

I Theme Three I

Industrial Policy and Special Economic Zones





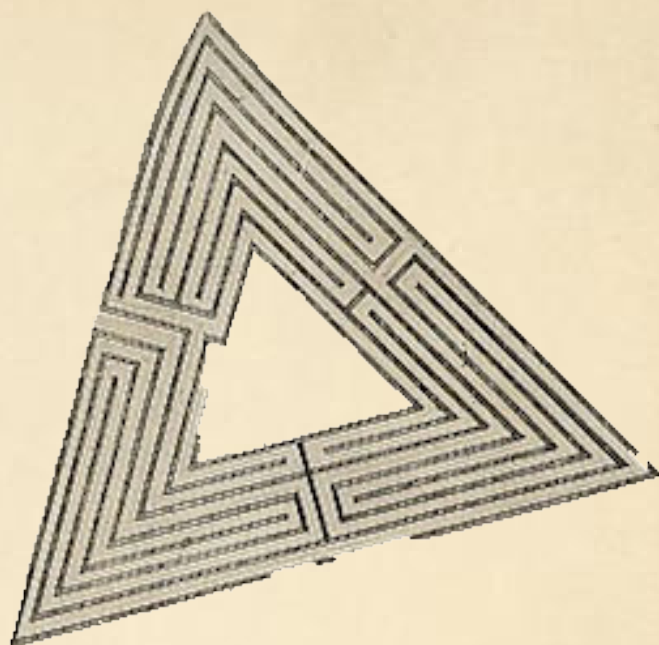
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- Creating legal, regulatory, and planning frameworks;
- Advising and convening key stakeholders including governments, new city developers, and multilateral institutions;
- Influencing the global agenda through research, engagement, and partnerships.



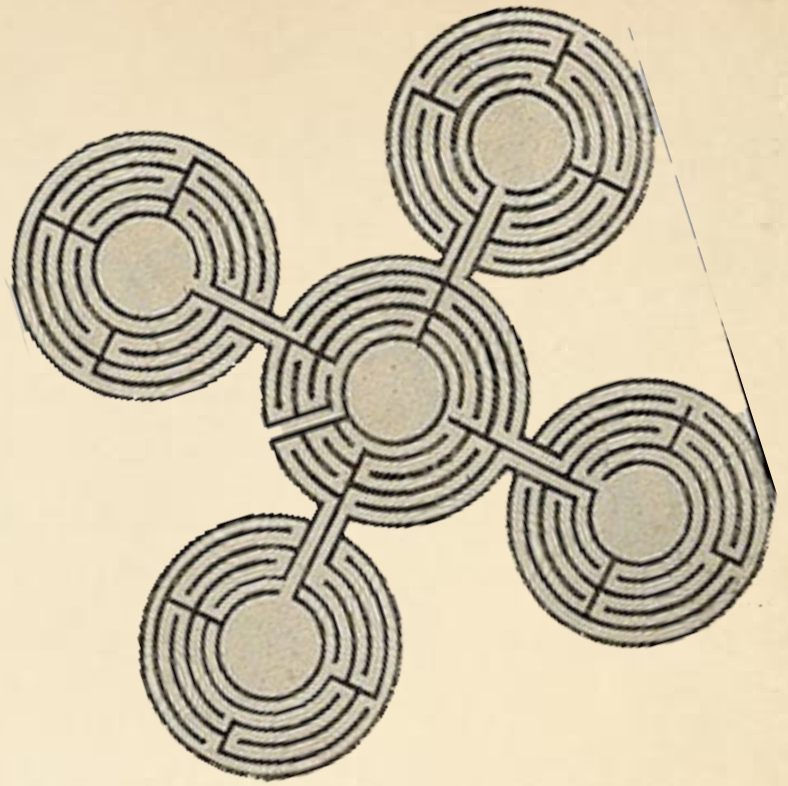


Charter Cities as Industrial Policy

A key benefit of charter cities is their role as industrial centers that drive sustained economic growth. However, even if we grant new cities autonomous governance and a high-capacity administration, their transformation into productive charter cities is not guaranteed. These cities will find it hard to coordinate resources and agglomerate firms. Nascent charter city industries may also struggle to compete with established industrial clusters elsewhere.

These barriers highlight the importance of industrial policy (IP) in designing effective charter cities. In certain contexts, the government will be a necessary

complement to markets for coordinating resources and supporting the formation of productive clusters, which will prove crucial for early charter cities. As argued in our Industrial Strategy Guide (Charter Cities Institute, 2021), governments can support charter cities by providing market information, coordinating factor inputs, building infrastructure, and aligning the city's industries with the nation's political economy. Industrial policy, however, remains controversial among economists and policymakers. In this section, we summarize the intellectual history of IP—the initial skepticism and its recent revival within the macroeconomics policy-making community—and the role it can play in the charter cities agenda.



Can We Pick Winners?

For much of the post-WWII period, governments were motivated to actively guide their markets. This was particularly true for many newly independent post-colonial states eager to rapidly modernize and develop. According to Stiglitz et al. (2013a), these emerging nations were skeptical that the market could achieve development at the level and pace they desired. They faced economies with limited access to capital, low productivity, and weak industries that they feared would be unable to compete against richer countries. These

challenges encouraged an interventionist mindset, in which the state should direct resources to chosen industries in order to drive productivity and to protect them from global competition.

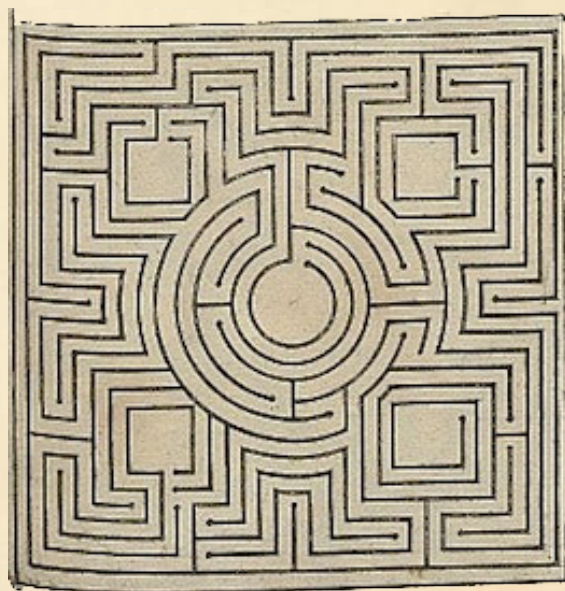
These early intuitions were supported by some theoretical models. Some markets face distortions that prevent the optimal social allocation of resources. When the free market is unable to internalize these failures, the government can step in to coordinate resources more efficiently. Unlike

the market, the government has a stronger incentive to provide public goods and internalize social externalities, and a greater ability to mobilize resources and actors across different economic sectors. The case for government industrial intervention is particularly strong given the importance of knowledge spillovers in economic growth (Rodrik, 2008).

This is not to say that industrial policy is always effective. Given perfect information, top-down industrial policy is relatively straightforward. However, governments often have limited information on its economic constraints and can be vulnerable to corruption. This is particularly true in the developing world, where the state has lower capacity and weaker institutions (Hevia et al., 2017; Kreuger, 1990; Rodrik, 2004a). As such, poor IP can exacerbate market inefficiencies.

Early attempts at industrial policy appeared to have yielded mixed results. With a few exceptions, many countries implementing state-led development stagnated or, in the case of Africa, deindustrialized (Stiglitz et al., 2013a; Lin, 2010). The main issue was that developing countries, in an effort to mimic or leapfrog the development history of Europe, almost unilaterally pursued an IP of capital-intensive industrialization and manufacturing regardless of their comparative advantage (Lin & Monga, 2013). These industries were unable to compete with the West on the open market, and many governments were forced to bankroll failing industries at a great economic cost to society.

Even when governments appeared to have successfully “picked winners,” as was the case for the “East Asian miracles,” critics argue that the counterfactual would have yielded more equal, rapid, and cost-effective social welfare (e.g., Pack & Saggi, 2006). That is to say, even though they appear successful in hindsight, countries like South Korea, China, Singapore, and Taiwan “overpaid” for their development. Krugman (1994) further argues that the Asian industrialization strategy sacrificed current consumption for future consumption—an approach difficult to justify in the West. More generously, the World Bank (1993) recognizes Asia’s success, but attributes it to effective market-oriented policies and a unique regional context rather than successful industrial policies. By the 1980s, economic thinking responded to these criticisms by shifting towards the market-oriented “Washington Consensus” and against state-led industrial policies.





Rethinking the Development State

More recently, however, the pendulum is swinging back towards IP. This is reflected in both new academic interest (Rodrik, 2019; Wade, 2012) and government policies (Klein, 2012). Three complementary trends explain the shift. The first is theoretical. For much of modern history, economists saw industrial policy as a narrow set of tools that directly targeted specific manufacturing

industries—so-called “vertical integration.” In contrast, economy-wide “horizontal” policies (e.g., exchange rate policies, infrastructure projects, education policies, etc) that didn’t specify industrial beneficiaries were seen as “policy neutral” and therefore excluded from the IP banner. Such a narrow definition of IP can be deceptive, since it implies that “neutral” policymaking is possible. In

practice, however, few policies are truly distributed equally to all sectors; as Stiglitz et al. (2013a) argue, "Everything governments do or choose not to do benefits or can be captured by vested interests." Wade (2012) further criticizes earlier theoretical definitions as too dismissive of "soft" industrial policies, such as programs that offer technical assistance or public investments in infrastructure.

For instance, William Nester's (1997) work shows that every major American industry has been partially created by the state: "every nation has industrial policy... whether officials admit the practice or not." Dani Rodrik (2008) also highlights that even policies targeted to non-manufacturing sectors (e.g., agriculture, services, tourism) still "qualify as much as incentives on manufacturers." Governments are always intervening, so rather than dividing policies between "distortionary" and "neutral," we should focus on identifying how to minimize distortionary consequences of policy-making: "the question is not whether any government should use industrial policy but rather how to use industrial policy" (Stiglitz et al., 2013a).

The new model for industrial policy is one that acknowledges the benefits of government intervention, but recognizes the importance of incorporating market signals. Given imperfect public information, effective IP should be treated as a joint process of discovery. The government should leverage markets to identify market distortions and latent comparative advantages (e.g., through public-private partnerships) (Ro-

drik, 2004b; Lin, 2010). Rodrik (2008) further characterizes it as a process to "let losers go" rather than "pick winners." This differs from how IP had been practiced in the past, in which states attempted to "decide" their comparative advantage.

The other driver for IP's newfound popularity is sociological. Specifically, the recent history of the Great Financial Crisis and the ongoing pressures of climate change has convinced many economists of the necessity of some government direction (Stiglitz et al., 2013b). While this shift could be phrased as a purely academic recognition of previously missed market failures, we argue that it also reflects a broader cultural shift that goes beyond pure technocratic considerations.

Lastly, advances in empirical methods and econometric theory have generated more convincing and precise causal estimates of IP. This contrasts with the classical literature, which relied on theory-heavy, single-country studies or weakly identified cross-country correlations (Rodrik, 2019). Nathaniel Lane (2020) discusses three empirical limitations of the first-generation literature. First, early studies did not sufficiently overcome the issue of endogeneity. Industrial policies are enacted in response to poor economic performance, so naive regressions may incorrectly underestimate the positive effects of these policies. While these approaches revealed important historical and descriptive facts, they arguably obscured the detailed

mechanisms of IP. This in turn led to ambiguous findings that were difficult to translate into new policies.

Second, the first-generation works were too coarse, in that they examined relationships using high-level macroeconomic indicators. For instance, they may compare expansive policy packages against aggregated economic indicators. This neglects potential heterogeneous effects on specific economic measures. It also does not provide guidance on how to improve IP or explain why IP appears to have worked in certain contexts. For example, Lee's (1996) evaluation of the relationship between South Korea's IP and productivity from 1963 to 1983 found evidence against IP. However, as Lane highlights, Lee's analysis assumed that South Korea implemented a uniform policy for the 20 year period. In reality, the government radically changed its approach in 1973, and it is possible that the differential effects of the pre-1973 and post-1973 approaches cancelled each other out. A more informative approach may be to look at how specific components of IP affect different sectors of the economy (e.g., unemployment, sectoral manufacturing, wages, health, etc). Kalouptside's (2018) study on Chinese shipbuilding illustrates this nuanced approach. She finds that Chinese subsidies specifically targeted to shipbuilding shifted global production towards China. However, it only marginally decreased domestic shipping costs in China.

Third, early studies were more pessimistic towards the potential for IP to generate

spillovers and Marshallian (agglomeration) externalities. Instead, externalities were assumed to be of minimal benefit at best. This may not be the case, as IP has the potential to both bolster and hinder secondary industries. Liu (2019) for instance, shows that market-correcting IPs in a distorted industry may contract general equilibrium substitute industries, but enhance downstream complementary industries. These findings suggest that there are circumstances in which government promotion of upstream industries leads to measurable spillover benefits (e.g., Hausmann & Klinger, 2006).

Given these issues, Lane (2020) proposes a research agenda that investigates the "microeconomics" of IP. This approach focuses on within-country variation to estimate the causal impact of specific industrial policies on narrowly-defined economic outcomes. In some cases, it may also bring down the unit of analysis to household surveys (e.g., how does a policy affect self-reported household income?). The benefit of this approach is that it lends itself to rigorous quasi-experimental methods, since identifying compelling natural experiments and controlling for contextual confounders are easier on the microeconomic level. The tradeoff, however, is that it is not always clear how narrow economic outcomes (e.g., employment) directly translate into broader national growth. For a review of papers employing this approach, see Lane (2020).



Special Economic Zones

The most relevant type of industrial policy for charter cities is special economic zones (SEZ). SEZs are geographically-defined areas where the host government provides infrastructure support and allows for more business-friendly regulations than exist in the rest of the country. In most cases, this includes lower taxes, expedited customs, streamlined bureaucracies, reliable

utilities, and access to cheaper labor (Alexianu et al., 2018). SEZs were a core component of the industrial strategies of East Asian countries. The classical case is Shenzhen, China, which experienced rapid growth within a relatively short amount of time. By some estimates, China's first four SEZs accounted for 60% of all foreign direct investment (FDI) flows in the first few years

after their establishment (Wang, 2013), and as of 2010, China's SEZs account for 22% of its national GDP (Zeng, 2010). Hoping to emulate these successes, other regions in the Global South are increasingly establishing SEZs of their own.

The rationale for SEZs resemble those of charter cities. Both start from the premise that national institutions, poor governance, and laws are binding economic growth in Global South countries. Rather than reforming the rules in the entire country, it would be less risky and more politically tractable to implement changes in a smaller region first. This allows governments to maintain the protections that existing institutions offer while realizing the benefits of a more liberal regime. In the case of the early Asian SEZs, the primary goal was to implement rules that could incentivize FDI while keeping other protective barriers intact. This FDI would in turn help develop local manufacturing capacity that fits in with an export-oriented growth strategy. Secondary goals included policy experimentation that, if successful, would be rolled out nationally, and spillover generation (FIAS, 2008). In the case of China, SEZs also quarantined more liberal policies from the command economy that predominated in the rest of the country.

Modern SEZs have broadened their scope. Instead of focusing purely on export-oriented industrial manufacturing, some new special economic zones aim to provide well-run domestic areas that build local human capital. For instance, Malaysia's Multimedia Super Corridor provides support for high-tech industries. Similar

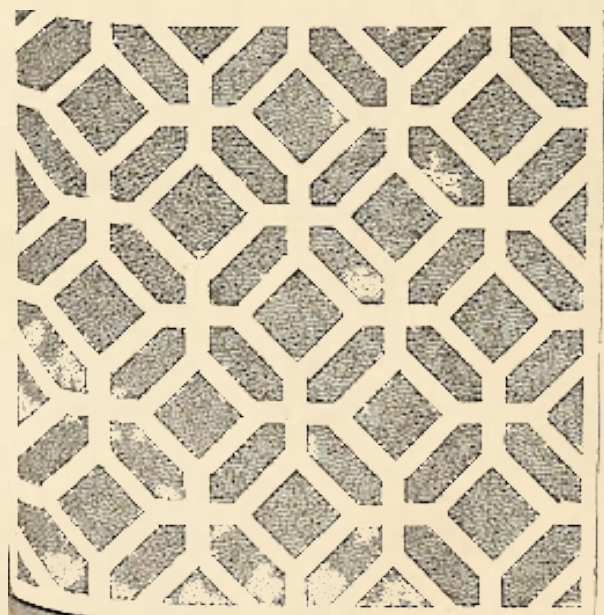
tech-oriented SEZs have been developed in Bangladesh and Nigeria. However, compared to first-generation industrial SEZs, there has been relatively little scholarship on these novel zones. Early observations suggest they are not successful (Kobie, 2016).

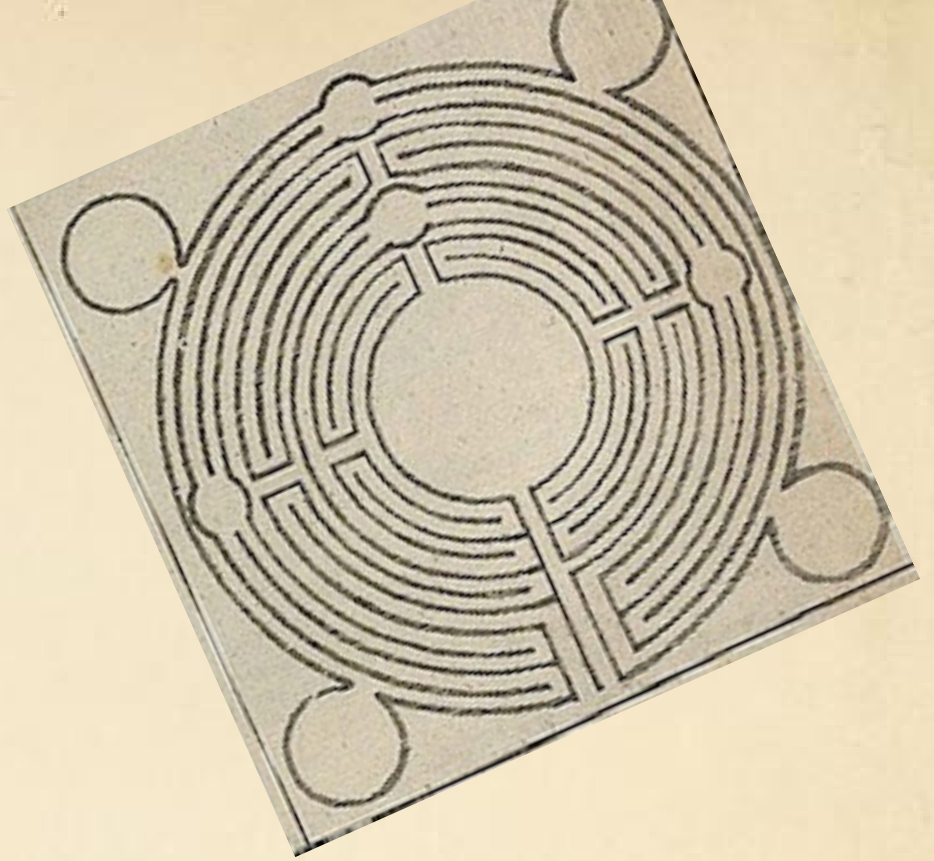
SEZs, however, face many of the same problems as IPs. Despite theoretical justification, the empirical outcomes have been mixed. Farole and Moberg (2014) review research detailing the failure of SEZs in Africa to generate economic growth. Some scholars even call into question the success of SEZs in China, South Korea, and Taiwan, which are held as the quintessential success cases. For instance, China established SEZs along with its broader Open Door Policy. It is difficult to disentangle how much of China's growth can be attributed to its SEZs specifically. It may be that China possessed a latent comparative advantage in manufacturing that was only coincidentally unleashed by establishing manufacturing-oriented special zones (Alexianu et al., 2018). This implies that mimicking the policy in a country without similar economic fundamentals will fail. SEZs may also initiate a "race to the bottom," leading to worse conditions for workers (Dutta, 2009).

The SEZ literature also faces many similar empirical limitations. SEZs are typically selected based on economic conditions, which makes it difficult to evaluate their impact. For instance, if zones are placed in economically-struggling areas, then these zones may appear less effective than

they actually are. Existing studies also fall into the trap of aggregating SEZs into a homogeneous composite variable, then comparing its effects on macroeconomic indicators across countries without accounting for local differences. However, zones are incredibly diverse, both within-country and cross-nationally (e.g., Phiri & Manchishi, 2020), and international comparisons of SEZ performance can obscure insightful relationships. As a country grows its SEZ stock, these zones will also face diminishing marginal returns. That doesn't necessarily mean other countries should not pursue an SEZ strategy of its own, especially if it currently possesses few of them.

For instance, Frick et al. (2019) used a new dataset of global SEZs to compare zone economic activity with that of the host country. While their analysis controls for some SEZ characteristics, it cannot hope to adequately account for all relevant local differences on a global scale. They also aggregate the outcome into a single measure of economic activity captured by nighttime data. This is not to say that such studies aren't informative, but that additional insights may be found if we pursue more granular research. As an example, in an ongoing project, Bassi et al. (forthcoming) are using granular administrative data to look at how Ugandan SEZs affect firm-level outcomes. Likewise, Brussevich (2020) uses a matching technique and household surveys to estimate if Cambodian SEZs create socio-economic spillovers.





Further Research

Charter cities aim to go even further than SEZs. They could be seen as the next-generation of special economic zones or as “Special Economic Zones 2.0” (Bhattacharya & Allen, 2020). Like SEZs, charter cities are motivated to establish well-run and geographically-bounded regions that will draw global resources and build local capacity. If successful, these cities will generate national spillovers and policy learnings that will drive country-level

structural changes. At its core, charter cities include all the benefits of SEZs, including infrastructure support and streamlined economic regulation. However, they also more ambitiously experiment with governance and political institutions. For instance, while SEZs may lower tax rates or provide subsidies, charter cities may also provide more effective courts and open borders.

Given their similarities, we would expect lessons learned from SEZs, and from place-based IPs more broadly, to apply to charter cities. This includes questions on the magnitude of spillovers, the identification of latent comparative advantages, the causal estimation of impacts, and the political economy of elite capture. Charter cities also raise new research questions that the extant IP and SEZ literature has ignored, but which may be answerable using their data. In particular, IP and SEZ studies have focused on their impact on economic outcomes and paid less attention to their effects on political and institutional change. Better understanding the political implications of industrial policy would help us better understand the role charter cities can play in broader governance changes.

Examples of Research Questions:

- How did early East Asian special economic zones affect political structures at both the national and subnational levels?
- Can governments use IP to promote service-based or tech-based industries?
- What characteristics of SEZs are most attractive to businesses and investors?
- Why have East Asian SEZs performed significantly better than African or Indian SEZs?
- What leads some countries to effectively scale up successful policies while others fail?



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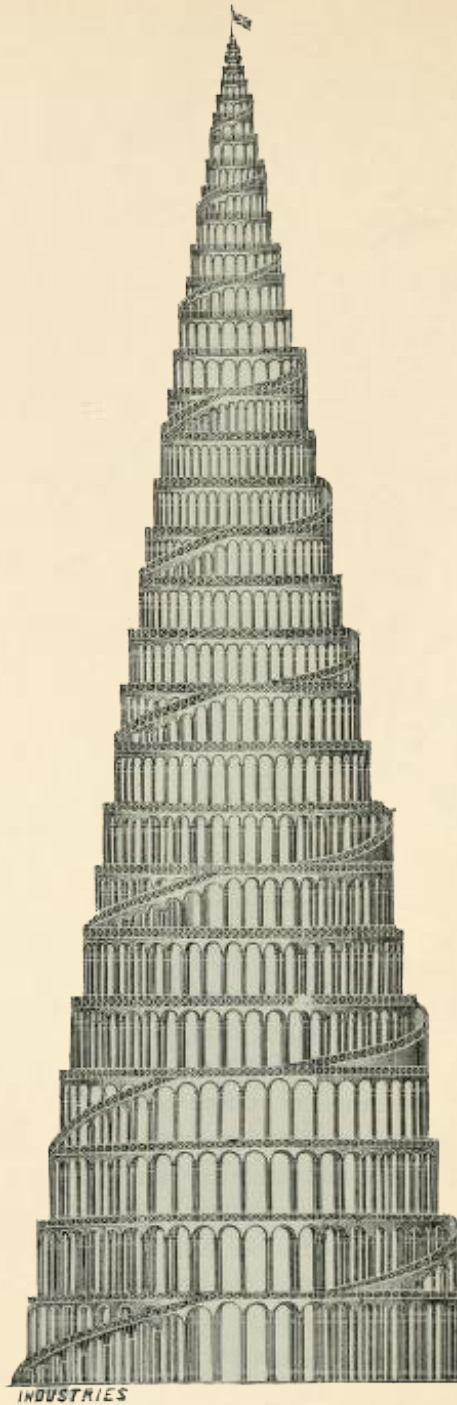
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