case of Edgar Allan Poe, "has a writer been so scorned by the literati of his own language and so celebrated by the best minds of another culture and language."[332] This celebration, of course, takes place in France, as Poe and his work inspire the work of turn-of-the-century poets like Rimbaud, Valéry, Mallarmé, Verlaine, and, most notoriously, Baudelaire. Poe's work has continued to attract French intellectuals, with the famous textual exchange between Lacan and Derrida over "The Purloined Letter". Such a continuing affinity—coupled with America's own distinct lack thereof—is, as Culler continues, surely suspicious, in a distinctly Poe-like way: "this unparalleled discrepancy [...] might lead one to suspect that there is some uncanny relation between Poe's texts and French readers, some deep and unexplained sense of the relevance of his work to their situation [...]."[333] What precisely this "unexplained sense of relevance" might be for any relationship of influence and exchange is contentious (Culler goes on to persuasively argue that Baudelaire learned from Poe "the generation of an allegorical narrative through the liberalization of a phrase or a figure"[334]) and ultimately unknowable. But on a far larger

[331]Rose, p. 96.
[332]Culler, Jonathan. "Baudelaire and Poe" in *Zeitscrift für französische Sprache und Literatur*, 1990, p. 61.
[333]Ibid.
[334]p. 71.

scale of affinity, Poe's stories of doubling, murder, and misapprehension are far better suited, at least in terms of setting, to the better-established streets of the old European metropoles.

Indeed, some of Poe's best-known works take place in Europe, notably London and Paris. Written from Philadelphia, Baltimore and New York, the London of "The Man of the Crowd" and the Paris of the Inspector Dupin stories are the inventions of an American mind knowledgeable on the differences between his cities of origin and those overseas. One major difference, and one that Poe himself wrote on several times, is the quality of the American city street versus that of the Romans, and thus, much of Europe. In an editorial in the *Broadway Journal* in 1845 entitled "Street-Paving.", Poe writes

> There is, perhaps, no point in the history of the useful arts more remarkable than the fact, that during the last two thousand years, the world has been able to make no essential improvements in road-making. [...] it appears that we have at last settled on a result which differs in no material degree, and in principle not at all, from that which the Romans attained, as if instinctively, in the Via Appia, the Via Flaminia, the Via Valeria, the Via Tusculana, and others.[335]

In contrast, the American road, Poe continues, is shoddy and ill-designed, filthy, and, most distressingly it seems, *loud*: "the street *din* which is wrought by the necessity of having the upper surfaces of the blocks roughened, to afford a hold for the hoof. The noise from these roughened stones is less, certainly, than the *tintamarre* proceeding from the round ones—but nevertheless is intolerable still."[336] In place of these roads, Poe advocates streets of wood preserved against decomposition as easier to clean, requiring less maintenance, and much quieter.

Though these issues were by no means unique to the American street, Poe's problems were undoubtedly exacerbated both by the relative newness of the American street itself, and the brand newness of the governmental system that might regulate it. Philadelphia—if only due to Benjamin Franklin's influence and presence—is perhaps the best known example of the derailment of urban planning in a colony after the American revolution. Following the technological innovations of the early eighteenth century, and the installation of "systematic infrastructures" in several major east coast cities, "the order achieved during the 1760s turned to disorder with the Revolution, leaving the legislation of that decade sitting like dead weights in the statute books. The physical city [of Philadelphia] continued to decline [...]."[337] Indeed, as John Reilly argues, Poe's interest in street-paving probably followed him from Philadelphia, where the subject was popular at mid-century, to New York, where complaints about the streets were equally popular:

> Though New York newspapers carried any number of complaints about deplorable street conditions, by far the most of the complaints were not about noise but about uncleanliness—which is quite understandable when we consider, for example, that each of the upwards of

[335]Poe, Edgar Allan. "Street-Paving." *Broadway Journal*, Vol. 1, No. 16, April 19, 1845. Permanent address: www.eapoe.org/works/essays/paving.htm

[336]"Street-Paving".

[337]McMahon, Michael A. "Benjamin Franklin, Philadelphia, and the 'Progress of Cities' " in *The Pennsylvania Magazine of History and Biography*, Vol. 116, No. 2 (Apr. 1992) of p. 179.

> 200,000 live horses in the city at mid-century deposited an average of twenty-four pounds of manure and several quarts of urine each day on streets where fly-ridden corpses of abandoned work horses lay undisturbed.[338]

This is all to say that the American city street—possibly for these reasons of noise, filth, and lack of oversight—did not offer Poe the affinity of setting as did the European city street. What are these affinities, and what is the version of the street they help offer?

"The Man of the Crowd"

Poe's 1840 short story "The Man of the Crowd," written while he lived in Philadelphia, opens with the narrator mentioning a "certain German book" that "*er lasst sich nicht lesen*—it does not permit itself to be read."[339] The narrator then assumes a first-person persona, and we find him, in the past, sitting in "the large bow window of the D— Coffee-House in London." He has been ill for months, he tells us, but now, convalescent, is in "one of those happy moods which are so precisely the converse of *eunui*—moods of the keenest appetency, when the film from the mental vision departs [...]."[340] Here we find a characteristically Poe-like usage of a word with both archaic and modern (in 1840) meanings in "appetency." In the early seventeenth century, the word meant similarly to "appetitive" as "the state of longing for, desiring; appetite, passion," but, by the early- and mid-nineteenth century began to take on additional meanings as an "instinctive inclination or propensity," a word including "both desire and volition" (*OED*).[341] In this way, the word doubles its meaning, in a particularly interesting way for my interests here in that the narrator is experiencing a mood whose synonym is affinity.

With whom or what does the narrator feel this mood of keen affinity? At first, everything: "I felt a calm but inquisitive interest in every thing." Quickly, however, his interest progressively focuses itself, first on the passerby outside his window—"I looked at the passengers in masses, and thought of them in their aggregate relations"[342]—and their almost-biological classification into various substrata. But then, "scrutinizing the mob, [...] there came into view a countenance (that of a decrepit old man, some sixty-five or seventy years of age)—a countenance which at once arrested and absorbed my whole attention [...]."[343] If the narrator's general sense of appetency is his ability to find interest and take pleasure in the stimuli around him, then his particular affinity becomes directed completely toward this decrepit old man. The narrator begins to follow, increasingly fascinated, and, the reader suspects, unwell: "For my own part I did not much regard the rain—the lurking of an old fever in my system rendering the

[338]Reilly, John. " 'We write this article with no books before us': Poe on the Art of Street Paving" *The Edgar Allan Poe Review*, Vol. 8, No. 2 (Fall 2007) p. 22.

[339]Poe, E.A. "The Man of the Crowd" in *The Selected Writings of Edgar Allan Poe*. Edited by G. R. Thompson. New York: W. W. Norton & Company, 2004, p. 232.

[340]Ibid. p. 232.

[341]We see this again elsewhere in "The Man of the Crowd," when the narrator describes a route as "devious," in the literal, and more archaic, sense of the word as "lying out of the way; remote, sequestered." The word's figurative connotations of deceit and perversity are more modern, but still available and applicable to this story in 1840.

[342]"The Man of the Crowd". p. 233.

[343]Ibid. p. 235.

moisture somewhat too dangerously pleasant. Tying a handkerchief about my mouth, I kept on."[344] The narrator follows throughout the night and the next day too, as the man makes loop after loop, walking endlessly through London's constant crowd, even through slums, where

> [t]he paving-stones lay at random, displaced from their beds by the rankly-growing grass. Horrible filth festered in the dammed-up gutters. The whole atmosphere teemed with desolation. Yet, as we proceeded, the sounds of human life revived by sure degrees, and at length large bands of the most abandoned of a London populace were seen reeling to and fro.[345]

The two continue to walk, arriving back at their starting place as morning breaks, continuing throughout London as night falls again. Finally, exhausted, the narrator stops, saying to himself " 'This old man [...] is the type and the genius of deep crime. He refuses to be alone. *He is the man of the crowd.*' "[346]

This story both is and is not characteristic of Poe's work. On the one hand, we find many of his recurring motifs, most notably that of doubles and doubling. As Lacan has argued concerning "The Purloined Letter," Poe's "doubles" exists on the level of narrative as well as plot, with scenes in that story repeating, and characters shifting and doubling their roles within these repetitions.[347] The most frequent means of doubling in Poe, that of the doppelgänger, is explored again and again, as the protagonist is rarely able to cope with or understand the resemblance: "[t]he sense of finding oneself in a figure or representation that in principle is quite foreign is what much of Poe's writing is about."[348] In many ways, this aspect of being "quite foreign" is integral both to the ways in which Poe's characters experience the world, just as it is to our reading of this world. This potential for recognition in external resemblances is, in Poe, often thwarted by this other's perceived "foreignness," or, to use a word used more often by Poe himself, a perceived "oddness."[349] In "The Man of the Crowd," the double's oddity is in his perceived singularity—"any thing even remotely resembling that expression I had never seen before."[350] The narrator's refusal to allow the old man to have any worldly resemblance whatsoever becomes increasingly striking as the story continues and the narrator and the man become physically closer and closer, blending, at times, into a "we": "suddenly a corner was turned, a blaze of light burst upon our sight, and we stood before one of the huge suburban temples of Intemperance [...]."[351]

This inability to reconcile themselves to or somehow alleviate this oddity, then, often leads characters to madness. The madness in "The Man of the Crowd," however, is

[344] "The Man of the Crowd". p. 236.
[345] Ibid. p. 238.
[346] p. 239.
[347] "For the narration effectively doubles the drama with a commentary without which no *mise-en-scène* would be possible." Lacan. "Seminar on 'The Purloined Letter' " *Ecrits*, translated by Bruce Fink. New York: W. W. Norton & Company, 2006, p. 7.
[348] Culler. p. 63.
[349] As Lacan also says, the odd, which is so integral to Poe's work, has no ready French cognate, and that "*bizarre*, by which Baudelaire regularly translates it into French, is only approximate" (p. 16).
[350] "The Man of the Crowd". p. 235.
[351] Ibid. p. 238.

what is *not* characteristically Poe-like. As J. Gerald Kennedy argues, this story marks the beginning of a new, and relatively short-lived, turn in Poe's career:

> While the Gothic protagonist typically succumbs to a paroxysm of fear, uncertainty, or madness, the ratiocinator discerns the causes behind effects, proving that nature's laws are accessible to the man of reason. The emergence of this man of reason and his eventual disappearance from Poe's fiction can be observed in "The Man of the Crowd" (1840) and "The Oblong Box" (1844), tales which respectively signal the beginning and end of Poe's ratiocinative cycle.[352]

Though the narrator, like many other of Poe's, seeks "a clarification of experience, only to discover, in the tales of terror, that rational explanation is not possible,"[353] this particular narrator's delusion is not necessarily to do with rationality in total, but rather his small portion thereof. In other words, as we see the narrator increasingly unable to notice his growing resemblance to the man whom he follows, the reader grows more and more mistrustful that the narrator is nearly so talented at that with which he opened the story: noticing enough repeating aspects in the people passing before him to classify them into discernible groups. It is not that such a process of astute observation is rationally impossible, but that it is for this character.

This process of deduction based upon observation, however, is second nature to Poe's next character, written some five months after "The Man of the Crowd," Monsieur C. Auguste Dupin, a man of "a peculiar analytic ability [...]."[354] In fact, Dupin is so rationally astute that he often produces that same agitated feeling of oddity or unease in other, lesser minds:

> [Dupin] boasted to me, with a low chuckling laugh, that most men, in respect to himself, wore windows in their bosoms, and was wont to follow up such assertions by direct and very startling proofs of his intimate knowledge of my own.[355]

Indeed, moments later, the narrator recounts, as example, the time that Dupin seemed to read his mind, as he ascertained the narrator's thoughts while both were silent:

> "Dupin," said I, gravely, "this is beyond my comprehension. I do not hesitate to say that I am amazed, and can scarcely credit my senses. How was it possible that you should know I was thinking of —?" Here I paused to ascertain beyond a doubt whether he really knew of whom I thought.
>
> —"of Chantilly," said he, "why do you pause?"[356]

Dupin is, of course, the archetype of the detective. For Poe, this figure is capable of doing what so many of his characters cannot; he can be two things at once, a mind made singular by his ability to be double: "Observing him in these moods, I often dwelt meditatively upon the old philosophy of the Bi-Part Soul, and amused myself with the fancy of a double Dupin—the creative and the resolvent."[357]

[352]Kenndy, Gerald J. "The Limits of Reason: Poe's Deluded Detectives". *American Literature*, Vol. 47, No. 2 (May, 1975), p. 185.
[353]Ibid. p. 185.
[354]Poe. "The Murders in the Rue Morgue". p. 243.
[355]Ibid. p. 242.
[356]p. 244.
[357]Ibid.

The figure of the detective is one made possible and necessary, literally and figuratively, by the street itself. Although his capabilities for successful detection are hampered by his addled sensitivities, the narrator of "The Man of the Crowd" wears the right shoes—"[l]uckily I wore a pair of caoutchouc over-shoes, and could move about in perfect silence."[358] These over-shoes of rubber, from which we get the figurative name of "gum shoe" for the detective, are necessary for walking the street unheard. More figuratively, the city street produces the detective as the figure who thrives in isolation from the crowd, while still of the crowd, a sentiment that Raymond Williams associates with Baudelaire (and, necessarily, Poe):

> Baudelaire, meanwhile, reversed both these values. Isolation and loss of connection were the conditions of a new and lively perception: "Multitude and solitude: terms that an active and fertile poet can make equal and interchangeable." The city was a 'spree of vitality', an instantaneous and transitory world of 'feverish joys'. It taught the soul to: "give itself utterly, with all its poetry and charity, to the unexpectedly emergent, to the passing unknown." There was a new kind of pleasure, a new enlargement of identity, in what he called bathing oneself in the crowd.[359]

This enlargement of identity—the ability (scant) in Poe of merging with one's double—is one version of the landscape produced by the street. What is so interesting about this landscape is that it is not characterized by purposeful movement, building, or destination, but almost purely by the uniquely urban promise of the crush of people. As the narrator of "The Man of the Crowd" says in a brief aside, giving the reader additional pause as to who precisely he is and where he has been:

> [t]he street was a narrow and long one, and his course lay within it for nearly an hour, during which the passengers had gradually diminished to about that number which is ordinarily seen at noon in Broadway near the Park—so vast a difference is there between a London populace and that of the most frequented American city.[360]

Poe's placement in London of this story of doubling oneself is partially a practical one, then, in that the street as imagined here is ever-populated both by people, and the resultant possibilities of loss and expansion, of bathing oneself in the crowd.

In this formulation of the city street and its possibilities, we see a continuation of the narrative itinerary quality of the road—the experiential Roman road, as I have been calling it. The landscape opened up by Poe's urban street is similar to Apulejus' in the sense of chance, random events, and literal / figurative identity loss. In Poe's ecology, however, the arbitrary nature of the street has become distinctly sinister, in a landscape in which the possibility of finding the rose petals and returning to one's original nature is never allowed. Instead, the street, and the urban fright of an anonymity that becomes complete lack of interior identity becomes unavoidable, more powerful than its participants and habitants. We have here the beginnings of what we will see in Ballard's road of the constant present, with no future and no past. The looseness of identity, in which the capabilities and recognitions of the self become place-dependent for Apulejus, becomes, for Poe, an almost mandated lack of identity, in which any "sense of self" is

[358] "The Man of the Crowd". p. 237.
[359] Williams, Raymond. *The Country and the City.* New York: Oxford University Press, 1973, p. 234.
[360] "The Man of the Crowd". pp. 236-7.

predicated upon mirroring and repetition of the external, urban world. Even with the rhetorical / literary shift at the end of *The Golden Ass*, we see Lucius still, converted and finally, so he says, himself, concerned with hair, or a lack thereof. If we imagine Lucius seeking salvation on a road in Poe's Europe, any specificity of task, let alone peculiarity / consistency of self, recedes (think of the rose petals), replaced instead by the mania of undirected and insatiable appetency.

J.G. Ballard and the End of the Road

If conceptions of the street are often inseparable from the flows of pedestrians upon it, the image of the deserted urban landscape has been a visual shorthand to the idea of something gone wrong, of disaster, apocalypse. J.G. Ballard—the modern British writer who was born, as Zadie Smith says, "on the inside, to the colonial class, that is, to the very marrow of British life,"[361] an experience recounted in 1984's autobiographical story of childhood internment in Shanghai, *Empire of the Sun*—is an author uniquely sensitive to these visions of the modern street upon which something untoward has happened. Though born into imperial marrow, he did not stay in the interior, establishing instead "an autonomous hinterland, not attached to the mainland in any obvious way."[362] The Ballardian hinterland is characterized by a flat, even tone that reads as cold and clinical; what populates the landscape itself has been called many things, from dystopian to science fiction, to avant-garde. His themes, beginning in the late 1960s, have established Ballard as something of a prophet in the same sense of Kafka in that both writers' fictional worlds—Kafka's hell of endless bureaucracy and Ballard's hell of endless traffic—have come to pass: "[Ballard's] life story doesn't necessarily explain his eerie prescience, or the extent to which things predicted in his novels of forty years ago have mostly come true—the water crisis, global warming, traffic problems, drugs, violence, and war."[363] Of particular interest here is the Ballardian street, or the lack thereof.

As I mentioned above, the urban street, if it comes up at all in Ballard's works, is radically depopulated of people, replaced instead by forms of surveillance, from the security-camera monitoring of the street in "The Intensive Care Unit" to the constant streetward gaze of those living way up in high rises in *High Rise*, *Crash*, *Concrete Island* and others. Instead, Ballard is interested in the road in the more Roman sense of a major thoroughfare, populated solely by cars. In 1973's *Crash*, the road is envisioned as a nightmare of crushed cars, massive traffic, and the violent union of man and machine:

> As I looked down at myself I realized that the precise make and model-year of my car could have been reconstructed by an automobile engineer from the pattern of my wounds. The layout of the instrument panel, like the profile of the steering wheel bruised into my chest, was inset on my knees and shinbones.[364]

[361]Smith, Zadie. "On 'Crash' " in *The New York Review of Books*. July 10, 2014.
[362]Ibid.
[363]Johnson, Diane. "J.G. Ballard: The Glow of the Prophet" in *The New York Review of Books*, October 9, 2008.
[364]Ballard. J.G. *Crash*. New York: Picador USA, 1973, p. 28.

But if *Crash* and other earlier novels present visions of worlds in which certain perverse dreams—what Ballard repeatedly calls his characters' "psychopathology"—become attainable via the human use of certain spaces and technologies, then Ballard's later novels deal with the inverse situation, in which spaces and technologies establish the conditions for human action and dreaming. It is true, however, that this line is never clear in Ballard's work, of who or what is using who or what, and that one true aspect of the Ballardian world may be, as again Smith says, that everybody uses everything and everything uses everybody.

Ballard's permeability of use and function between the built environment and the human actors within it is, I think, a hyper-version of this chapter's driving argument concerning the ways in which instances of building create location and space. For Ballard, the built environment comes first, and, as most of his characters lack any (accessible) interior world and thus agency, it is the landscape itself that often seems to be the protagonist. In 2000's *Super-Cannes*, this is certainly the case, with the oddly perfect landscape of the "new French Riviera" central to the novel. Though fictional, J.G. Ballard based his business and residential park Eden-Olympia on the real Sophia-Antipolis, a technology park with a residential and commercial sector within, in Nice. As he says in his foreword, Super-Cannes is not just a "luxury enclave on the heights above the Croisette [prominent road in Cannes]," but is also a term that refers to "that whole terrain of science parks and autoroutes on the high ground above the Var plain. Together they make up Europe's silicon valley [...]."[365] *Super-Cannes* opens like several Ballard novels, with characters in or near cars, one of whom has been recently injured. The husband and wife, we learn, are driving from London to the Côte d'Azur so that the wife can take a temporary position in Eden-Olympia's private clinic, as her "predecessor, a young English doctor named David Greenwood, had met a tragic and still unexplained death after running amok with a rifle."[366]

The details of this unexplained death emerge throughout the novel as the husband, Paul, becomes obsessed with the event and seeks answers as to why the young doctor "killed seven senior executives at Eden-Olympia, executed his three hostages and then turned his rifle on himself."[367] Beginning the novel as a kind of ersatz Dupin, Paul pursues his clues by car rather than on foot through the carparks and malls of Eden-Olympia, to the winding roads of southern France, and he discovers what David Greenwood had: that there exists a sanctioned and protected means of transgression for the wealthy and influential, including rape, prostitution, and physical violence, what one of the characters refers to as "a kind of weekend fascism, where the stormtroopers clean up afterwards."[368][369] The novel ends with Paul retracing Greenwood's motions—now like Poe's two men of the crowd who, via one's obsession, morph into a collective unit—in Eden-Olympia, loading a shotgun with which to kill those whom his predecessor left

[365]Ballard. *Super-Cannes*. New York: Picador USA, 2000, Foreword.
[366]Ibid. p. 3.
[367]*Super-Cannes*. pp. 9-10.
[368]Ibid. p. 389.
[369]Even this incredibly lurid situation seems to be another instance of Ballard's prescience, as the former chief of the IMF, Dominique Strauss-Kahn, was charged in 2013 with "aggravated pimping," for his alleged participation in a prostitution ring.

alive.

The possibilities for anonymity in the Ballardian world—either to perpetrate or receive harm—are a literary evolution of the possibilities granted by the street itself in Poe and Baudelaire's European city. The "isolation and loss of connection" that is an integral experience of being part of a crowd, leading to a "new kind of pleasure" reaches, with Ballard, the end of the road, so to speak. There is rarely a crowd in Ballard's works, but this sense of isolation, as well as a certain slackness to identity in which characters can and do become one another that earlier authors associated with crowds, instead has become the world at large. In a strange way, the Ballardian world is one endless road, both literally and figuratively. In the literal sense, there is no "natural," unpaved world; Ballard's version of the shipwrecked-desert-island tale, *Concrete Island*, has an architect crashing his Jaguar into an abandoned triangle formed by criss-crossing freeways. In the figurative sense, the Ballardian landscape is so completely that offered by the built environment, particularly the road, that his work is often read not just as science fiction, but as parable or allegory, as containing some type of warning within this surreally amplified version of the modern, paved world. Indeed, all of the authors in this chapter—Apulejus, Poe, and now Ballard—have long (some longer than others) been read as allegorical writers. Just as with Apulejus, however, I think it is far more interesting, and difficult, to read Ballard straightforwardly, as offering a possible experiential account of the concrete world.

As Paul, looking at a particularly vicious and powerful couple, says near the end of *Super-Cannes*: "I imagined their Roman predecessors, administrators of colonial Provence, sitting in the arena at Nimes and watching a favourite slave bravely meeting her end. Wilder Penrose's [Eden-Olympia's resident psychiatrist] feat was not to have driven the Delages mad but to have made them appear sane."[370] It is not the case then, as many have argued, that Ballard is concerned with a "new type of pervert," one made possible by the extravagances of technology. Instead, as his characters often tell us, their type, those who go "beyond leisure," have been around: "De Sade's behaviour was typical of his class. Aristocracies keep alive those endangered pleasures that repel the bourgeoisie. They may seem perverse, but they add to the possibilities of life."[371] Ballard's landscapes are endless stretches of such possibility, roads that continue forever but also lead nowhere, in the old sense—for Apulejus, Poe, and Baudelaire, at least—of change, be it psychological or technological. Even if the outside world reduces Poe's protagonists to psychic *aporia*, this still reads as distinct, if devolving, change.[372]

Indeed, change is a misplaced directive for the Ballardian world in that both the characters and the landscape are so without a past as to be amnesiac. It is not so much that there is an exaggerated capacity for forgetfulness as the sense that nothing registers long enough to be remembered, either by the environment or the people within it. This is, I think, the perceived flatness of Ballard's work, but also what produces, if we struggle to read him non-allegorically, what Baudrillard refers to as Ballard's

[370] *Super-Cannes*. p. 382.

[371] Ibid. p. 96.

[372] As many have pointed out, the climatic disasters depicted in his early novels are not directly caused by anything; the change produced by natural disasters is unaccountable and blameless.

incredibly sustained sense of ambivalence, and a hyperreality neither good nor bad.[373] Looking down from their high rise in *Crash*, one character asks another, "Is the traffic heavier now? There seem to be three times as many cars as there were before the accident." Though everyone who writes on Ballard loves to isolate a passage thus, there is something quintessentially Ballardian about this posed question. This hazy notion of a prior time—in which conditions may have been different, but never unimaginably so—never incites, but instead invites a surreal form of stasis, in which "[t]he enormous energy of the twentieth century, enough to drive the planet into a new orbit around a happier star, was being expended to maintain this immense motionless pause." [374]

In Ballard's world, then, the road has become its opposite. Gone is the dynamism and sheer possibility of the road of Roman literary imaginations, as well as the darker, more sinister inescapabilities of Poe's city street. Instead, Ballard's nests of traffic and endless

[373]Baudrillard. *Simulacra and Simulation.* Translated by Sheila Faria Glaser. Ann Arbor: The University of Michigan Press, 1994, p. 118.
[374]*Crash.* p. 151.

flows going nowhere impede motion, offering no sense of possibility other than harm and repetition. Identity is not a term of importance in this world, and everything—the human body and steel girders on the freeway alike—can and will be worn down. On this nightmare road, upon which everything is permissible, nothing really happens, stasis and dynamism become interchangeable, leading back to an always-already changed world, different in ways acknowledged but not understood by any of its inhabitants.

Digital Infrastructure & the Information Superhighway

The premise with which I began this chapter is that the Roman road network did not criss-cross an already extant body of territories that made up the empire, but that the roads in fact created that empire in the sense of a traversable, quantifiable, knowable entity. Though I introduced this as a philosophical idea via Heidegger's work, it has become—especially during this period of rapid global urbanization—an undeniably political one (I also find Heidegger's work inherently political, but that is another topic). As the earth becomes increasingly paved, it is more difficult to think of a road as a singular entity, often the only guaranteed path from A to B as it was in the Roman empire. Instead, as we saw beginning in Apulejus' *Golden Ass*, the road offers a distinct world of its own, a world explored in different ways by Poe and Ballard, among others. And yet, this version of the road as secondary pathway through a primary space continues on metaphorically in the digital world. First, I want to look at the explicit and implicit ways in which "information design" takes up such metaphors. Finally, just as in "Cities," I will argue for the problems of structuring cognitive perception after an idea of the built world that is not experientially sound.

Infobahn

William Mitchell, Dean of MIT's School of Architecture and "digital theorist," opens his influential *City of Bits* from 1996 with the following:

> As the *fin-de-K* countdown cranked into the nineties, I became increasingly curious about the technicians I saw poking about in manholes. They were not sewer or gas workers; evidently they were up to something quite different. So I began to ask them what they were doing. "Pulling glass," was the usual reply.
>
> They were stringing together some local, fiber-optic fragments of what was fast becoming a worldwide, broadband, digital telecommunications network. Just as Baron Haussmann had imposed a bold spider's web of broad, straight boulevards on the ancient tangle of Paris, and as nineteenth-century railroad workers had laid sleepers and steel to shrink the windy distances of the North American frontier, these post-whatever construction crews were putting in place an infobahn—and this reconfiguring space and time relationships in ways that promised to change our lives forever. Yet their revolutionary intervention was swift, silent, and (to most eyes) invisible.[375]

[375]Mitchell, William J. *Space, Place, and the Infobahn: City of Bits.* Cambridge: The MIT Press, 1996, p. 3.

Though Mitchell is certainly not the first to use the terms infobahn or information superhighway (Al Gore helped popularize them in a 1994 speech on the Internet), he is one of its more explicit speakers, making more precise the metaphorical comparison implied between the growing digital realm, and the architectural world of infrastructure.

Mitchell's parallel to Haussmann's (in)famous spiraling reconfiguration of Paris is, for me, emblematic of much of the writing done by him and others on this particular subject. Though the parallel is superficially apt, the deeper—and by deeper, I really only mean historical—resemblances invited by such a comparison between the two projects are either ignored or unknown. As many have written, the Haussmannization of Paris was, in fact, an architectural means of curbing political unrest, a means of imposing urban architectural order onto a city that had recently seen the upsurging of revolution: as Walter Benjamin says, those beautiful wide boulevards of Haussmann's were impossible to barricade. It is surprising, then, that, for Mitchell, the "revolutionary intervention" comes from the side of those following in Baron Haussamann's path. What I am attempting to highlight here is a fundamental schism in early thinking on the Internet: on the one hand, there was coming into existence a truly revolutionary technology that has drastically altered notions of time and space; on the other hand, the metaphors used to communicate this technology's revolutionary capabilities were ones of order, organization, and planning by distant governmental bodies.

As I have mentioned elsewhere, this schism is present not just in the writing surrounding the early Internet, but also in the engineering and financing that went into its creation. Eisenhower's creation of the Advanced Research Projects Agency (ARPA) inadvertently led to the creation of the ARPANET, the American precursor to the Internet. The ARPANET was a "nationwide computer network" built to "promote a sort of nationwide computing brotherhood" among the several American institutions to receive government funding to develop graduate programs in the computer sciences in the 1960s: MIT; Stanford; UCLA; UC Berkeley; Carnegie-Mellon; and the University of Utah. As Michael Hiltzik argues, ARPANET came out of two equal urges: on the one hand, "researchers were all looking for answers to the same general questions." And on the other hand, a constant conversation among these engineers and their machines was a guarantee against the threat of technological relativism, in which "each institution would develop its own unique and insular culture, like related species of birds evolving on islands in a vast uncharted sea."[376] The language surrounding this innovation is not yet that of architectural metaphor, but instead the image of a web-like network of connectivity: "we were going to build a network that would connect these interactive communities into a larger community in such a way that a user of one community could connect to a distant community as though that user were on his own local system."[377]

Leaving aside the imperial notes that such a statement strikes—in particular the idea of "each island community enjoying constant access to the others' machines as though they all lived on one contiguous virtual continent"[378]—ARPANET's technology soon was used for directly imperial, militaristic purposes. By 1967, the Vietnam

[376]Hiltzik, Michael A. *Dealers of Lightning: Xerox Parc and the Dawn of the Computer Age.* New York: HarperCollins Publishers, 1999, pp. 43-4.
[377]Ibid. Quotation of Bob Taylor. pp. 44-5.
[378]Ibid. p. 44.

military command had a "logistical nightmare" of information: "estimates of enemy casualties exceeded the known population of North Vietnam, while the reported quantities of captured sugar reached levels equivalent to three-quarters of the world supply."[379] Thus, the technology of a decentralized network of isolated and independent machine-communities—whose organization was itself a militarized response to the threats of the Cold War—helped synthesize and streamline the American war effort abroad. This is by no means a novel point, but it bears repetition that, as Manuel Castells says, these so-called "technologies of freedom" were induced by the state.[380] This "unique blending of military strategy, big science cooperation, and countercultural innovation"[381] fostered the explosive growth of what was to become the Internet: from the 25 computers in the 1973-network, to the "few hundred primary computers and a few thousand users" of the early 1980s, the Internet hosted "3.2 million computers worldwide with an estimated 25 million users" by the mid-90s (a number that, by the mid-2010s has multiplied more than eighty-fold, with some two-billion users). Thus the need for a more comprehensive and legible means of cognitively understanding the Internet and its uses, which returns us to David Mitchell.

Much of *City of Bits* is dedicated towards mapping the spatial urban world onto the burgeoning digital one in order to arrive at Mitchell's actual "city of bits," "bit-sphere communities" in which "increasingly, computers will meld seamlessly into the fabric of buildings and buildings themselves will become computers."[382] Though part of Mitchell's prompting is surely on behalf of the prognosticating futurism beloved by so many technologists ("By this point in the evolution of miniature electronic products, you will have acquired a collection of interchangeable, snap-in organs connected by exonerves."[383]), there is a unarticulated political subcurrent to his thinking: "the Net eliminates a traditional dimension of civic legibility. In the standard sort of spatial city, *where* you are frequently tells *who* you are."[384] In place of this geographical segregation,

> accessibility is redefined; tapping directly into a broadband data highway is like being on Main Street, but a low baud-rate connection puts you out in the boonies, where the flow of information reduces to a trickle, where you cannot make so many connections, and where interactions are less intense.[385]

Though Mitchell does allow that in this new world, just as in the old, it is money that grants spatial and digital accessibility alike, this is another example of how the aforementioned schism plays out. The chosen metaphor of the built environment and urban infrastructure forces its users into imaginative scenarios that seem to immediately fizzle out: on the Net, instead of in the city, civic legibility will not longer be based on geographical location, but instead on connection rates!

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[379]Hiltzik. p. 46.
[380]Castells, Manuel. *The Rise of the Network Society.* Massachusetts: Blackwell Publishers Inc, 1996, p. 342.
[381]Ibid. p. 351.
[382]p. 171.
[383]Mitchell. p. 29.
[384]Ibid. p. 10.
[385]p. 17.

This schism—or the inherent limits of such an operative metaphor of comparison—is, I think, the origin of much of the liberal or libertarian thinking that surrounded the American Internet in the 1990s. This liberalism is seen above in Mitchell's false utopia of the same coordinates in a different axis; it is actually conservative thinking, just coded differently (as Castells says, "Silicon Valley was, and is, a solid bastion of the conservative vote"[386]). This is not to say that technology produced under conservative auspices must remain as such,[387] but that the early metaphorics of the Internet and its uses were of an imperial and conservative nature. It is impossible to concretely analyze the consequences and reaches of such metaphorical thinking, but it is, I think, hard to underestimate the power of such an insidious analogy. As Paul C. Adams—arguing that the metaphors of "virtual architecture, electronic frontier, and cyberspace" encourage "control, surveillance, and capitalist expansion through computer technologies"[388]—says, "since the beginning of industrialization, new technologies (produced by modernist world views) have often been understood popularly through metaphors fundamentally opposed to modernist world views."[389] Thus, the image of the freeway serves "less to define a sense of place than to indicate a set of social functions."[390] And as the "mapping of architectural space in electronic forums [becomes] so familiar that they erode any original significance,"[391] architectural metaphors "anticipate a world with no sense of place (Meyrowitz 1985), a space of flows (Castells 1989) or a "mediascape" (Appadurai 1985) in which the contexts for construction of identity surpass the mappable world."[392]

In this brief final section, then, we have seen the same trajectory outlined in this chapter in the physical world playing out at a tremendously faster pace in the digital world. With the Romans, the construction of a road network created the space of empire as a series of contiguous locations, accessible to many. The road, and the city street, then, became emblematic of an aspect of modernity concerned with both the experience of urban space, and the vagueness of identity induced by such spaces. With Ballard, we saw all the world become a road, thereby "eroding any original significance" of the road and its unique uses in Ballard's "hyperreality" in which no terrain precedes the road, and the road is all. This sequence of events has played out in writing concerning the early Internet, but, in many ways, the starting point is already one of Baudrillard's hyperreality in that these are all spatialized discussions of what is by no means a place. And with these specific metaphors of highways, freeways, and roads, it is easy to forget

[386]Castells. p. 5.

[387]As Castells also says, "The information technology revolution half-consciously diffused through the material culture of our societies the libertarian spirit that flourished in the 1960s movements. Yet, as soon as new information technologies diffused, and were appropriated by different countries, various cultures, diverse organizations, and miscellaneous goals, they exploded in all kinds of applications and uses that fed back into technological innovations, accelerating the speed, broadening the scope of technological change, and diversifying its sources." p. 6.

[388]Adams, Paul C. "Cyberspace and Virtual Places". p. 155.

[389]Ibid. p. 157.

[390]p. 159.

[391]"Already this has happened with *gateway*, a term now used more often to indicate a connection between computer networks than a swinging portion of a fence or a majestic entry into a city." p. 159.

[392]Adams. p. 160.

that the digital "land" these paths claim to traverse is information itself. Though the fact of existing land did in fact precede the Roman empire—lending weight to the view I have been arguing against that the Roman road system simply went through an extant empire rather than create the empire around it—it is inarguable that there never simply existed vast continents of data, land masses of pure information, and that the Internet merely runs through them.

But this is what such architectural metaphors imply! If the "space" of the digital world is information itself, it goes to argue that the Internet is but one means of navigation within. But just as with the Roman roads, for a majority of users the Internet *is* the digital world, and its nestled information. And just like the roads, the Internet, and the information it provides, are corporately and governmentally sanctioned, surveilled, and accessed at a literal price. Unlike the Roman road system, however, that made its way through concretely real people and places that existed before the empire, what exactly constitutes "information" is a surprisingly subjective notion, in the hands of a relatively small number of people. This idea will be looked at in more detail in the chapter on maps and the idea of virtual query and navigation, but suffice it here to say that by using this metaphor of the information superhighway, early Internet thinkers were inviting a far more troubling than intended comparison with imperial builders of the past.

In the "Cities" chapter, I made a similar argument concerning the adoption of theories of urban design, particularly those of Le Corbusier, being, in the first instance, not representative of lived urban experiences, and secondly, as misleading and prohibitive metaphors on which to structure understanding and use of the digital. But if urbanization provided a set of orientational metaphors that have implicitly and explicitly structured how and why we interact with the Internet as a spatial entity, my argument here is that the adoption of roads and a general sense of infrastructure supplies a structural metaphor in that the metaphor provides a whole system by which to construct understanding of another. The trajectory is the same; the original imperial metaphor obfuscated experiential conditions in order to impose the logic of empire. Just as in "Shadows," the imperial presentation of the road network as a facet of empire whose organic / ontological "essence" is elsewhere (a presentation followed by many scholars) than the space created by these very roads, is already a figurative, and sometimes metaphoric, idea (so too is the shadow always-already a metaphor). This problematic presentation—problematic in that it is a mistake in the Lacanian sense, an idea of a whole that experience never affords—is then taken up by digital theorists and designers as the metaphoric structure of this new organizational power structure. Each chapter has argued that these metaphors do not match experience in their imperial origins, yet they go on to create the conditions for possible experiences in their digital afterlives.

Hackers

If the Roman roads had the problem of brigandage, the pirates of the Information Age are surely hackers. By this I do not mean to conflate the two groups in their illegality or perceived maliciousness, but instead in their ability to not only forge different routes, but to also use predetermined ones in unauthorized and unintended ways, for good or

bad. As Roy Rosenzweig summarizes Steve Levy's argument from his book on hackers, there was among "the computer programmers and designers who regard computing as the most important thing in the world [hackers]" a

> 'philosophy of sharing, openness, decentralization, and getting your hands on machines at any cost—to improve the machines, and to improve the world.' Although this "hacker ethic" was not simply the technological side of the counterculture and the antiwar movement, it drew from some of the same sources.[393]

By this definition, both due to ability and ethic, hackers are those to whom the information terrain looks remarkably different,[394] even if this perspective comes from deep within the established system of surveilled infrastructures. Edward Snowden, in his capacity as a contractor for the National Security Agency (NSA), had a vastly different picture of the US government's information gathering and use. By sharing his knowledge, and thereby risking his own safety and freedom, Snowden offers one version of the hacker in the twenty-first century. No longer is the hacker the computer programmer who cannot be separated from his machine, but also the individual or group who can expose the information and thus power being steadily and stealthily accumulated by others.

Indeed, just as brigandage on Roman roads exposed more clearly and fully the "correct" usage thereof (*jus eundi*, etc.), hackers expose just how impinged upon "lawful" usage of the Internet really is. From the continual threats to privacy and the compromised safety of personal information, majority access and use does not match up with the actual possibilities known to a minority. This is, I think, partially due to those underlying cognitive metaphors discussed in this chapter—the ways in which these architectural metaphors of space have come to "erode any original significance"—metaphors that are both inadequate and troublingly conservative for translating the virtual world. This is not to say that I have any idea of the parameters of "Internet possibility," but that the governing models of ways of considering these possibilities are inherently limited by devices of unequal power, surveillance, and force—in short, by the devices of imperialism.

[393]Rosenzweig, Roy. "Wizards, Bureaucrats, Warriors, and Hackers: Writing the History of the Internet". *The American Historical Review*, Vol. 103, No. 5 (Dec., 1998), p. 1545. Embedded quote from Steve Levy's *Hackers: Heroes of the Computer Revolution*.

[394]MIT, at least in part, retains some of this "hacker ethic" with which it helped begin the Information Age. The institute's commitment to open source technology—from software to course offerings—is a sadly rare instance of large-scale freedom of information.

MAPS

Introduction

In this final chapter on maps, I want to alter the structure that has informed the previous chapters, in which Rome comes first and longest, then literature, then the digital realm. Here, I will start at the end, or the present, with the Internet's fascination with navigation, exploration, and mapping and work my way back to Rome and the first long-lost map of the Western world.

Other Spaces

> Brothels and colonies are two extreme types of heterotopia, and if we think, after all, that the boat is a floating piece of space, a place without a place, that exists by itself, that is closed in on itself and at the same time is given over to the infinity of the sea and that, from port to port, from tack to tack, from brothel to brothel, it goes as far as the colonies in search of the most precious treasures they conceal in their gardens, you will understand why the boat has not only been for our civilization, from the sixteenth century until the present, the great instrument of economic development (I have not been speaking of that today), but has been simultaneously the greatest reserve of the imagination. The ship is the heterotopia *par excellence*. In civilizations without boats, dreams dry up, espionage takes the place of adventure, and the police take the place of pirates.[395]

The boat as heterotopia *par excellence* makes clear many of Foucault's theories of space presented over the course of his career (other heterotopias are prisons, cemeteries, fairgrounds, mirrors, museums and libraries). Foucault's preoccupations with these "other spaces"—other both than what he calls the historical preoccupations of the nineteenth century, and also other than the internal space of the phenomenologists most fully explored by Bachelard—takes on a surprisingly imaginative turn here at the end of this brief essay, and we are left considering the boat, "closed in on itself" while simultaneously "given over to the infinity of the sea" as somehow the best instance of this placeless place Foucault has returned to time and time again.

What is it about the boat? And moreover, why does the final sentence concerning civilization with no boats read, at least to me, as frighteningly close to a description of what is currently happening in the digital realm, in which adventure is espionage, is the mining and hacking of information, and the largest perpetrators of surveillance and information theft—those fulfilling the role of pirates—are, in fact, the police and other governmental bodies? Lest we forget, the Internet was early on figured as a type of sea,

[395]Foucault. "Of Other Spaces". Translated by Jay Miskowiec. *Diacritics*, 16:1 (Spring 1986), p. 27.

the sea as it was likened by those great European powers as they discovered the world. The interaction with this roiling mass of pure data was deemed search and exploration, with early engines and browsers making the metaphor explicit. This final chapter deals with this metaphor of search, the most, I think, pervasive and all-encompassing metaphor concerning the digital. All of the same movements outlined in previous chapters are in motion here: an imperial concept, itself already a misleading representation of experience or practice, becomes utilized as a source metaphor for modeling digital behavior and understanding. In the coming pages, I will start by looking at these tools, all the while keeping an eye on the question demanded by Foucault's hypothesis: what has happened to our boats?

World Wide Web

Having discussed the Internet's beginnings as the military tool ARPANET elsewhere, I here want to focus on the formative years following the US government's relinquishment of the Internet to the private sector, a process begun in the late 1980s (although ARPANET was officially "put down" in 1989, and majority control of the Internet was given to the National Science Foundation (NSF), "it was still run by a government agency and still intended only for nonprofit researcher and education"[396]), but not finalized until April 30, 1995, when "MERIT formally terminated the old NSFNET backbone, ending US government ownership of the Internet's infrastructure."[397] The ensuing privatization of the Internet accelerated a process long in the works, as civilians had been using the government infrastructure for their own purposes for some time; consider, for example, Stewart Brand's dial-up bulletin board version of the famous Whole Earth Catalogue, called the Whole Earth 'Lectronic Link (WELL) from the mid-1980s. By the mid-1990s, however, an unprecedented number of users were attempting to both access and create data within a system ill-designed both for such masses, and the inevitable multiplicity of intentions therein.

In many ways, the Internet's infrastructure at this early point can be thought of as taxonomic; computer science is not called as such for nothing! The rule of domains and naming that is still in place today was created under ARPA, with the six basic domains of network sites, or largest taxonomic fields, being:

> edu (educational), gov (government), mil (military), com (commercial), org (other organizations), and net (network resources). [...] This division by type of host was designed to make it easier to manage the domains separately: the military could control the "mil" domain, an educational consortium could administer the "edu" domain, and so on. Beneath the top-level domains were other, site-specific domains, and these in turn could be further divided to create a nested hierarchy of domains. For instance, within the top-level domain "edu," each university would have its own domain; a university could then choose to give different departments or other groups their own domains within the university domain. This decentralized the naming process [...].[398]

This decentralization of the naming process, along with a practically simultaneous privatization of the entire taxonomic field in which these domains lay, proved to be momentous

[396]Abbate, Janet. *Inventing the Internet*. Cambridge: The MIT Press, 1999, p. 195.
[397]Ibid. p. 199.
[398]p. 190.

in shaping the Internet. If the Internet, both now and then, is fundamentally a massive collection and storage of data, then it is only by naming and organizing this data that it becomes relevant. Thus, on the side of data creation, unique naming and adept filing were key. And on the side of data usage and retrieval, it was often only by knowing precisely the name of a file, address, site, etc., that one could access it. Given these factors, then, privatization requires both that some sense of the general size of this data mine is known, and that there is some means of more generalized, less research-oriented (knowing the precise name of one's object) access. But, as Janet Abbate notes, the "privatized Internet had no central authority to create a directory of resources, and in any case the size of the Internet would have made the task of maintaining such a directory impossible."[399]

The creation of the World Wide Web in the early 1990s was one attempted, and surprisingly resilient, answer to many of these issues. Created by the European research organization CERN, not only did the Web utilize the hypertext markup language (HTML) still in use, those same engineers

> designed the hypertext transfer protocol (HTTP) to guide the exchange of information between Web browsers and Web servers. To enable browsers and servers to locate information on the Web, there also had to be some uniform way to identify the information a user wanted to access. To address this need, they created the uniform resource locator (URL)—a standard address format that specifies both the type of application protocol being used and the address of the computer that has the desired data.[400]

Thus, with "widespread access to the Internet (made possible by privatization) and the technical means for users to run the Web software (provided by the personal computer),"[401] the World Wide Web, and the Internet upon which it was built, took off.

Explorer, Safari, Magellan, Netscape Navigator

If the Web became the new, more coherent infrastructure of the Internet, Web browsers, and a short while later, search engines, became the means of interacting with this infrastructure. As Web browsers utilized the graphical-user interfaces of personal computers more and more, the fundamental basis of Web-user interaction became equally more and more virtualized and visually analogized. As I have stressed in the above pages, ARPANET, the Internet, and, more so than now, the World Wide Web, began as research-focused troughs of data to be archived, shared, and accessed by others who already spoke the same language both literally (English is the language of computers), and figuratively (the knowledge of searchable terms and virtual locations). But as more and more Web browsers came into existence, the relationship had become obscured in that the user was transformed from the inputter of plausible search terms to the adventurer on a quest, ignorant of possible results. The non-virtual precursors for such adventures are immediate and plenty, and many browsers, as I will go into detail about shortly, capitalized on images and stories of colonial "discovery" of the world. I find it

[399]Abbate. p. 213.
[400]Ibid. p. 215.
[401]Ibid.

important to stress again that this was never "true" in the sense of the models after which Web browsers began to fashion themselves; though the parameters of the world may have been unknown to Christopher Columbus, for example, the Web is completely the opposite of this type of ignorance; it is sheer human ingenuity and creation, fueled by more of the same. But from the still in-use Internet Explorer and Safari to the now-defunct Magellan (eventually folded into Netscape), and Northern Light, the names of Web browsers have been and continue to be huge indicators for how users should think of their behavior. As I begin to look at some of these browsers, and eventually search engines, in more depth, I want to keep my starting principle—that they are fundamentally unsound modes of comparison or cognitive modeling—firm.

In the previous chapters, I have attempted to label my metaphors of interest according to their metaphoric "type," from the ontological metaphor of shadows and "telling" the time, to the orientational metaphor of cities, with the structural metaphor of roads in between. Labeling them as such is hopefully helpful in the way that categorization can be, in terms of clarity, delineation, etc.. All metaphors, however, are conceptual in nature insofar as they allow us to "comprehend one aspect of a concept in terms of another."[402] This final metaphor of search is the most "fully" conceptual in that it does not fit neatly into a further subcategorization of type, due in part to the literal largeness of the metaphor itself and the vast ways in which it is used. Refiguring imperial search and conquest as digital behavior has created so many moving parts that it is difficult to keep track of just what from the source domain maps over onto the target; in fact, this might be the best possible example of the flip-side of all metaphors, which is that their power of creating / highlighting resemblance of some aspects must always result in the hiding and diminishment of other aspects (an idea to which I will return more fully in the conclusion). Though some space will be dedicated to a few of those smaller "moving parts," (Netscape's icon of a ship's wheel, Safari, etc.), my larger concern here is with the entire metaphor of search and inquiry, both in its former sense of imperial exploration, and its current evolution in which data retrieval is becoming considered not just finding or discovery, but even creation.

Netscape Navigator

Netscape Navigator was one of the earliest commercial browsers available for free download. Developed from the earlier browser Mosaic, Netscape was at the forefront of making Web interaction more user-friendly and visually intuitive. As their logo and name demonstrate, Netscape presented itself through the self-attested-analogue of nautical navigation. Both the icon—with the browser's N straddling the horizon line—and the full logo—with a ship's wheel emerging from the sea, looming large against a starry sky—clearly align the browser with not just exploration, but a distinctly prior, antiquated form thereof. There are several aspects of this metaphor implied, but not made explicit, that I would like to dwell on. Clearly a visual analogue is being made in order to clarify a largely-unknown practice; by taking the familiar—but, for most people, completely imagined and not experiential—premise of the ship, the sea, and the stars,

[402]Lakoff & Johnson. p. 10.

Netscape's engineers are offering a mode of comparison that, under scrutiny, is not terribly clear. To begin with, the role of the browser itself is not obvious: is it to be thought of in line with the ship itself, or that ship's navigational systems, be they the stars or the wheel?

Netscape Navigator Logo, Version 2.0

The latter seems the more probable, but this leaves the role of the ship vacant. And if the sea is the Web itself, or pure information, the implication is then that landforms are those desired pieces of information; that after which one seeks. In this way, the world itself, along with its discovery by the West, is refashioned in the virtual realm as the retrieval of human-made data. Though such a metaphor seems obvious enough, keep in mind that current Web-interaction, which rarely seems like straight-forward data retrieval, is based upon this foundational relationship.

Returning to an assertion from the chapter on shadows, the Internet is, in many ways, the digital rendering of the analogue idea of empire, the current moment in the ongoing practice of technological abstraction, by which the world is quantified into measurements with little interaction with the world itself. We can see this again here in the repetition of the same imperial procedures of quantification and measurement. The map, as I discuss more fully later in this chapter, is of course the object of quantification and measurement *par excellence*, and it is by no means an accident that the Web's visual designers chose the historical analogue of the world before it was fully navigated and thus mapped. Though there existed no actual search engine for the Web in the summer of 1993, an engineer at MIT

> produced what was probably the first web robot, the Perl-based World Wide Web Wanderer, and used it to generate an index called 'Wandex'. The purpose of the Wanderer was to measure the size of the World Wide Web, which it did until late 1995. The web's second search engine Aliweb appeared in November 1993. Aliweb did not use a web robot, but instead depended on being notified by website administrators of the existence at each site of an index file in a particular format.[403]

Not only do these two forms of measurement and quantification mirror the two ways in which the Romans went about measuring their empire (the four geographers sent to the four corners of the earth, and, later, provincial governments responsible for census data),

[403]Seymour, Frantsvog, and Kumar. "History of Search Engines". *International Journal of Management & Information Systems*. Fourth Quarter 2011 (Vol. 15, No. 4), p. 48.

the orienting principle of centralizing knowledge of what is an inherently disparate and non-cohesive entity remains the same for both.

But as the name itself implies, the Web is not given to mapping. In the first place, it is misleading and somewhat impossible to give visual spatialization to something that is intrinsically non-spatial; efforts at quantifying the Internet result in more quantification (jumping ahead some years, think, for example, of the Google notification accompanying every search result that informs users of how many possible matches there are, as well as how quickly such an operation was performed, thus giving one aspect of the size and speed of the Web). Likewise, "movement" on the Web is not well-said in spatial terms; there is the sense of "hopping" regularly ascribed to following hyperlinks or embedded content around the Web; earlier on, "surfing" was another possible verb to describe this motion of simply being on the Internet, possibly linked to the seeming effortlessness of activity (and, to stretch further, that image of the sea or ocean again!). Keeping all of this in mind, I will now turn to perhaps the most fully-developed of all these metaphors: America Online, and its accompanying tour guide.

Road Tripping through America Online

In 1992, Ventana Press published the strange *The Official America Online Tour Guide*, something in between a user's manual and a literal guidebook. In the foreword, AOL's founder Steve Case reminisces on AOL's mid-80s beginnings: AOL

> was founded with the specific mandate to create an online service that offers ease-of-use, affordability, usefulness, and fun. Moreover, we set out to create a true online community: a "place" where people could meet, learn, explore, make friends and share the wonders of telecommunicating.[404]

AOL's insistence on presenting their services not just through spatializing metaphors, but through ideas of distinctly American space and interaction was just one definition of what it meant to be "online," a term that, as the book points out, was not yet in the dictionary. Of all the earliest Web resources, AOL was the most explicitly "community" oriented in the sense that it made the Web seem like a medium through which to simply interact with other like-minded people:

> we compare AOL to the small town in Oregon where we live. People are friendly there. They say hello when they pass you on the street, they invite you to their house for a chat, and they go out of their way to be of assistance. AOL does these things: *Instant Messages* allow people who are online at the same time to say hello and hold "passing on the street" conversations; *chat rooms* are electronic "rooms"—public or private—where groups or members hold real-time conversations about subjects of their choosing [...].
>
> [...]
>
> At first it's hard to ignore the technology; but in the end AOL is people, and in the end it will be their company you will treasure the most.[405]

[404]Case, Steven. Foreword to *The Official America Online Tour Guide*. Tom Lichty and Kathy Parks. Ventana Press, 1992, p. xxi.

[405]Ibid. p. 3.

As has been pointed out repeatedly about Web-connectivity, previous senses of nearness in space were used to understand what it now meant to be "online" at the same *time* as another. Neighborliness—this idea of passing someone on the street—was one model of individual Web-conduct, one possible means of behaving in a non-space with strangers.

In many ways, AOL's—and others'—main means of enabling users to "ignore the technology" is precisely through this process of analogous substitution, in which, in the case of AOL, America is remade as America Online, and this burgeoning idea of "connectivity" takes the place of citizenship in the sense of living with others. But as AOL and other telecommunication services knew, such direct exchange between users was neither practical nor always possible—thus the need for a mass of information storage, a third, always-online party to which users were actually connected. This third party, "the Stratus" for AOL users, in truth has no analogous counterpart in any of these proposed cognitive metaphors, a truth that the *AOL Tour Guide* admits to:

> [c]onceptualizing America Online as nodes and mainframe computers isn't very comforting. AOL is much more parochial than that. For many of us, AOL is software in our PCs—software that arrived on that disk provided from AOL [...].
>
> [...]
>
> This is more like it. The software you use on your computer to sign on to AOL more accurately represents the personality of the service then anything we've discussed so far. It communicates in plain English, it's resplendent with windows and icons, and it automates those tasks and procedures that formerly were responsible for excluding most semi-normal people from using an online service. [...] Once you install the software on your computer [...], all the technicalities are coordinated by the Stratus and your PC. They simply talk things over and a make adjustments as they're required. This is as it should be. People should never be asked to do these things. That's why we have machines.[406]

I quote at such length in order to demonstrate that then as now, the incredible feats of technology involved in Web activity do not lend themselves to any of the metaphors utilized to make such feats understandable and usable to "most semi-normal people." In this incredibly extended metaphor of the guidebook to the landscape of America Online, there is nothing comparable in the source end of the metaphor to the degree to which any aspect of interactivity, be it with the "surroundings" or "people," is heavily mediated and technically not understood. It is striking, then, that what is in fact a segmented and partitioned activity has always been presented through examples of nearness and intimacy. The reasons for this are not clear, at least not to me; perhaps, as AOL's tour guide's authors suggest, there is something non-comforting about imagining the actual physical and technological processes of "going online."

The lack of congruence between the metaphor of touring America and going online, however, did not mean that the actual experience felt as mediated and partitioned as it technologically was. I am completely in agreement with Lakoff and Johnson that metaphoric thinking is a necessity of human thought and language, and, to allow myself a hyperbolic moment, perhaps the most beautiful and illuminating aspect of consciousness ever. But metaphors' ontology is based upon a principal of similarity, of relational understanding: that this, in some way, is like that. But what of a this with no that,

[406] *AOL*. pp. 8-9.

an experience without precursor? Unlike metaphors, which are often in accord with the "phenomenological notion of a given horizon, within what there is appears," how can we allow more for Benjamin's weak messianism, a thinking of the future that might not be "in conjunction with the thinking of the present and the past"[407]?

It is a strange thing to read and write historically about an event from one's own lifetime, but I distinctly remember what it was like to use AOL as a child. There were computers in my house growing up from before the time of my birth in 1985, and I had become familiar with the DOS-system of text input early on; the strangeness of computer-interaction had become routinized for me as new technologies can only really be for children, who learn the world with technology in it. But still, going on AOL with my own username, a process inextricably linked to the sound of the 28.8 dial-up modem, was a brand new thing. It felt nothing like taking a trip, like talking to recognizable humans. It felt, forgive the technological mysticism, like magic! It felt vast and unknowable, and a key component of its charisma was precisely in its lack of definition, both in terms of "what it was," but also in terms of what one was supposed to do with it. Going online was not an experience like anything else, and far more gratifying as a singular, heretofore unprecedented, experience, than as simply the digital rendering of an already-extant practice. But it is via these supposedly helpful models of understanding that the possibly revolutionary possibilities of both the experience of and the tool itself became occluded and rendered more tame and knowable than actually true. In working against these metaphors, I am often thinking of myself, as a child, delighted and enraptured before the computer.

Early Search Engines

AOL was a unique Web service in that it was entirely self-contained software, from the physical startup kit to the monthly billing system of time and data spent on the network. Within the huge umbrella category of AOL, there existed a multitude of offerings, from an email service to a variety of departments such as astrology, entertainment, and stocks. But AOL, at least in its early days, did not serve as a means of browsing the Web in general—it served as a means of browsing AOL itself. Though AOL has since become another search engine on the Internet, we will see that this concept of a version of the Web that is somehow distinct or separate from others is not as exceptional as it may now seem. Returning to Netscape Navigator, and any of the other free-for-download Web browsers available, there was still a need *within* these browsers for actual search functions, so as to give the user something to browse. Except for AOL (and today Google Chrome as the browser, and Google as the search engine), almost never were the browser and the search engine the same. Thus, in 1996, "Netscape was looking to give a single search engine an exclusive deal to be their featured search engines. Resultantly five major Search Engines Yahoo!, Magellan, Lycos, Infoseek, and Excite joined the deal."[408]

[407]Hodge, Joanna. "The Timing of Elective Affinity" in *Walter Benjamin and Art.* Edited by Benjamin, Andrew. London: Continuum, 2005, p. 19.

[408]"History of Search Engines". p. 51.

Of those five major engines, Yahoo! is the only one that remains remotely popular, though, in the mid-1990s, Alta Vista was far more relevant. While Yahoo!'s search functions "operated on its web directory, rather than full-text copies of web pages"[409] (thus limiting both search results and inputs), Alta Vista radically changed Web searches through the "inclusion of a natural language search. Users could type in a phrase or a question and get an intelligent response. For instance, 'Where is London?' without getting a million-plus plages referring to 'where' and 'is.' "[410] This idea of a more "natural" form of search—asking the machine a question—is a distinct mode of Web interactivity, altogether different from other methods of Web inquiry, such as keyword searching. Keyword searching is the most frequent type of Web search, an input that prompts the engine to go through its mass of stored data in the form of indices, and return, in list form, the "best matches". This idea of the "best match" is perhaps the most crucial, and most subjective, of search engine theory:

> There are two main types of search engine that have evolved: one is a system of predefined and hierarchically ordered keywords that humans have programmed extensively. The other is a system that generates an "inverted index" by analyzing texts it locates. This second form relies much more heavily on the computer itself to do the bulk of the work.[411]

But as is frequently pointed out, there are a whole slew of reasons—independent to the information itself—that marks some results as "popular" or "relevant," along with the more obvious fiscal, political, and social biases. When we stop to consider the actual process behind a web search, the facade of unfettered access to neutral data crumbles. First, before any kind of search, a web crawler or robot, also known as a spider, constantly trawls the Internet, gathering and storing information to a database. Within this massive database, then, some kind of program sifts through all of the information, organizing it according to some principle of rank. Thus, by the time the user inputs a query into a search interface, the accessible information has already been filtered and processed via an unknown, and in the case of the coming Google, highly secretive series of commands. Beginning, as did Yahoo!, as a project between graduate students at Stanford, Google's co-founder Sergey Brin

> wrote on his PhD profile page at Stanford in 1999: "Research on the web seems to be fashionable these days and I guess I am no exception. Recently I have been working on the Google search engine with Larry Page." [Brin and Page] argued in much the same vein as Vannevar Bush had half a century previously that 'the number of documents in the indices has been increasing by many order of magnitude, but the user's ability to look at documents has not.'[412]

Google

No single tool on the Web has done as much to increase the user's ability to look at documents and other data as has Google. Begun as a project in 1996, Google became

[409] "History of Search Engines". p. 51.
[410] Ibid.
[411] p. 56.
[412] Ryan, Johnny. *A History of the Internet and the Digital Future*. Reaktion Books: London, 2010, p. 118.

a public search engine in 1998 and quickly rose to prominence. Returning to that brief outline of how search engines work, it is immediately obvious that there are huge differences possible: in the first place, the comprehensiveness of the stored data is dependent upon the success of the engine's spider; the more spiders, the more data. And secondly, the vague notion of "some principle of rank" leaves much room for innovation and interpretation. At first, it was in this latter area that Google excelled. Brin and Page created a program called 'BackRub,' a system that determined a site's given 'back links'—the number of times any one site was cited by another. Thus, "the most cited sites would be given higher 'page ranks', appearing first in the search results and their back rub would be more important to other sites."[413] In number four of Google's strange "Ten things we know to be true" list, under the heading "Democracy on the web works", the company says

> Google search works because it relies on the millions of individuals posting links on web sites to help determine which other sites offer content of value. We assess the importance of every web page using more than 200 signals and a variety of techniques, including our patented PageRank algorithm, which analyzes which sites have been "voted" to be the best sources of information by other pages across the web. As the web gets bigger, this approach actually improves, as each new site is another point of information and another vote to be counted.[414]

Leaving aside for the moment the complete collapse of the democratic system onto the web so that the simple click of a mouse can be deemed a "vote," let us focus on Google's PageRank system for a moment.

PageRank, which Google immediately patented, tries, in many ways, to mechanically replicate via algorithm human patterns of placing importance and relevance in some categories or objects, while not in others. In other words, Google's PageRank is a tool both for spotting and maintaining popularity. Rather than previous keyword-search engines which would show results based upon site-specific criteria (the number of times a given query shows up on a given page, for example), PageRank instead

> analyses human-generated links, assuming that web pages linked from many important pages are themselves likely to be important.
>
> Google's algorithm computes a recursive score for pages, based on the weighted sum of the Page Ranks of the pages linking to them. PageRank is thought to correlate well with human concepts of importance. In addition to PageRank, Google over the years has added many other secret criteria for determining to ranking of pages on result lists, reported to be over 200 different indicators. The exact percentage of the total of web pages that Google indexes are not known, as it is very hard to actually calculate. Google not only indexes and caches web pages but also takes "snapshots" of other file types, which include PDF, Word documents, Excel spreadsheets, Flash SWF, plain text files, and so on.[415]

PageRank helped Google become the most effective search engine on the Web, such that "in June 2006, the *Oxford English Dictionary* added the word 'google' as a verb."[416]

[413] Ryan. p. 118.

[414] "Ten things we know to be true". http://www.google.com/about/company/philosophy. Accessed February 23, 2015.

[415] "History of Search Engines." p. 52.

[416] Ryan. p. 119.

Google came to completely corner the search engine market through PageRank, but also, as the company gained power and money, through the incomparable (literally so, as the company is notoriously secretive, and the amount of data on the Web is so staggering) ability of its constant web crawlers.

Google's continuing dominance and efficacy, then, is dependent upon its diligent monitoring of the Web's ever-growing parameters. Indeed, Google's "diligence" reads to some as invasive and, in many cases, illegal violations of both privacy and copyright, and it is not surprising that they, like the imperial structures before them, have turned to surveillance and secrecy in order to maintain power and influence. Before we reach this current moment in Google's history, however, it is interesting to note that Google's higher-ups themselves seemed to immediately recognize that there existed the strong possibility for wrongdoing. In a 1999 meeting to "determine the firm's corporate values," one of Gmail's creators, recalls "[i]t just sort of occurred to me that "Don't be evil" is kind of funny. It's also a bit of a jab at a lot of the other companies, especially our competitors, who at the time, in our opinion, were kind of exploiting the users to some extent."[417] Though this dictum to "not be evil" came up in relation to Google's means of making money—selling advertising space—it certainly arose as an acknowledgement of the scope of Google's growing power, through which the engine could surely mask an advertisement as the result of a search.

Google's very name—a googol is a one with one hundred zeros behind it—signifies the vastness that not only the company has become, but to which it constantly aspires. In this remaking of the world, land has become information, but in place of the desire to conquer and dominate the finite and knowable earth, as with previous empires, Google's imperialist desire is to quantify and qualify an infinite stream of data. As Hillis, Petit, and Jarrett argue in *Google and the Culture of Search*, "Google's dominance of the search industry [and the] contemporary culture of search is inextricably bound up with a metaphysical longing to manage, order, and categorize all knowledge."[418] Unlike former empires, then, Google's does not have boundary lines, and it has also replaced subject-hood, in the sense of being an imperial subject (itself not a "good" thing), with the capability for search. This is an entirely bizarre exchange, and one whose consequences are difficult to assess in that the entire concept of search itself has become opaque. When considering, as Hillis et al. do, how often one would have made inquiries using previous methods of research, "the question of whether you would actively retrieve information becomes important epistemologically and even ontologically."[419] As they go on to say,

> [t]o search has become so natural and obvious a condition of using the Web, and the Web such a natural and obvious feature of the internet, that the specific contingency of these everyday practices has become obscured. Search is the ultimate commodity fetish. Often it will take a technical breakdown to expose the myriad moments of your everyday life almost instinctively or automatically given over to some kind of search activity or device.[420]

[417]Paul Buchheit as cited by in *Google and the Culture of Search*. Ken Hillis, Michael Petit, and Kylie Jarrett. New York: Routledge, 2012, p. 174.
[418]Ibid. Intro.
[419]*Google and the Culture of Search*. p. 1.
[420]Ibid. p. 2.

To search, then, is to *be* online, in the way that the AOL guidebook earlier attempted to define; to click one's mouse is to leave a record of one's taste, preferences, and habits, one's desires and curiosities. Searching remains, by far, the most popular and constant online activity: "in July 2011 alone, Americans conducted 19.2 billion core search queries, and Google processed 12.5 billion of them, commanding 65.1 percent of the U.S. search market (comScore 2011). It processed 91 percent of searches globally during the same month (StatCounter 2011)."[421] With the ubiquitous presence of the online world, searching, then, it can be argued, as *Google and the Culture of Search* does, has become a form of ontology, a transformation of the Cartesian thinking, now reading "I search, therefore I am."[422]

But, returning to the fundamental metaphor underlying all of this, the user of the search engine is figured as a modern-day adventurer, a seeker on a quest:

> Google [and all search engines and browsers] invites each of us to reimagine ourselves as searchers, as contemporary explorers and voyagers, latter-day Vasco da Gamas, Captain Cooks, and Neil Armstrongs navigating the proprietary intersection of the digital realm and bodies-as-information. [...] each interactive online search can be seen to produce a unique path, different from the others not pursued, along which the searcher branches and forks through Google's seemingly ordered universe of data.[423]

Prior, formative concepts of search—ignoring, for the moment, one of imperialism's biggest (if not *the* biggest) ignorances in that the space it "discovered" was rarely, if ever, empty and uninhabited by others—were always towards the unknown, towards the uncharted, and thus, always oriented towards the future. But due to the nature of online searching, "to google" is always a necessarily past-oriented action in that searches mine previous accumulations of data, particularly Google's personalized searches, which attempt to meld seamlessly with the user's desires by closely tracking and mining past activity.

This is, more than anything, a sad fact, and, I think, latent in the Internet's sadness, its holes and loops, in which we are continuously led into the future by past actions. As Hillis et al. point out, this idea that the past is the best indicator of the future is a completely conservative one, not in any way in keeping with the Web's perceived revolutionary or radical status. The seriousness of online search's regressiveness becomes especially striking when considering the search query Google most wants to be able to answer: "What shall I do tomorrow?":

> Consider that, in certain circumstance, "What shall I do tomorrow?" might best be answered by proposing a radical break with the weight of a searcher's past history. In the underlying logic that informs their production, answers provided by automated search to prayerful queries about how one should organize one's future bear a remarkable affinity not to the futurist logic of progress but, instead, to something radically old—the pre-Enlightenment belief that the past is always the best teacher. Answers based on mining one's past search queries point backward. Particularly in times of social and economic status that lead to despairing thoughts of "no future now," such answers and their acceptance by searchers suggest the deinstitutionalization of the fatalistic belief that, like some film noir protagonist, we can never escape our predetermined Fate.[424]

[421] *Google and the Culture of Search*. p. 3.
[422] Cf. *Google and the Culture of Search*'s epilogue "I Search, Therefore I Am".
[423] *Google and the Culture of Search*. p. 34.
[424] Ibid. p. 202.

Google's desire to know its users better than they know themselves can only be fulfilled through numberless assemblages of past clicks and queries, and any effort towards prognostication—itself a worrisome desire—is always already recursive. Underlying this, however, is the troubling idea that such behavior is, in any way, a form of search in the now-antiquated sense of moving through unknown space. And, as mentioned above, this antiquated form of search was itself inaccurate in the sense of "discovery." In truth, imperialistic search is always an exercise in representation, both of power and knowledge. To search, like Columbus for the New World, or like Agrippa's geographers for the empire's extent, is to quantify and qualify what necessarily preexists the explorer. To search, then and now, is never to create. And yet, the two have long become intertwined, and both online and on land, the world becomes knowable through search, such that the Web enthusiast Kevin Kelly "has gone so far as to argue that 'in the library of all possible books, finding a particular book is equivalent to writing it'."[425] But this is not true, and there is the additional remove in the virtual realm in that information is decidedly not what makes up the world around us in the way that geographical space does. In this final section, then, I want to look at what remains "unsearchable" on the Internet, beyond Google's and others' reach, as a possible model of resistance in this real world.

The Deep Web

The deep web or invisible internet—of which the infamous DarkWeb, alleged refuge of "thieves and spammers, child pornographers and terrorists"[426] is only a small fraction thereof—is the vast depth of information existing, to use Michael Bergman's spatializing metaphor, beneath the "surface web" accessible to search engines. Writing in 2001 on behalf of *BrightPlanet*, the "Deep Web Intelligence" group, Bergman says that

> [s]earching on the Internet today can be compared to dragging a net across the surface of the ocean. While a great deal may be caught in the net, there is still a wealth of information that is deep, and therefore, missed. The reason is simple: Most of the Web's information is buried down on dynamically generated sites, and standard search engines never find it.[427]

BrightPlanet alleges to give access to these depths—via proprietary meters—which it partially quantifies (in 2001, recall) as:

- Public information on the deep Webb is currently 400 to 550 times larger than the commonly defined World Wide Web.
- The deep Web contains 7,500 terabytes of information compared to nineteen terabytes of information in the surface Web.
- The deep Web is the largest growing category of new information on the Internet.

[425] *Google and the Culture of Search*. p. 21.

[426] Hutson, Bradford and Miller, Michael. "Beware the Darknet". 2010, Procysive Corporation.

[427] Bergman, Michael K.. "The Deep Web: Surfacing Hidden Value". http://brightplanet.com/wp-content/uploads/2012/03/12550176481-deepwebwhitepaper1.pdf. Accessed February 25, 2015.

- A full ninety-five per cent of the deep Web is publicly accessible information—not subject to fees or subscriptions.

Standard search engines' inability to "never find" the information buried on the deep Web is due to the database-compilation step in search procedures; in other words, the common methods by which web crawlers or spiders accumulate information (via back-links, static web pages, etc.) do not work for what is apparently a massive portion of the Web. The reasons for *why* this information remains inaccessible to web crawlers, and thus to common searches—from being behind any number of firewalls, to being in non-recognizable file formats—are myriad. I want to focus, however, on the most intentional of reasons; those sites and databases that ensure their information remain hidden and unsearchable out of issues of privacy and anonymity.

The Onion Router

In one of the NSA documents leaked by Edward Snowden and published by the *Guardian*, there is a series of slides (with the background graphic of snowy mountains) with top secret classification detailing the workings of the *Tor* network—The Onion Router—a multi-hop router that sends all of its traffic through an intricate and randomized series of machines, thereby obfuscating any traffic's origin. Of *Tor*, the NSA says that it is "very secure," "low enough latency for most *TCP* [Transmission Control Protocol] uses," and "still the King of high security, low latency Internet Anonymity" with "no contenders for the throne in waiting".[428] In a 2012 interview with the *Guardian*, Tor's (which began in 2002, built from technology first created by the US Navy) executive director Andrew Lewman said that

> "We were increasingly concerned about all these websites—in the 2000/01 dot com bubble, everyone was offering free services, and by free they meant 'we take all your information and sell it as many times as possible'. We wanted a way to: one, put some of our research into practice and see how it would work; and two, we wanted to give control over your information to you, the user, not to have all these companies take it by default. And let you make decisions about do you trust Google, do you trust Amazon, do you trust the BBC, whatever."[429]

As Henry Farrell has argued, Tor and many aspects of the deep web developed out of libertarian sentiments that "hoped to combine cryptography and the internet into a universal solvent that would corrupt the bonds of government tyranny. New currencies, based on recent cryptographic advances, would undermine traditional fiat money, seizing the cash nexus from the grasp of the state."[430]

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[428] "Tor: 'The king of high-secure, low-latency anonymity' ". The *Guardian*. October 4, 2013: http://www.theguardian.com/world/interactive/2013/oct/04/tor-high-secure-internet-anonymity. Accessed February 26, 2015.

[429] "What is Tor? A beginner's guide to the privacy tool". *Guardian*. November 5, 2013: http://www.theguardian.com/technology/2013/nov/05/tor-beginners-guide-nsa-browser. Accessed February 26, 2015.

[430] Farrell, Henry. "Dark Leviathan: On the High Seas of the Hidden Internet". *Aeon*, February 20, 2015: http://aeon.co/magazine/technology/on-the-high-seas-of-the-hidden-internet. Accessed February 21, 2015.

And though much attention, certainly on the surface Web, has been given to the criminal aspects of the deep Web—from the attempted-murder trial of Ross Ulbricht, the founder of the Silk Road, a deep Web Amazon for contraband, to the identity-theft and jihadism (to name just two possibilities) of the Dark Net, a subsection of the deep Web—I am most interested in the idea of refusing mappability and search-ability, though not necessarily the idealism and politics prompting such refusals. If anonymity and invisibility are prized traits of sectors of the deep Web, it is fascinating to think of how user-interaction must accordingly shift, from the data-mining and -sharing of the surface web. For starters, the entire concept of search disappears, at least in the Google sense of pre-determined, pre-ranked and vetted data. It is instead replaced with more prior forms of navigation; not just word of mouth (go here, look for this, do that, etc.), but also repetitive motion: as Farrell says, "the landmarks of this hidden internet can be discovered only by those who already know where they are."[431] I am not arguing for a nostalgic return to provincialism any more than I am interested in a Ludditism whose possible viability is long gone. Instead, I want to offer this new (at least to me and, I imagine, other frequenters of the surface Web) method of interaction with information that need not (and cannot) be databased, archived, and eventually sold. What new categories of use and non-use, play and work—or altogether other binaries—can be created, down there in the depths?

Foucault's Boat

I began this section with the quote from Foucault concerning the ship as the heterotopia *par excellence*, and said that I would be paying attention to the role of the boat in these ongoing metaphors of virtual search and exploration. The "deep Web" is surely the latest in this string of such metaphors, with the new troughs of information to be accessed figuring not as land forms, but as the deep unknown beneath the surface. In earlier ideas of the Web, the boat, or components thereof, surely, and unacknowledgedly, figured as the search engine itself. If the browser was something like the ocean, the search engine, just like the boat, was an instrument of human engineering and technology that allowed its users to navigate otherwise inaccessible "spaces." But as I hope to have shown, this metaphor quickly breaks down in the face of what the search engine actually does; to reverse the metaphor, if a boat functioned like, say, Google, the boat would be constantly assembled beneath its user, as well as, more importantly, only capable of exploring spaces previously explored by multitudes. Likewise is the idea of "discovery" or revelation at the end of a search ill-suited for Web behavior in that accessible databases are compilations of human behavior and information.

In many ways, it seems as though the boat has in truth disappeared, not only because espionage has taken the place of adventure and the police the place of pirates. It is with the most surprisingly "touchy-feely" of Foucault's disappearances that I am most intrigued: dreaming on the Internet has become impossible, I think, in that the Web can only give back what it has been given. Imaginations and personalities meld together, and dreaming merely becomes seeing with someone else's eyes. The truly radical aspect

[431] Farrell.

of dreaming, of seeing something that has never been seen before, literally does not compute. Regardless, I remain hopeful that there is enough "room" in the deep Web in which one can do something brand new, find and oar a new boat, possibly looking for nothing at all. What new activities, let alone metaphors thereof, open up if we can leave behind this pervasive notion of search? Never mind activities or metaphors of digital interaction, but what might such a loosening mean for this undeniably digital, globalized world? What can not be translated into data, into information? I do not mean this in the Luddite sense of some kind of return to the "natural" world—a world that increasingly, due to urbanization, does not exist, or, due to ecological catastrophe, has become entirely unpredictable—but instead how can we rethink and imagine the digital as something unknown, positive or negative, not via a set of known metaphors, but as uniquely brand new, likewise demanding new actions, new ontologies, and thus allowing for the truly revolutionary in the sense of that which has yet to be seen or thought of?

A Map of the World

As discussed in the chapter on time, the Romans were by no means the first map makers, but, as with most things, they built upon ideas and technology taken from the Greeks. The desire to depict immediate, and more distant, surroundings via scaled representations is one that certainly precedes the Roman empire. Empire, however, exacerbates such desires, as these scaled representations become evidence and proof of existence. Thus, during the Augustan period, "there was a series of undertakings of geographic, cartographic, and administrative nature. There was an increase in the number of partial or global censuses, in the publication of cadastral books or maps in numerous regions, and in the establishing of road itineraries."[432] As the empire expanded, both the need for tracking its dimensions and the technology with which to do so became greater. Thus, the mysterious "map of the world" built in the center of Rome was a testament to both these efforts, and to Rome's presence within an increasingly known and surveilled span of earth.

In his *Natural History*, Pliny repeatedly mentions the existence of a detailed map of the Roman empire, and its creator, Marcus Agrippa. In relating a small cartographic error, Pliny says

> Agrippa was a very painstaking man, and also a very careful geographer; who therefore could believe that when intending to set before the eyes of Rome a survey of the world (*cum orbem terrarum urbi spectandum propositurus esset*) he made a mistake, and with him the late lamented Augustus? for it was Augustus who completed the portico containing a plan of the world that had been begun by his sister in accordance with the design and memoranda of Marcus Agrippa (III. 17).[433]

[432]Nicolet, Claude. *Space, Geography, and Politics in the Early Roman Empire.* Translated by Hélène Leclerc. Ann Arbor: The University of Michigan Press, 1991, p. 95.

[433]*Agrippam quidem in tanta viri diligentia praeterque in hoc opere cura, cum orbem terrarum urbi spectandum propositurus esset, errasse quis credat et cum eo divum Augustum? is namque conplexam eum porticum ex destinatione et commentariis M. Agrippae a sorore eius incohatam peregit.*

The object in question is surely what we would call a map, though there exists no one word in Latin so clearly demarcating the world from a graphical representation of it. The phrase used, *orbem terrarum*—literally meaning "circle of lands" and the compound-word for the world as a whole—is not unique to Pliny, nor does it necessarily refer to anything but the world as a whole. In its specification, however, as *spectandum urbi*, this world becomes something different, as it is, again rather literally translated, "to be looked at by the city" (*urbi* here meaning Rome specifically). Indeed, some manuscripts counter the emendation of the transmitted word *orbi* to the afore-cited *urbi*, thematizing some of the difficulties in translating this passage. A translation of the transmitted text would have it read "the world to be seen by the world," thereby eliding this passage's significance, which is that the world—a visual representation of the world—is being brought to Rome. That is to say that the newness of this object is reflected linguistically in its lack of a direct name.[434]

Although the exact date of the map's installation is unknown (it was incomplete at the time of Agrippas death in 12 BCE, and finished by Augustus, sometime between 7 and 2 BCE), the portico's location is better known.[435] It stood within the *Campus Agrippae*, which was centrally located in the Via Lata, one of Romes major roads,[436] a site which undoubtedly gave situational cues to its viewer. Just west of the Via Lata stood the Ara Pacis, an altar comprised of friezes of intricate and elaborate symbology sculpted in marble, dedicated to the Pax Augusta.[437] From the map's own geographical vantage, a viewer could see the main way Rome extended itself—its roads. Indeed, if we take the Peutinger map from the thirteenth century as a copy of an extant update from the fifth century of Agrippa's portico, as some claim it to be, the "map" was the earliest depiction of the then-current extent of the *cursus publicus*, or the Roman road network.[438"439]

The postulations as to the reason for this map's creation are numerous,[440] but it is clear both from Pliny's words and its public placement that it was intended for the people, and thus must be understood as a piece of (edifying) Augustan propaganda. As we can imagine, the general gist of the map would have been to show the impressive extent of the Roman empire to those whose empire it was. As many scholars of ancient Rome have argued, Augustus and his government made extensive efforts to represent the

[434]The Latin words of writing and paper that have come to be associated with maps—*charta, tabula, descriptio,* etc.—all have prior, independent meanings.

[435]Richardson, L., Jr.. *A New Topographical Dictionary of Ancient Rome.* Baltimore: Johns Hopkins University Press, 1992, p. 64.

[436]Ibid.

[437]*A New Topographical Dictionary of Ancient Rome.* p. 287.

[438]As with any aspect of classical history, this conclusion is highly debated. The unobjectionable consensus, as Tierney has it, is that "[Agrippa's map] represents a conscientious attempt to give a credible version of the geography of the known world. It relies on the general scheme of the Greek maps which had been current since the time of Eratosthenes and Hipparchus, and attempts to rectify them, particularly in Western Europe, with recent information derived from the Roman itineraries and route-books.

[439]Tierney, J.J. "The Map of Agrippa". *Proceedings of the Royal Irish Academy. Section C: Archaeology, Celtic Studies, History, Linguistics, Literature*, Vol 63 (1962–4), p. 155.

[440]Nicolet offers the compelling hypothesis that Augustus commissioned the map to serve as "a learned illustration of his own *Res Gestae*" (pp. 114-5).

sprawling, difficult concept of empire through the concrete, easily definable image of his own body—one of the clearest examples of this is Augustus' purification of the Roman money system (metallurgically speaking!) and the issuing of new money emblazoned with his face. By offering his own body and form as metonym for the empire itself, there existed the possibility for citizens to experientially relate to the ever-changing concept of empire via their own corporeal form. And if Augustus often offered his own body as metonym for the empire, the map and its public presentation offered the chance for citizens to partake of this metonymical exchange via their own bodies. Lacanian language of the mirror stage in early childhood development is again helpful here: just as the observer of a mirror image must take coaesthenic empirical knowledge (the body experienced fragmentarily) and believe it to "actually" be the experience of a unified whole, the observer of a map must take the same type of disjointed experiential knowledge (surroundings experienced fragmentarily) and see it as participating in the unified whole of the empire.[441] Through the perspectival aspect of a map, the viewer can assess the lay of the land in relation to himself, and his (literal, spatial) place within it. And whether or not Agrippa's map focused on the roads of the Roman empire, or on known measurements more broadly speaking, the association between the road and any access to the empire's sprawl—as discussed in the chapter on roads—would have been clear. In other words, indubitably due to the map's position within Rome, and possibly due to precisely what it depicted, the "lay of the land" was necessarily associated with the path of the road.

This relationship between citizen and empire, and the spatial extent of both, is vital in that a successful empire, as Claude Nicolet defines it, is

> a territorial continuity in which the different parts of the state are entwined, from the center to the periphery, in a series of administrative districts where the space is as important as men.[442]

In other words, the estimation of an empire's power is a likewise estimation of its geographical size, rather than of its population. This emphasis on space, and an altered form of self-conception within this space, then, corresponds to the constant effort to make the entirety of empire both quantifiable and legible. As Nicolet also says,

> in order to set boundaries to the empire and to claim to have reached those that were marked out, the Romans needed a certain perception of geographical space, of its dimensions and of the area they occupied [...] the ineluctable necessities of conquest and government are to understand [...] the physical space that one occupies or that one hopes to dominate, to overcome the obstacle of distance [...].[443]

This "certain perception of geographical space" is made into an active way of looking by a map. Indeed, our modern understanding of geographical space is so ineluctably linked to maps and the perspectives they provide that it is difficult to think of what a truly radical and strange object a map is. Ignoring all the ways in which a map must in

[441]This analogy is perhaps clearer in the example of a more intimate map. A neighborhood, or even city map would more explicitly demand this type of viewing, dramatically altering the perspective of daily occurrences from first-hand to birds-eye.

[442]Nicolet. *Space, Geography, and Politics*. p. 2.

[443]Ibid. p. 2.

fact misrepresent global space in its translation of a spherical, three-dimensional object onto a flat, two-dimensional surface, there is, at the very outset, the impossible premise of the represented point of view. The "bird's eye view" from which all maps, at differing distances, portray geographical stretches, is never the perspective from which space is experienced, let alone inhabited. Though this may seem a simplistic point, the mental process through which one understands or reads a map is, in some ways, a scaled-down version of the mental process of being an imperial subject. Accurately reading a map, or at least understanding what such a reading process entails, is a fundamental aspect of empire-creation on the individual and subjective level. What any map does is confuse the subject/object divide inherent in looking—a map simultaneously removes the subject from its usual perspectival position, but also curiously makes the subject into his own object by forcing him to reinsert himself into the image at which he looks (hence, on modern maps indicators reading "you are here"). Thus is the map perhaps the most resilient of all imperial artifacts, a largely unquestioned means of looking at and representing the world.

The Peutinger Map

Agreeing with Richard Talbert that there is nothing stronger than wishful thinking offering proof of whatever Agrippa's map depicted, there can be

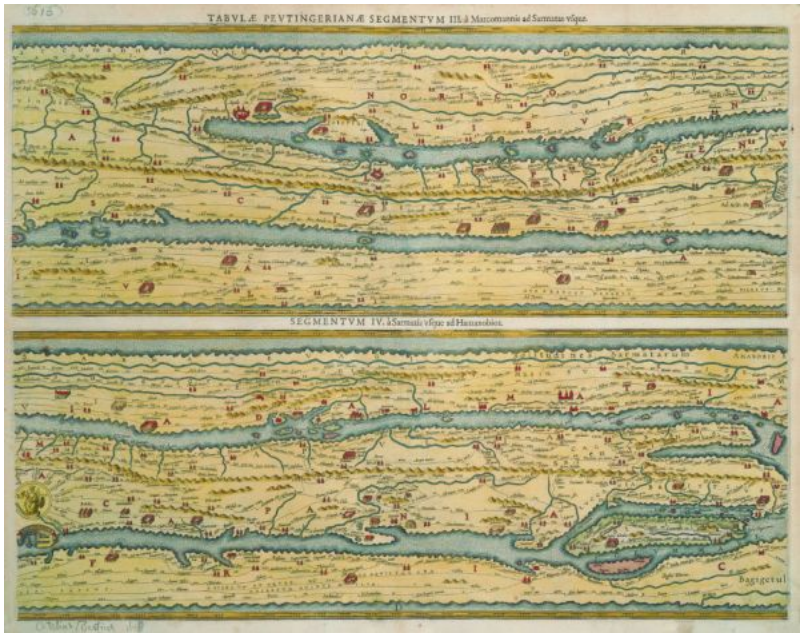
> no doubting that both Agrippa's map and the text known to have been somehow associated with it demonstrated a concern for accuracy that can only derive from the geographic and cartographic learning developed by the Greeks, especially Eratosthenes at Alexandria and his successors from the third century B.C. onward. Products of this unique expertise were vital to all Greek and Roman mapping of large areas thereafter, and the maker of the Peutinger map's original, too, must have drawn upon it.[444]

The Peutinger Map, named for the sixteenth-century German scholar Konrad Peutinger, is a twenty-two feet by one foot map of the Roman empire, commissioned, it is assumed, by an emperor sometime in the first four centuries A.D.[445] The map itself, which includes "features from the past that could never even have coexisted,"[446] is thus additionally hard to date. Regardless of its exact date—which Talbert narrows to sometime in the third or fourth centruy—the map focused with precision on ways and routes through the empire.

[444]Talbert, Richard. *Rome's World: The Peutinger Map Reconsidered*. Cambridge: Cambridge University Press, 2010, p. 137.

[445]Ibid. p. 2.

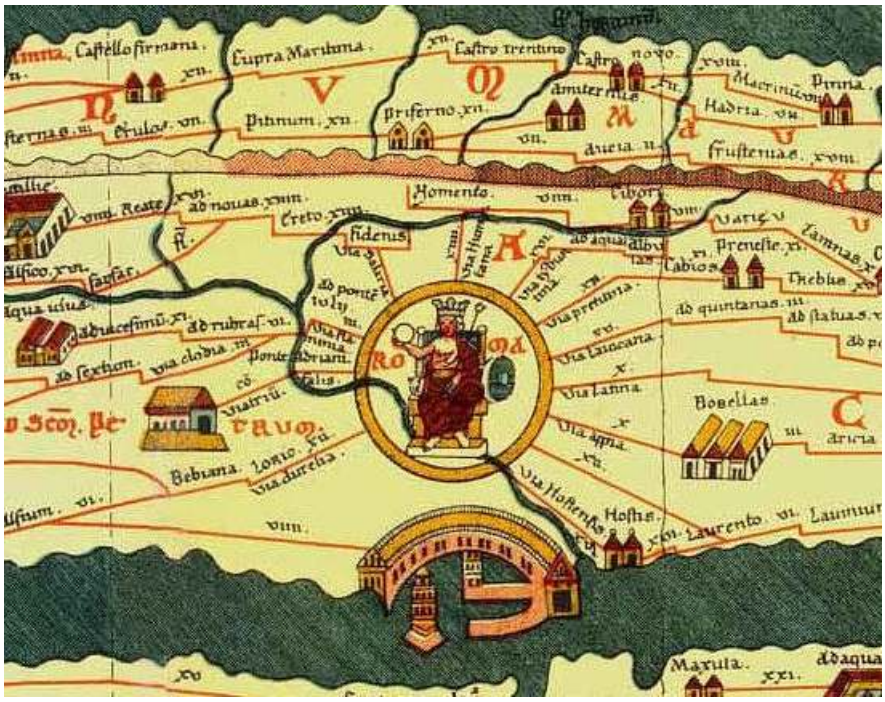
[446]p. 134. "In particular, the cities of Campania destroyed by the eruption of Vesuvius in A.D. 79 make a striking mismatch with the Roman route network in Dacia, a province north of the Danube only annexed by Trajan early in the second century."



Sections of the Peutinger Map

Though much scholarship focuses on the incredible ways in which map serves as a "way finder or route diagram" akin to Harry Beck's London Tube diagram,[447] Talbert argues against such a reading on several grounds. For one, the map's details "can only be appreciated from close up," but it is unlikely that the map's context was one that permitted travelers the "opportunity to inspect the details any more than they could ever be inspected on the Columns of Trajan and Marcus Aurelius, say [...]."[448] Additionally, the argument for the map's practical purposes are unlikely given its clear cost: "it is hard to imagine a patron who could afford this masterpiece actually exposing it to the risks of practical use on journeys [...]."[449] Instead, a map of such detail and scope, it seems clear, must have had more propagandistic purposes.

[447]Talbert. pp. 142-3.
[448]Ibid.
[449]p. 143.



Detail of Rome

Indeed, with its "stark demonstration of Roman might,"[450] as well as its "deliberate placement of the city of Rome at the center," the map is a depiction of Roman influence and power as much as it is of land. As Talbert argues, the Peutinger Map shows a harmonious, accessible, and known world,

> with its confident representation of the entire *orbs terrarium* (not merely the empire) under the sway of Rome at the center, the absence of overtly military features, and instead the conspicuous marking of cities, temples, and spas. These are repeated indicators that everyone may once again feel secure, free to recover and enjoy the benefits of Roman civilization. [...] Cities stand out as *lumina* (rays of light), and great numbers of them are marked along with a profusion of lesser settlements; even the humblest viewers might have the satisfaction of finding their place of origin to be shown there.
>
> [...]
>
> Moreover, travel by land over great distances within the empire, and even far beyond it to the east, is presented as demonstrably feasible and safe.[451]

My argument (and others') is that any map shows, albeit often more implicitly in modern exempla, such political and biased representations of space. The implicit message of the Peutinger map—that the world, since it is known and depicted by the Roman hand, and thus subdued—informs all totalizing geographical overviews. What such overviews do is turn geographical space into information, information not only of distance and extent, but with all the political and cultural messages thus encoded. An idea that I would like to open here, and address more fully later, is that the digital realm, as I have been arguing, borrows many of these imperial metaphors and motivations, but from a different starting

[450]Talbert. p. 143.
[451]Ibid. p. 152.

point. If the imperial map, for example, strives to make a representative model of itself; i.e. to make the empire into digestible *information*, the Internet—starting from the assumption that such a totalizing operation is possible and desirable—is starting with pure information/data itself. This again returns us to my assertion that the Web is the digital version of the analog idea of empire in that the Roman empire and others worked on turning the natural world into political information, while the Web is recreating the world via political information.

A Talking Tour

In this final section concerning Rome, I want to return to something mentioned in the chapter on roads: the itinerary, or the *itineraria adnotum*, a description of moving through space along a specific path. Such itineraries were far more common than visual maps, and the earliest remaining description is Pomponius Mela's *de Chorographia*, or *Chorography*, from the first century CE. Existing somewhere between a *topographia*—"a description limited to a single place (*topos*)"—and a *geographia*—a description of "the whole earth (*gê*),"[452] a *chorographia* "typically designates a written description (*graphê*) covering a district or region (*khôros*) [...]."[453] Though not a localized and specific itinerary in the manner of, say, Juvenal's journey on the Appian Way, Mela's text is, in his own words, "a description of the known world [...], a difficult task and one hardly suited to eloquence, since it consists chiefly in names of people and places and in their fairly puzzling arrangement."[454] This puzzling arrangement is surely that which is made visibly understandable by geographical and topographical maps, objects that Mela resolutely avoids in favor of his *periplus*, the text that "doubles as its own map."[455] And though it cannot be proved that Mela did not reference Agrippa's Porticus Vipsania map,

> it is hard to imagine that the most scientifically up-to-date and politically important world map of the early imperial era did not play some part in Mela's conception. Whether or not Agrippa's map underlies the actual outline of the world as given by Mela cannot be known with certainty, but *chorographia* was nevertheless the Roman name for public maps. If the Augustan map was known either formally or informally as the *chorographia*, then both Mela's title and his subject matter deliberately ring with echoes of the Augustan project.[456]

In other words, "it may not be stretching the point to suggest that the voice of Mela's textual *oratio* was meant at least to respond to the great *chorographia* of Augustus."[457]

Allowing that it is impossible to prove with any certainty the correlation of Mela's text and Agrippa's map, suffice it to say that I am certainly trying to read the two as a historical unit; what does Mela's written description convey about the world that the

[452]Romer, F.E. *Pomponius Mela's Description of the World*. Ann Arbor: University of Michigan Press, 1998, p. 4.
[453]Ibid. p. 4.
[454]Mela. *De Chorographia*. 1.1. Translated Romer, p. 33.
[455]Romer. p. 20.
[456]Ibid. p. 21.
[457]Ibid.

visual map does not? Following a literal linear path as it does (counterclockwise around the Mediterranean, through Africa, then Asia, and Europe last), Mela's vision of the world is a discrete set of intervals, moving from place to place, while a visual map is a continuous whole. Mela's type of knowledge, then, is not geographical so much as it is the conveyance of a "sense of place, of being there, when he alludes to *fabulae* that he and his audience had heard all their lives. [...] Mela played on his readers' mental images of persons, places, and things, and he offered his audience a kind of armchair travelogue in prose."[458] This travelogue, however, is an anachronism as well as a misnomer, in that the idea of his Mela's readers making his described voyage is unlikely to impossible. Indeed, as Romer also argues,

> [n]arratologically, the text becomes what it describes, and it succeeds through the fiction that the readers are pursuing a journey of their own: the reader is the traveler, and the mixed geographic and narrative *ordo* becomes the reader/traveler's *ordo*, or itinerary. [...] Mela has made explicit what was known intuitively all along, not only that the narrative's order is the order of the journey, but that this journey depends on the power of speech. Speech, then, preserves all the memorable persons, places, and other phenomena of the known world.[459]

What keeps the fiction narratologically exciting for the reader, however, is the possibility that in smaller, more discrete intervals, portions of this journey are not in the realm of fiction, and are, in fact, possible—this is the same aforementioned allure of finding one's hometown on the Peutinger Map. Though I am not arguing that this localism is somehow anti or counter-imperial, but that the totalizing notion of space that empire requires from the bird's-eye view neglects the far more fragmentary sense of place required to inhabit this space. This distinction between space and place has become a recurring theme in modern geography, perhaps beginning with Lefebvre's "absolute" versus "abstract" space. Both forms of description—the talking tour for a sense of place, and the visual map for an extent through space—create aspects of spatial knowledge. But in its seemingly subsidiary role to the grand map view, the place-dependent, "talking tour" notion of space is surely seen as the more cultural, relative, and generally subjective. I want to conclude this section with the idea that the map of the world, the Peutinger Map—any map of political and politicized space and thus any map—is just as subjective, and also just as narrative in the sense of the stories of places in that the map is, at all times, telling the story of imperial knowledge, of geographical space, of where the boundaries are and are not, of where all the roads finally lead.

The Waves

Returning to the idea that the British novel did as much to culturally disseminate the ethos of imperialism into the world as its roads and maps, we can now better qualify some of the claims made in the sections concerning Dickens and Woolf. As Said says near the beginning of *Culture and Imperialism*,

[458]Romer. p. 22.
[459]p. 11

> the enterprise of empire depends upon the *idea* of *having an empire*, as Conrad so powerfully seems to have realized, and all kinds of preparations are made for it within a culture; then in turn imperialism acquires a kind of coherence, a set of experiences, and a presence of ruler and ruled alike within the culture.[460]

One of these "*idea*s of *having an empire*" is best illustrated in Dickens' novels; in many ways, Dickens' omniscient narrator—who, we recall, "takes off the housetops and shows the shapes and phantoms"[461]—is the narrative equivalent of the map, the bird's eye view that gives largely impossible coherence and connection to the world. Rather than returning to Dickens, however, and examining the ways in which his novels and others are "map-like," influenced by and influencing the imperialist world-view, I want to return instead to Virginia Woolf, and her possibly most-experimental novel, *The Waves*. In so doing, I hope to follow Woolf's lead in prioritizing and thinking through if not a world-view, then certainly an experiental-view, that does not prioritize the coherent and all-seeing eye.

One of Said's major focuses in *Culture and Imperialism* is to examine the work of many of the major British authors not from "the novel's plot and structure as constituted mainly by temporality" as was (and is) far more customary, but instead focusing on "the function of space, geography, and location."[462] *The Waves* seems to be a novel with similar preoccupations, taking the familiar chronological cues of time and its passing in structuring a novel and using them to instead orient what is a deeply challenging and unfamiliar text concerning the interior lives of six individuals as they consider, at different points in time, the death of a seventh friend. Each of the novel's nine sections opens with an italicized scene of nature at different points in the day. Beginning at dawn, the scene is one largely devoid of people, following the sun as it hits different points of the sea and a nearby home:

> *The surface of the sea slowly became transparent and lay rippling and sparkling until the dark stripes were almost rubbed out. Slowly the arm that held the lamp raised it higher and then higher until a broad flame became visible; an arc of fire burnt on the rim of the horizon, and all round it the sea blazed gold.*
>
> *The light struck upon the trees in the garden, making one leaf transparent and then another. One bird chirped high up; there was a pause; another chirped lower down. The sun sharpened the walls of the house, and rested like the tip of a fan upon a white blind and made a blue fingerprint of shadow under the leaf by the bedroom window. The blind stirred slightly, but all within was dim and unsubstantial. The birds sang their blank melody outside.*[463]

Thus does the reader, oriented towards an early moment in time, dawn, the beginning of a day, enter into the text. Still, though, nothing quite prepares for the chorus of voices we find, all uttering sense perceptions of sight, sound, and feel:

> "I see a crimson tassel," said Jinny, "twisted with gold threads."
>
> "I hear something stamping," said Louis. "A great beast's foot is chained. It stamps, and stamps, and stamps."

[460]Romer. p. 11.
[461]Williams. p. 156.
[462]Williams. p. 84.
[463]Woolf, Virginia. *The Waves*. pp. 7-8.

[...]

"Stones are cold to my feet," said Neville. "I feel each one, round or pointed, separately."

"The back of my hand burns," said Jinny, "but the palm is clammy and damp with dew."[464]

What these voices are able to perceive and describe grows more sophisticated over the course of several pages, and we get the impression as the voices relate hurt feelings and stuck memories that we are in childhood, in which any sense of narrative has been given over to dialogue, much as in the opening of Greek tragedies with the chorus' song.

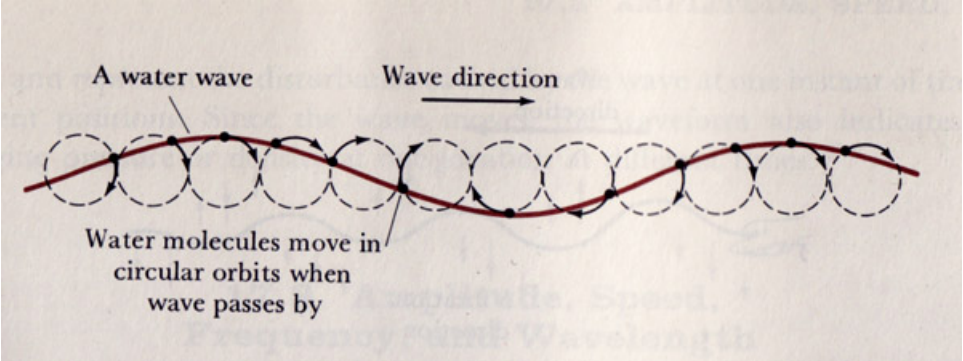
As the voices mature, personalities emerge, from Susan's jealousy over Jinny and Louis' secret kiss ("I saw them, Jinny and Louis, kissing. Now I will wrap my agony inside my pocket-handkerchief."[465]), to Rhoda's taste for solitude ("I have a short time alone, while Miss Hudson spreads our copy-books on the schoolroom table. I have a short space of freedom."[466]). These developmental traits and memories stay with the characters throughout the rest of the novel, returning in different ways. Bernard emerges as the most vocal of the group, if only in that his voice is narratively-inclined and most apt to articulate the necessity of this particular group of friends in his own identity formation:

"I wish then after this somnolence to sparkle, many-faceted under the light of my friends' faces. I have been traversing the sunless territory of non-identity. A strange land. [...] I think of the people to whom I could say things; Louis; Neville; Susan; Jinny and Rhoda. With them I am many-sided. They retrieve me from darkness. We shall meet tonight, thank Heaven. Thank Heaven, I need not be alone. [...] I see Louis, stone-carved, sculpturesque; Neville, scissor-cutting, exact; Susan with eyes like lumps of crystal; Jinny dancing like a flame, febrile, hot, over dry earth; and Rhoda the nymph of the fountain always gets wet. These are fantastic pictures—these are figments, these visions of friends in absence, grotesque, dropsical, vanishing at the first touch of the toe of a real boot. Yet they drum me alive. They brush off these vapors."[467]

Thus does the novel's structure of an endless flow of voices create the innovative means through which it will address its theme not only of the individual versus the group identity, but of the constant flux and movement between the two.

Indeed, both the literal motion of a wave and the metaphors sustained by such motion inform the novel's more-thematic organization. For purposes of clarity, I will separate the thematic motifs I am interested in into two, though they are intimately linked in the novel, as well as undergirded by the same operative metaphor of the wave. Before I address these motifs directly, it is helpful to consider how exactly a (water) wave moves. Distilled to the essence of its motion, a surface wave is essentially energy moving through inert matter, thereby displacing the matter in a circular motion without truly moving it. The sun creates the wind that moves across the ocean, propelling water into waves, only the tops of which are visible to the eye above the water-line.

[464] *The Waves*. pp. 9-10.
[465] Ibid. p. 13.
[466] p. 18.
[467] pp. 116-7.



Water Wave Motion

The first thematic motif, then, as mentioned above, is the slippage and fluidity of identity and its dependence upon language or some form of expression (many have argued for the musical and poetic quality of *The Waves*). If there is an animating force to the novel, an energy equivalent to the wind across water, it is surely the force of language and each individual character's usage of it, particularly in relation to grief and absence. Bernard, perhaps the most language-based of the six, considering his preoccupation with "finding some perfect phrase that fits this moment exactly,"[468] says,

> "I am embarrassed by my own fertility. I could describe every chair, table, luncher here copiously, freely. My mind hums hither and thither with its veil of words for everything. [...] I, mixed with an unknown Italian waiter—what am I? There is no stability in this world. Who is to say what meaning there is in anything? Who is to foretell the flight of a word? It is a balloon that sails over tree-tops."[469]

Each character, though none so straight-forwardly, assess themselves in relation to both language and the solitary, seemingly fixed meaning found there; and the group and the shifting, comforting meaning of friendship. As Neville says, "the light falls upon real objects now. Here are knives and forks. The world is displayed, and we too, so that we can talk."[470]

But not all the characters are successful either in language or in the group. If Bernard finds the most meaning in both, it is Rhoda for whom maintenance of an identity in either sphere is especially difficult. Early on, she thinks to herself:

> "But *you* understand, *you*, my self, who always comes at a call (that would be a harrowing experience to call and for no one to come; that would make the midnight hollow, and explains the expression of old men in clubs—they have given up calling for a self who does not come) you understand that I am only superficially represented by what I was saying tonight."[471]

At this point, Rhoda still has a strong sense of self, strong enough to feel "superficially represented" in an evening's language. But this harrowing experience of calling on oneself, and oneself not coming returns to Rhoda, who, midway through the novel, can barely find her self:

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[468] *The Waves*. p. 69.
[469] Ibid. pp. 117-9.
[470] p. 127.
[471] p. 77.

> "If I could believe," said Rhoda, "that I should grow old in pursuit of change, I should be rid of my fear: nothing persists. One moment does not lead to another. The door opens and a tiger leaps. [...] I am afraid of the shock of sensation that leaps upon me, because I cannot deal with it as you do—I cannot make one moment merge in the next. To me they are all violent, all separate; and if I fall under the shock of the leap of the moment you will be on me, tearing me to pieces. [...] And I have no face. I am like the foam that races over the beach or the moonlight that falls arrowlike here in a tin can, here on a spoke of the mailed sea holly, or a bone or a half-eaten boat. I am whirled down caverns, and flap like paper against endless corridors, and must press my hand against the wall to draw myself back.[472]

Indeed, Rhoda's consciousness and impinging sense of self seem to be washing away throughout the course of the novel, and her voice leaves the novel when she takes her own life: "I see far away, quivering like a gold thread, the pillar Rhoda saw, and feel the rush of the wind of her flight when she leapt."[473]

The disintegration and eventual loss of Rhoda's consciousness and identity are personifications of themes that preoccupy many of Woolf's novels. From the remarkable section "Time Passes" of *To The Lighthouse*, in which the elements over the course of time invade the summer home, to that novel's father's philosophical work, characterized by his son Andrew as "a kitchen table then, [...] when you're not there."[474] This interest in the solidity, or lack thereof, of the the object-world and the natural world without the human touch as intermediary, then, seems to have taken human form in Rhoda's suffering consciousness. In many ways, Rhoda's inability to believe that one moment leads to another is in direct antithesis to *To the Lighthouse*'s Lily Briscoe, another female often-anguished voice, but for whom, unlike Rhoda, there is the occasional flash of coherence:

> They became part of that unreal but penetrating and exciting universe which is the world seen through the eyes of love. The sky stuck to them; the birds sang through them. And, what was even more exciting, she felt, too, as she saw Mr. Ramsay bearing down and retreating, and Mrs. Ramsay sitting with James in the window and the cloud moving and the tree bending, how life, from being made up of little separate incidents which one lived one by one, became curled and whole like a wave which bore one up with it and threw one down with it, there, with a dash on the beach.[475]

Using this as something of a key, then, the waves of *The Waves* are those "crystallizations" of which Woolf spoke, those means of striking this "eternal passing and flowing" into stability. It is not without pain that the reader notices the finality of this metaphor in that the inability to ever strike this stability, to find and ride these waves, leads to the drowning death of Rhoda.

But even Bernard, the most successful of the characters at this crystallization, admits the artificiality in such a process:

> Let us again pretend that life is a solid substance, shaped like a globe, which we turn about in our fingers. Let us pretend that we can make out a plain and logical story, so

[472] *The Waves*. pp. 130-1
[473] Ibid. p. 289.
[474] *To The Lighthouse*. p. 23.
[475] Ibid. p. 47.

> that when one matter is despatched—love for instance—we go on, in an orderly matter, to the next. I was saying there was a willow tree."[476]

And, towards the novel's close, which is entirely in Bernard's voice, he says, returning to the water imagery that seeps into all the voices:

> Should this be the end of the story? a kind of sigh? a last ripple of the wave? A trickle of water to some gutter where, burbling, it dies away? Let me touch the table—so—and thus recover my sense of the moment. [...] Life is not susceptible perhaps to the treatment we give it when we try to tell it. Sitting up late at night it seems strange not to have more control. [...] Sitting alone it seems we are spent; our waters can only just surround feebly that spike of sea-holly; we cannot reach that further pebble so as to wet it. It is over, we are ended. But wait—I sat all night waiting—an impulse again runs through us; we rise, we toss back a mane of white spray; we pound on the shore; we are not to be confined. That is, I shaved and washed; did not wake my wife, and had breakfast; put on my hat, and went out to earn my living. After Monday, Tuesday comes.[477]

Thus, the animating energy of these waves, what I have called the novel's language, is reckoned here as an almost tidal impulse, that which compels continuance and lends, if not causality between events, then at least the assurance Rhoda lacks, that one moment in fact does lead to another.

This type of narrative impulse, the giving of momentary shape—"curled and whole"—to fragments whose dissolution is ultimately inevitable, is, in many ways, the opposite narrative impulse of the narrative voice of Dickens and other imperial authors. As Said says about Dickens' character Dombey from *Dombey and Son*, "[t]rue, Dombey is neither Dickens himself not the whole of English literature, but the way in which Dickens expresses Dombey's egoism recalls, mocks, yet ultimately depends on the tried and true discourses of imperial free trade [...]."[478] These discourses enter into the novelistic tradition in less literal, but more insidious ways as well. The novels of Said's "high imperialism" are, in many ways, narrative versions of maps, both of which present the world as an inherently knowable, translatable, finite and boundaried thing. The general conceit of a map of any scale is to put lines of demarcation around a built or natural object, in relation with other built or natural objects; to visually show, in other words, where things in the world begin and end. Though such a narrative inclination becomes, as Raymond Williams argues, more central by the 1890s, I am most interested in it with Dickens and others of his era, creating a "new kind of novel" that deals with a double condition of "the random and the systematic, the visible and the obscured," such that the novelist made possible the "coexistence of variation and apparent randomness with what had in the end to be seen as a determining system: the visible individual facts but beyond them, often hidden, the common condition and destiny."[479]

But the novel in Woolf's hands (and others) becomes the narrative version of those experiences that in fact can *not* be mapped, that have no definitive borders or lines of demarcations, but are instead in constant flux and movement. Though her novels are deeply concerned with time and its passage, they are not straightforwardly sequential,

[476] *The Waves*. p. 251.
[477] Ibid. p. 267.
[478] Said. p. 14.
[479] Williams. p. 154.

instead following the chasms and strange linkages within consciousness. Concerning *Mrs. Dalloway*, I argued that that novel is Woolf's means of gathering those sense perceptions and experiences that, in life, have no means of permanence, and thus, the novel becomes anti-imperial in its opposition to the progressive, constant motion of empire. In some ways, the inverse is true in *The Waves*; it is a limpid novel, in constant motion, caught up momentarily, curled and whole, and then dashed back down, energy dissipated, only to recur. This novel too is anti-imperial, but instead in its refusal of boundaries and limits, of imposed lines of meaning. That being said, there is not a prescriptive in *The Waves*, nor am I trying to argue for Woolf as an "anti-imperial" thinker. Instead, I want to conclude with the idea that the world that Woolf and others open up, the interior world of consciousness and the external world of intimacies and friendships, somehow falls outside the imperial world's means of representation. This is important, I think, because empire and its systems of knowledge production are so seductive in terms of how totalizing and absolute they presents themselves as, nowhere better evidenced in its time than in a map of the known world. It is hard to consider, especially when faced with a representation of the world in its entirety, what such an image cannot accommodate.

Finally, however, I want to return to the Foucault with which I began this chapter, and acknowledge that a map, particularly a global map, is, in many ways, an object of imagination and narrative, masquerading as a neutral object of empiricism. And not only in terms of its production is the map an imaginative object, but so too in its reception. It is the map, either in its blankness—the world still unknown—or its offerings—X marks the spot—that guides Foucault's boat, that "greatest reserve of the imagination." Though it is unsurprising that the ocean as a continuing source of metaphor recurs in many different ways throughout this chapter (from the "trawling on the surface" of the deep web, to Woolf's waves), I do not think that it is the boat, or the map, that any longer holds the depths of a collective imagination. And while I do not have a ready substitute, my conviction is that a reconstitution of imagination will require visionaries and visions, the desire and ability to see a different space than the one we currently inhabit, rather than repetition by a different name, an ongoing recycling of empire and imperialism in different realms.

A metaphor is still a process and product of imagination, but it, much like this idea of discovery that can only return the user to the past, is linked to the world as we have and understood it to be—recall Lakoff and Johnson's assertion that a metaphor "works" via its embedding in shared experience. How can we open up into a future, positive or negative, that might not presuppose that it looks just like the past? What are, if not the possibilities for, then the means by which to not predict the future, but to, using Jameson's own metaphoric turn in describing, again, Benjamin's weak messianism, allow for that in which there is no "linear idea of the future: nothing predictable, nothing to be read in the signs of the times, in the first few swallows or shoots, the freshening of the air."[480]

[480]Jameson. "Marx's Purloined Letter". p. 62.

GHOSTS & OTHER PARTIAL ENDINGS

New Spaces

Opening this conclusion, I want to return to a memory from my childhood that I wrote about previously, an early memory of technological interaction that was enthralling in its seeming limitlessness and undefinability. As with any new technology or experience, metaphors and analogies soon came in to dissipate this sense of ambiguity. And, returning to Paul C. Adams' assertion that "new technologies (produced by modernist world views) have long been understood popularly through metaphors fundamentally opposed to modernist world views,"[481] these early Internet metaphors were recursive and largely inaccurate. The somewhat chaotic feel of the internet, from AOL to NetScape, was not, as many have written using another troubling imperial metaphor, this time from American history, akin to that of the Wild West. Though there is some overlap between the two—similar feelings of lawlessness, unknown or nonexistent boundaries, and a certain degree of anonymity—the collapse of the practice of unstoppable Western expansion onto that of digital interactivity, is but another of the undeniably political and imperial ways in which we have come to understand what it is that we are doing. My overall desire, however, is that there be other ways, unthought of ways, to understand what it is we are doing when we "go online." Or, if it is no longer possible to reimagine this action, then to begin to think of new possibilities, new interactions, in spaces not informed by practices of empire.

No, going online was not like entering into the Wild West. In trying to remember what it felt like, I have remembered the large desk atop which the computer stood, a desk my father made from plywood and painted a bright and pleasing red. I mention this in that I distinctly remember juxtaposing the solidity and legibility of the objects around me with those on the screen before me. The inability to completely link that mode of interaction to any prior form is undoubtably due to my being a child at the time, but I think such a lack of other worldly experience simultaneously allowed me to fully embrace the action as brand new. Indeed, the closest analogue I can think of to the set of tools necessary to experience the early internet were ones that I learned far earlier still: those of the reader. Many of the things that made, and continue to make, me a dedicated and avid reader, contributed to my understanding of virtual navigation

[481] Adams. p. 157.

(whatever noun or gerundive used here is wrong; exploration, navigation, surfing, etc., all wrong!). I was given certain cues and pointers (an hourglass appearing when the computer was stalled), sign posts and directives (underlined text for clickable content), but there was a huge amount left blank that the imagination had to account for. My favorite books at the time were the Madeleine L'Engle series about the Murry family, beginning with *A Wrinkle in Time*. The backyard of their house that I invented in my head as I read, as well as their kitchen and Mrs. Murry's bunsen burner, became vistas in this online world (and, now that I am thinking about it, some of that backyard became Proust's Combray much later on in my reading life, leading to Swann's house), the places from whence these anonymous recipes in the cooking section of AOL came, not real and not fake.

At that point, there was no sense of the world being somehow refashioned or replicated in a digital arena as in the sense discussed in chapter one. That aspect of the Internet, as the next natural progression of scientific exactitude and quantification, in which the empirical (and imperial) world is translated into the 1s and 0s of binary code, was not yet present. Visually, there was certainly no sense of imitation of any aspect of reality; early websites looked like data trees, and were pretty much all text. The virtual simulation of offline behaviors and situations was not yet a given facet of "being online," which in and of itself meant that the virtual world did not have this facade of being somehow "another version" of the world. And in terms of interaction, the technology design was largely unfamiliar to average users. The home desktop computer was a tangible user interface (TUI), which essentially means that in order to manipulate the function of one thing, the user manipulates the function of something else. The computer mouse is a a technological example, but the very idea of a button—a tool to mediate and possibly simplify a series of actions into one, other, action—is the TUI in its most simple form. Though the Internet would come to imitate the analog world by means of transforming all of its quantifiable aspects into pure data, this future was not yet visible.

And yet, I was definitively not reading a novel when online, that is just the closest parallel, and one not universal I imagine, dependent upon being an inveterate bookworm as it is. As the Internet became more publicly established, other cognitive models came to the fore, many of which I have written about in previous chapters. From steering the boat of the web browser Magellan to driving or riding in a car on the Information Superhighway, a whole slew of metaphors—all of which were, I have been arguing, deeply informed by imperial conceptions of space and time—were offered. Many of these metaphors stem directly from language connected to urbanism and urban infrastructure; flows of traffic, congestion, crowds, close quarters, etc. The connection between urbanization and virtuality, as I have been arguing, is not strictly linguistic; the physical existence of the former makes the discovery and production of the latter possible. As Hubert Damisch and others have argued, Freud's unconscious could not have been thought without the "archaeology of the city" to inform it[482]—the same dependent thought process is true

[482] "the archaeology of the city [...] provided Freud with a model for visualizing the layered structure of the unconscious". Damisch, H. *Skyline: The Narcissistic City.* Stanford: Stanford University Press, 2001, p. x.

for the basic cognitive structures of virtuality.

But as I have argued in chapter two, urban design and planning, in the imperial sense of ancient Rome, can be thought of in two ways: either as a form of surveillance and colonialism via the cities Rome built abroad; i.e. what I have been calling The Gridded City, or, as constantly after-the-fact, a catching up with urban populations and their needs in the unplanned metropolis, or The Eternal City. The Internet's metaphorical usage of urbanism comes distinctly from the former school of thought, following in the path of Le Corbusier and his ilk, those who sought to eradicate the city and its problems by planning it into submission. And so too for the literal, architectural structures of digital space; virtual networks have often been built on top, or in place, of existing road systems: "the narrow, rugged mile trail was replaced by the railway and the highway, which in turn have been replaced by no less transient copper and fiber optic cables."[483] This process is nowhere more evident than in the repeated laying down of transatlantic communication cables, from the telegraph cable of the mid-nineteenth century, to the continued effort at ever-faster fiber optic connections to Europe. And on the smaller cognitive sense, urban terms pervade, all the way down to the mouse, called as such not just because of its slight visual, but more so due to its behavioral, resemblance to said animal. As Friedrich Kittler argues, "Claude Shannon, head mathematician for Bell Telephone laboratories, construct[s] a mechanical mouse, capable of nosing its way through the labyrinth on the basis of trial and error. [...] the mouse would be able to optimize city plans without Ariadne's thread [...]."[484]

As seen in chapter three, this collapse, both literal and figurative, of the virtual and urban worlds is not, or rather should not be, such a clean operation. The model of urban planning that informs the architectural structures of the virtual world are plans for cities that largely do not exist: Le Corbusier's perfect cities of light and complete personal freedom are nowhere to be found. The analogy of Ariadne and Daedalus' labyrinth is interesting here as the entire premise of the myth is that the labyrinth functions as a trap, to which some know the key. That is not the model of chaotic urbanism, though repetition can make any space more knowable. Daedalus' labyrinth is, indeed, closer to the entirely subjective, non-naturally occurring, mines of data that comprise the Internet: artificially-constructed; clearly designed, etc. There is no "landscape" of data through which the Information Superhighway cuts; all is sanctioned and surveilled information, or what has been deemed information by a relatively select few.

So then what gets left behind from the more episodic nature of the non-linear shift from urbanism to virtuality? Why, for instance, are so many virtual practices described via a "real" analogue of physical (rather than intellectual, emotional, imaginative, etc.) motion? Almost all of our colloquial language concerning the Internet is decidedly borrowed; it is interesting to think that our one unique verb of virtual activity, "to google," could be roughly translated as "to ask a question to which there is a known answer." And yet, this form of knowledge-acquisition as data-retrieval is fundamentally at odds with the governing metaphors of "seeking" or "searching" to explain modes of online behavior. Such thinking is a repetition of a thematic I have returned to repeatedly, but

[483]Kittler, F. "The City is a Medium". *New Literature History*, Vol. 27, No. 4 (1996), p. 718.
[484]Ibid.

mostly to do with ancient Rome, and the emergence of "empire" through the changing meanings of existing words and practices. Indeed, the phenomena—empire and virtuality—not only share the feature of having come into being via a parasitic relationship with existing concepts and practices, but by using known concepts and practices (their "hosts" in this metaphor), they both expand themselves into something that is startlingly other. And in the case of virtuality, its host-concept is often urbanism and cities, both of which are growths from the "*ur*-parasite" of empire, itself accretive of prior concepts and practices of land, knowledge, and power.

Despite the conservativism of both its engineering—the necessarily recursive nature of data retrieval—and its cognitive and architectural modeling—this entrenched habit of looking at the past as a model for the present and future, what Ken Hillis et. al. refer to as that "pre-Enlightenment belief that the past is always the best teacher"—the Internet has long been triumphed as a revolutionary force in a wide swath of media. In many instances, this revolution is a fairly straightforward one in that the Internet has "revolutionized notions of space and time." While this is completely true in that electronic communication has replaced measurements of distance with those of ever-shorter measurements of time, a corresponding revolution in terms of what this might mean for attending power structures has not occurred. As Paul Virilio and others have argued, it is now the quickest who are the most powerful. If anything, this increasing rapidity has instead more-deeply entrenched existing forms of power, a fact evidenced nowhere better than in the mysterious world of finance and high frequency trading. Here, computer-generated algorithms predict and enact trades at volumes and speeds humanly impossible. Here, too, the language surrounding this consolidation of wealth is unnerving; financiers "speculate," not in the philosophical/scientific sense of forming hypotheses about an unknown, but instead as a literalized and monitized aspect of global capitalism, often buying and selling "futures," the contract between two parties for an exchange at some point.[485]

Particularly in Western media coverage, much of the impetus for and possibility of that flurry of popular uprisings in the Middle East known as Arab Spring was credited to the Internet, the so-called Facebook or Twitter Revolution. No longer was the Internet itself a revolutionary space in the sense of introducing David Mitchell's "city of bits," but certain platforms and applications made available by it somehow "fostered revolution." But this is a troubling idea, above and beyond the ways in which it degrades the necessity of individual and communal action in the offline world. As Miriyam Aouragh says, information exchange is always crucial for both military strategy and resistance, and "one simply seizes on the best communication alternative available in his or her time."[486] As she elaborates,

> The geographic power of Tahrir, via Madrid and Barcelona, then reaching the Occupy movement (covering more than nine hundred cities) in the United States in less than one month, is therefore significant. In other words, when the parameters of political change are grounded and confrontational, we should actually question the very premise of wanting to

[485]cf. in particular Frederic Jameson's Avenali lecture "The Aesthetics of Singularity". Berkeley, February 28, 2012.

[486]Aouragh, Miriyam. "Framing the Internet in the Arab Revolutions: Myth Meets Modernity". *Cinema Journal*, Vol. 52, No. 1, Fall 2012, p. 148.

> bypass material-geographic features in discussions about the Internet helping to overcome time and place challenges. If a social media community is about being together alone, than being off-line comes down to being commonly together; it is in this dynamic that people experience directly the "praxis" of revolution.[487]

Not only do these desires to "bypass material-geographic features" elide the centrality of offline behavior and action, so too does it fetishize the Internet tools that seem to make geography irrelevant. But as Aouragh succinctly points out, none of the American companies behind these tools are in any way politically neutral, let alone revolutionarily-disposed:

> The overwhelming prominence of Facebook and Twitter as agents of change thus whitewashes corporate capitalism and colonial practices. Corporate complicity has long been clear in Palestine, and it provides a good antidote to the celebratory discourse. Microsoft openly supported the Israeli army during Ariel Sharon's war on the Occupied Palestinian Territories, with militaristic slogans on huge billboards [...], and Israeli intelligence uses Facebook to trace Palestinian activists and to monitor people who want to visit the Occupied Territories (in order to refuse them entry). The online real-estate agent Google Maps and social-network profile listings may ignore Palestinian sources and localities or just categorize them under "Israel."[488]

I think that this continued discrepancy, or dialectic as Aouragh calls it, dates back to the Internet's beginnings as a Cold War technology embraced by libertarian sympathizers-cum-engineers, in which there seems to be a jarring difference between the "space" and its inhabitants. Added to this, however, is what Castells, in the conclusion to his trilogy on the information age, calls the new world of a digital society:

> A few, decisive features of this new world have been identified [...]. The information technology revolution induced the information of informationalism, as the material foundation of a new society. Under informationalism, the generation of wealth, the exercise of power, and the creation of cultural codes came to depend on the technological capacity of societies and individuals, with information technology as the core of its capacity. Information technology became the indispensable tool for the effective implementation of processes of socio-economic restructuring. Particularly important was its role in allowing the development of networking as a dynamic, self-expanding form of organization of human activity. This prevailing, networking logic transforms all domains of social and economic life.[489]

But transforms it how? Castells seems to make the same mistake as many other, far more conservative, critics when he fails to establish just what it means that this informationalism can in no way provide the "material foundation of a new society." Information, and this new world, are distinctly disembodied and non-material, one step closer to Marx's famous statement concerning the bourgeoisie's constant revolutionizing of the instruments of production: "All that is solid melts into air. [...] The need of a constantly expanding market for its products chases the bourgeoisie over the entire surface of the globe. It must nestle everywhere, settle everywhere, establish connexions everywhere."[490] Indeed, this last is an accurate description of Castells' new society, this

[487]Aouragh. p. 149.
[488]Ibid. p. 152.
[489]Castells, Manuel. *End of Millennium.* Oxford: Blackwell Publishers Ltd, 1998, pp. 356-7.
[490]Marx. *Manifesto of the Communist Party.*

constantly-expanding market with information now as its core commodity rather than tangible goods. In other words, this is not something brand new or revolutionary, but instead a continuation and consolidation of old power structures, what current Marxists call late capitalism.

But if I have stringently avoided the language of Marx in this work up until now, it is because I am not interested in the only possible redemption in the Marxist ontology, that of the proletariat uprising, workers uniting. The worker, in the information age, is increasingly obfuscated (itself another condition of late capitalism) and hidden, and I am far more interested in the moment before the workers unite, in which a different landscape opens up, becomes believable and viable, a brand new way of seeing the world. This possibility was, I think, briefly afforded by technology, which is a distinctly un-Marxist sentiment. Though I have been undoubtedly informed by Marx's sense of historical repetition, I want to regain something of seemingly little interest to Marxists, and that is the capacity and necessity of the imagination in dreaming of alternatives.

Regaining or finding anew such possibilities has informed my interest in trying to figure out, in some sense, what people were doing at those moments in which new forms of political and social power were coming into being: Richardson's "mental wallpaper" of the early Roman empire; different interpretations of the novel under British imperialism; and the early Internet memories of myself and others. In the introduction to *Internet Dreams*, published by MIT Press in 1997, Mark Stefik argues, somewhat simplistically, that "because metaphors can guide our imagination about a new invention, they influence what it *can be* even before it exists. The metaphors we use suggest ideas and we absorb them so quickly that we seldom even notice the metaphor, making much of our understanding completely unconscious."[491] Through these inherently imperial metaphors of space, exploration, and movement, the Internet has undoubtedly, perhaps irreversibly, become imaginatively confined to yet another space of empire, and, inevitably, of capital.

Throughout these chapters, however, I have tried to examine different works of literature, not as somehow free from or different than imperial space—to do so would be to fetishize literature both as somehow other than its means of production, as well as an escape from them—but as offering new perspectives, new landscapes, different imaginative possibilities within these spaces. Though this is certainly a subsidiary of the benignly specious argument that in art is the salvation of the world, I do think that there is something unique to the novel in regards to this issues of imagination and possibility. Building upon Georg Lukács' assertion that in the novel there is "the form of transcendental homelessness" and that "the novel is at the same time the only art form which includes time among its constitutive principles,"[492] Benjamin writes that

> The novel is significant, therefore, not because it presents someone else's fate to us, perhaps didactically, but because this stranger's fate by virtue of the flame which consumes it yields us the warmth which we never draw from out own fates. What draws the reader to the novel is the hope of warming his shivering life with a death he reads about.[493]

[491]Stefik, Mark. *Internet Dreams: Archetypes, Myths, and Metaphors*. Cambridge: The MIT Press, 1997, p. xvi.
[492]Benjamin. *Illuminations*. Translated by Harry Zohn. New York: Schocken Books, 1969, p. 99.
[493]Ibid. p. 101.

This not-quite-empathic transfer of energy or emotion that the novel enables, then, is unique to this particular art form not just in terms of the ways in which it both contains within and exists in time (think of not only the passage of time within a novel, but so too your own passing of time while reading it, both of which temporal aspects were central to Woolf's (and Proust's) novels), but also in that the novel deals centrally with human fate, a topic of recurring interest to Benjamin.

In Benjamin's writing, fate is the overarching idea to which many of his recurring topics are subsidiary: a moment lived through (*Erlebnis*); the repetition of labor; and a whole host of figures, perhaps most prominently, the gambler. Opposed to this entire genus of fate is that of chance, under whose far more magical umbrella fall those central ideas of: weighted experience (*Erfahrung*); the singularity of a wish; and other figures, among them the most famous Benjamin player of all, the flâneur. Not all of these categorizations are self-evident, however, and I want to dedicate a little space to understanding these divisions. In "On Some Motifs in Baudelaire," Benjamin writes that

> The earlier in life one makes a wish, the greater one's chance that it will be fulfilled. The further a wish reaches out in time, the greater the hopes for its fulfillment. But it is experience that accompanies one to the far reaches of time, that fills and divides time. Thus a wish fulfilled is the crowing of experience. In folk symbolism, distance in space can take the place of distance in time; that is why the shooting star, which plunges into the infinite distance of space, has become the symbol of a fulfilled wish. The ivory ball which rolled into the *next* compartment, the *next* card which lies on top are the very antithesis of a falling star. [...] The starting all over again is the regulative idea of the game, as it is of work for wages.[494]

Somewhat counter-intuitively, then, to gamble is the opposite of to wish, as the former action, for Benjamin, depends upon the bettor relying on all conditions remaining constant and predictable: gambling is, in other words, a conservative action. A wish, however, can only be granted, or realized as granted, through the passage of time: "a wish," he writes, "is a kind of experience,"[495] in the distinct sense of *Erfahrung*. And not only is the gambler a conservative figure of fate, his next of kin is the wage laborer, another actor for whom not only is there the dependence upon continuation of conditions, but "gambling even contains the workman's gesture that is produced by the automatic operation, for there can be no game without the quick movement of the hand by which the stake is put down or a card is picked up. The jolt in the movement of a machine is like the so-called *coup* in a game of chance."[496]

This connection between the conditioned rapidity of the gambler's motions and those of the worker has become nowhere more evident than, again, in the world of finance and virtual capital. The evidence of this claim is everywhere, from the rapid, massive valuations of people and companies via practices such as initial public offerings, to the equally sudden and complete collapse of fortunes. So fully has finance at this level become a form of betting that the language of the latter informs the former, in the hedge funds whose job is to offset potential gains or losses, and in those who analyze

[494] *Illuminations*. p. 179.
[495] *Arcades*. p. 179.
[496] *Illuminations*. p. 177.

the risk, or odds, of any possible transaction. Thus has gambling become the model for economic exchange in late capitalism. And while this is not a novel point, Benjamin's insistence that gambling is a fated action, and not an occurrence of chance, makes the whole proposition more interesting. Just like the adventurer of online search engines whose queries must always loop him into the past, the gambler is also a figure whose interaction with the future is inherently based upon the past. To more fully combine all of these issues, the question then becomes not only how to or who gets to make a wish in the digital age, but what can or should one wish for?

For Benjamin, the figure associated with chance, with weighted experience, and with wishing, is the flâneur, the type created by Paris, the man for whom the city is the landscape of pure life, the man for whom "the city splits [...] into its two dialectical poles. It opens around him as a landscape, even as it closes around him as a room."[497] The flâneur's relationship with the city is one of intimacy, even of quasi-mysticism/myth: "the street conducts the flâneur into a vanished time. For him, every street is precipitous. It leads downward—if not to the mythical Mothers, then into a past that can be all the more spellbinding because it is not his own, not private."[498] The flâneur walks through the city as though through a living, breathing palimpsest:

> That anamnestic intoxication in which the flâneur goes about the city not only feeds on the sensory data taking shape before his eyes but often possesses itself of abstract knowledge—indeed, of dead facts—as something experienced and lived through. [...] Wouldn't he, then, have necessarily felt the steep slope behind the church of Notre Dame de Lorette rise all the more insistently under his soles if he realized: here, at one time, after Paris had gotten its first omnibuses, the *cheval de renfort* was harnessed to the coach to reinforce the two other horses.[499]

This rising to the present some feeling or sentiment of the past—captured in its most internal and physical sense in the word "anamnestic"—is the basis of Benjamin's entire *Passagen-Werk*, the foundation of historical materialism, the "telescoping of the past through the present"[500] through which Benjamin will offer a "literary montage. I needn't *say* anything. Merely show."[501] These images that Benjamin is able to show us are what he famously refers to as "dialectics at a standstill":

> It's not that what is past casts its light on what is present, or what is present its light on what is past; rather, image is that wherein what has been comes together in a flash with the now to form a constellation. In other words, image is dialectics at a standstill. For while the relation of the present to the past is a purely temporal, continuous one, the relation of what-has-been to the now is dialectical: is not progression but image, suddenly emergent.[502]

Thus, perhaps one possible wish in the digital age is to not only imagine a space free of empire, but to be granted the ability, like Benjamin, to if not capture an altogether different constellation, then to recognize one as such. And it is the historian, Benjamin

[497] *Illuminations*. p. 417.
[498] *Arcades*. p. 416.
[499] Ibid. p. 417.
[500] p. 471.
[501] p. 460.
[502] p. 462.

argues, who is capable of reading this dialectical image, as if it were "the task of dream interpretation."[503] Perhaps in one of these dialectical flashes, a historian-cum-dream-interpreter will be able to decipher a different meaning and intention in what it is we are doing in the information age. This type of historian can take many forms, from Benjamin himself, to Proust, doing the work of dialectician in awakening, like the historian, to "[unravel] the web and ornaments of forgetting. This is why Proust finally turned his days into nights, devoting all his hours to undisturbed work in his darkened room with artificial illumination, so that none of those intricate arabesques might escape him."[504]

Ghosts

Living by night, shunning the day, allowing for ghosts to enter. The temporality of the ghost, the specter, the apparition, is precisely the temporality of Benjamin's messianism, a temporality in which the future is stripped of its magic, and "every second of time [is] the strait gate through which the Messiah might enter."[505] This is, he argues in "Theses on the Philosophy of History," the time of the historical materialist, who "cannot do without the notion of a present which is not a transition, but in which time stands still and has come to a stop."[506] Social Democracy's failure in fighting Fascism was precisely in misrecognizing this temporality, or its possible cessations; it was an ethos tied to progress, to the redemptive possibilities of the future, nourished by the image of "liberated grandchildren" rather than "enslaved ancestors."[507] But of this material historicism that seeks to explode the continuum, that seeks a new calendar, that "leaves it to others to be drained by the whore called "Once upon a time" in historicism's bordello,"[508] strange vistas open up, "four moons would illuminate the earthly night, the ice would recede from the poles, sea water would no longer be salty, and beasts of prey would do man's bidding."[509]

Such visions come only at night, flashing up in moments of danger: "[h]istorical materialism wishes to retain that image of the past which unexpectedly appears to man singled out by history at moments of danger."[510] Derrida, in *Specters of Marx*, expands somewhat on Benjamin's weak messianism in times of danger, a "messianic destitution, in a spectral logic of inheritance and generations, but a logic turned to the future no less than the past, in a heterogenous and disjointed time."[511] This spectral logic of the present, turned towards the future and the past in equal non-measures, becomes, for Derrida, a *hauntology*, arising out of the disjointed time in which the ghost of Hamlet's father returns to the castle. The appearance of the specter must arouse vigilance:

[503] *Arcades*. N4, 1.
[504] *Illuminations*. p. 202.
[505] Ibid. p. 264.
[506] p. 262.
[507] p. 260.
[508] p. 262.
[509] Benjamin, citing Fourier's visions, *Arcades*, p. 259.
[510] Ibid. p. 255.
[511] Derrida, Jacques. *Specters of Marx: The State of the Debt, the Work of Mourning, & the New International*. Translated by Kamuf, Peggy. New York: Routledge, 1994, p. 181.

> the cadaver is perhaps not as dead, as simply dead as the conjuration tries to delude us into believing. The one who has disappeared appears still to be *there*, and his apparition is not nothing. It does not do nothing. Assuming that the remains can be identified, we know better than ever today that the dead must be able to work. And to cause to work, perhaps more than ever. There is also a mode of production of the phantom, itself a phantomatic mode of production.[512]

This is the work of mourning, made necessary by trauma, about which Jameson says:

> the appearance of the ghost is a non-narrative event, we scarcely know whether it has really happened at all in the first place. It calls, to be sure, for a revision of the past, for the setting in place of a new narrative (in which the king was murdered and the present king was in fact his assassin); but it does so by way of a thoroughgoing reinvention of our sense of the past altogether, in a situation in which only mourning and its peculiar failures and dissatisfactions—or perhaps one had better say, in which melancholia as such—opens a vulnerable space and entry-point through which ghosts might make their appearance.[513]

Hauntology circumscribes those moments in which ontology, "tangible certainty and solidity,"[514] becomes undermined and shaken; these ghosts are "these moments in which the present—and above all our current present, the wealthy, sunny, gleaming world of the postmodern and the end of history, of the new world system of late capitalism—unexpectedly betrays us."[515]

But how to let the ghost in, or, in this "historical moment so immensely 'over-determined',"[516] even possible recognize a ghost as such? Jameson's beautiful proposition of a "wandering signifier capable of keeping any number of conspiratorial futures alive"[517] is one way, dependent on adjusting "the lens of thought in such a way that suddenly we find ourselves focusing, not on the presumed content of the opposition, but rather on the wellnigh material grain of its arguments, an optical readjustment that leads us in new and wholly unexpected directions."[518]

As alluded to in the final chapter, metaphors can participate in this ongoing hesitation between past and future. At their worst, in the sense meant here of reaffirming a "bad ontology," they bolster that sense of tangibility and certainty, assuring us that there is something from the past that will help reveal the present and thus dictate the future. This is absolutely the case for the metaphors examined throughout this project, which have, I've been arguing, help propel the logic and desires of imperialism forever into the future. I could never argue against metaphorical thinking, nor do I think it is possible to ever do so (not think metaphorically, that is). But in a disjointed time, a dark time, when time is "*disarticulated*, dislocated, dislodged, time is run down, on the run and run down, [. . .] *deranged*, both out of order and mad,"[519] we must allow that the past might return differently, not dead, and not not dead. The image of this

[512]Derrida. p. 97.
[513]Jameson. "Marx's Purloined Letter". p. 43.
[514]Ibid. p. 38.
[515]"Marx's Purloined Letter". p. 39.
[516]Montag, Warren. "Spirits Armed and Unarmed: Derrida's *Specters of Marx*" in *Ghostly Demarcations*. p. 81.
[517]"Marx's Purloined Letter". p. 65.
[518]Ibid. pp. 40-1.
[519]Derrida. p. 18.

return that permits a future is, to return to the beginning of this section, best figured by Proust, seeking out his intricate arabesques at night.

All of *In Search of Lost Time* returns to the beginning, to the past, but it looks different now. In the final volume, the narrator literally trips into enchantment, stumbling in the Guermantes' courtyard to avoid a passing car:

> [A]t the chauffeur's shout I had time only to step smartly aside, and as I retreated I could not help tripping up against the unevenly laid paving-stones, behind which was a coach-house. But at the moment when, regaining my balance, I set my foot down on a stone which was slightly lower than the one next to it, all my discouragement vanished in the face of the same happiness that, at different points in my life, had given me the sight of trees I had thought I recognized when taking a drive round Balbec, the sight of the steeples of Martinville, the taste of a madeleine dipped in herb tea, and all the other sensations I have spoken about, and which the last works of Venteuil seemed to me to synthesize.[520]

None of this is to endorse that same conservativism I have been writing against—that the past is the best teacher—but rather that a different kind of historicism, embodied differently—

> It was this notion of embodied time, of past years not being separated from us, that it was now my intention to make such a prominent feature in my work, and it was at that very moment of decision, in the *hôtel* of the Princesse de Guermantes, that I heard the sound of my parents' footsteps as they led M. Swann to the gate, heard the tinkling of the bell, resilient, ferruginous, inexhaustible, shrill and fresh, which told me that M. Swann was gone and that Mama was on her way upstairs, heard the very sounds themselves, heard them even though they were situated so far away in the past[521]—

a historicism embodied differently that can, in fact, open on to a new future, where the Guermantes' Way is finally also the Méséglise Way, and, given the enormous potential of these new technologies, there appears "new kind of trembling or shimmering of the present in which ghosts now seem on the point of walking."[522]

[520]Proust, Marcel. *Finding Time Again*. Translated by Patterson, Ian. New York: Penguin Books, 2002, pp. 174-5.
[521]Ibid. p. 356.
[522]"Marx's Purloined Letter". p. 65.

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