The Cultural Environment for Innovation and Entrepreneurship

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Introduction

Starting with the foundational texts of modern social science, the relationship between the cultural environment and entrepreneurship has been a perennial concern. Famously, Max Weber (1920/2013) introduced the Protestant Ethic born in the religious sphere as a critical input into the "mentality" (spirit) of "rational capitalism" in the economic sector. The new orientation toward the (permanent) economic enterprise involved the sober conduct of business, primarily via rational planning with a long view of the future relative to current investments, while also involving the decline and replacement of the irrational, haphazard "adventure capitalism" (1920/2013, p. 155ff)—aimed at pursuing risky, low probability, high-payoff one-off ventures— characterizing previous eras.

While Weber saw the rise of the rational entrepreneur as leading to the significant historical transformations that bequeathed the "iron cage" of modern capitalism, more recent considerations see entrepreneurship and the entrepreneur as operating within the ambit of a modern economy already organized along capitalist lines and subject to endogenous dynamics of both gradual and discontinuous change. The entrepreneur is thus the dynamic actor preventing the contemporary economy from congealing into a suffocating stasis by providing regular infusions of innovation and sometimes even altering the system's trajectory in improbable directions.

Accordingly, Schumpeter (1942) describes the entrepreneur as driven by a desire to innovate, serving as an exogenous—"disruptive" in contemporary parlance—change agent creating discontinuities and radical transformations on what otherwise would be the continuous (and largely conservative) tendencies toward equilibrium in modern (state-managed) capitalism. More recently, and coming from a complementary (Austrian Economics) approach, Kirzner (1997) sees the entrepreneur as a radical change agent who is endowed with a "vision advantage," allowing them to break stable institutional equilibria in the economy. From this perspective, due to their privileged position in the distribution of knowledge in society, the entrepreneur can "see" the potential impact of novel products, services, and linkages where others cannot. While not identical, work on entrepreneurship thus dovetails with work on the origins of novelty and change in the economy, sometimes referred to as "innovation studies" (B. R. Martin, 2016).

The more recent story, therefore, endows the entrepreneur with a very hefty and vital role.

However, as the entrepreneur is conceptualized as a *deus ex machina*, an exogenous agent that seems to come out of nowhere, the question becomes, where do entrepreneurs come from? Even a cursory look at the comparative evidence reveals that rates of entrepreneurship differ across national cases (Dheer, 2017; Zhao et al., 2012). Thus, just like Weber surmised that a significant cultural transformation begat the modern entrepreneur, contemporary analysts hypothesize that different cultural and institutional environments may produce more or less entrepreneurship, perhaps differing crucially among national cases. In what follows, we review some of this work, focusing on the specific *conceptions* of culture they mobilize. We conclude that a lot of this work, while leading to many valuable insights, primarily operates with a somewhat limited idea of the "culture" that is supposed to constitute a given "environment"—what DiMaggio (1997) once referred to as a "latent variable" conception of culture focused on "values." In the concluding section, we provide some alternative recent conceptualizations of culture that have become prevalent in contemporary cultural sociology and note how the study of the effect of the cultural environment on entrepreneurship could benefit from adopting them.

Previous Work on the Cultural Environment of Entrepreneurship

Contemporary scholars have attempted to measure and predict the conditions that produce entrepreneurs as they have sought to explain differing rates of entrepreneurship among ethnic groups or nation-states. Shapero and Sokol (1982)—hereafter SK—assembled an early overview of this subfield by studying environmental effects on entrepreneurship. Early researchers identified two sets of factors influencing entrepreneurship: (1) factors associated with the patterning of social ties into networks, i.e., one's peers and classmates, and (2) *value systems* that support risk-taking, independence and other behaviors associated with entrepreneurship. Increased attention to value systems promoting entrepreneurship coincided with a shift of emphasis from supply-side to demand-side approaches to studying entrepreneurship at the turn of the last century. Supply-side work centers mainly on individual traits leading people to become entrepreneurs (or preventing them from doing so). On the other hand, demand-side research focuses on the context and environment to explain how opportunities are created and whether individuals take advantage of these openings (Thornton, 1999).

From a demand-side perspective, therefore, the primary hypothesis is that some cultural

environments are favorable (and others disfavorable) to the creation of entrepreneurs. Thus, the core scientific challenge is identifying the dimensions of the cultural environment that most matter in spurring entrepreneurship and isolating the relevant causal pathways.[1] SK's main conclusion was that "cultural factors that enter into the formation of entrepreneurial events are most felt through the formation of individual value systems. More specifically, in a social system that places a high value on forming new ventures, more individuals will choose that path …. More diffusely, a social system that places a high value on innovation, risk-taking, and independence is more likely to produce entrepreneurial events than a system with contrasting values." Note that the basic conceptualization of culture (as a "value system") harks back to that which reigned in sociology during the Parsonian functionalist era (McClelland, 1961; Parsons, 1951), a drawback of this type of research on the cultural environment of entrepreneurship to which will return to below.

Licht and Siegel (2005)—hereafter LS—revisited and updated SK's take on culture and entrepreneurship in their article (identically) titled "The Social Dimensions of Entrepreneurship." LS argued for the validity of Shapero and Sokol's claim that societies in which individualist value systems are prevalent produce more entrepreneurial events than in collectivist systems; the basic idea is that individualist values are more likely to align with entrepreneurial traits such as risk-taking, compared to collectivist values. Hofstede's (2001) four cultural value dimensions, namely, individualism-collectivism, uncertainty avoidance, power distance, and masculinity-femininity, have served as a near-universal framework for this research. These studies assert that cultures with high individualism and low uncertainty avoidance possess high entrepreneurship rates. Shane (1995), for instance, provides empirical evidence, using a large sample covering a wide range of national contexts, that individuals who are low in uncertainty avoidance have higher preferences for occupying organizational roles associated with entrepreneurship and innovation.

Nevertheless, LS argue that existing data is not definitive since the Schumpeterian/Kirznerian definition of entrepreneurship as a radical change agent might have a firm root in Western society while being a poor fit in more collectivist societies. LS consider the literature on culture and entrepreneurship as "in a state of flux" without robust causal explanations while noting that research in the intervening years complicated the connection between entrepreneurship and key social

[1] Previous summaries of research on environmental factors of entrepreneurship have addressed both "network" and "cultural" variables. This chapter focuses on culture as a critical environmental feature since network effects on entrepreneurship have burgeoned into a distinct field of study (Hoang & Antoncic, 2003).

dimensions. Notably, studies suffer from the ecological fallacy (drawing individual conclusions from country-averaged data), an ethnocentric focus on "value systems" favored in Anglo-American and European societies—so-called WEIRD countries (Henrich et al., 2010). Widespread reliance on Hofstede's conceptualization of "national culture" was characteristic of most studies in the field, as noted in a landmark review published in 2002 (Hayton et al., 2002) and updated twelve years later (Hayton & Cacciotti, 2013). These authors concluded that while a good chunk of studies had found correlational support linking a country's average score on the value dimensions of individualism, uncertainty acceptance (the opposite of avoidance) and power proximity (the opposite of power distance) are linked to rates of entrepreneurial activity, some of the effects lack temporal robustness (showing up at some times but disappearing in later studies).

Conceptual Limitations of Previous Work

With some notable exceptions, most work examining cultural effects on entrepreneurship and innovation relies on a now outmoded—especially in sociology and organization studies (Giorgi et al., 2015, p. 4ff; Lizardo, 2019; K. Weber & Dacin, 2011)—conception of culture, specifically Hofstede's (2001, p. 9) definition of the concept as "collective programming of the mind that distinguishes the members of one group or category of people from another."[2] Thus, Hayton et al. (2002, p. 33) define culture as "shared values, beliefs, and expected behaviors" or as "the values, beliefs and expected behaviours [sic] that are sufficiently common across people within (or from) a given geographic region as to be considered as shared" (2013, p. 709). Values, in their turn, following the work of Milton Rokeah (1973), Geert Hofstede (2001), and Shalom Schwartz (2014), are defined as (relatively abstract) "conceptions of the desirable" a definition that goes back to Parsons and Kluckhohn. While differing in the details, the basic idea here is that you could differentiate "cultures" (by which the authors mean "groups" of people, usually operationalized as nations or countries) by looking at "shared" values.

For a long time, this empirical program slogged along *assuming* "groups" shared cultures

[2] Not all studies, of course, rely exclusively on Hofstede's conceptualization, nor do they deal exclusively with entrepreneurship broadly defined. Some studies have considered the connections between cultural environments and specific forms of entrepreneurship, such as social entrepreneurship or female entrepreneurship (Hechavarria and Brieger 2022), while other scholars have branched out from Hofstede's framework to explore other conceptualizations of cultural dimensions, such as GLOBE (Canestrino et al. 2020). Recently, researchers have debated between applying Hofstede, Inglehart's postmaterialist values (1977), and Schwartz's (1992, 2009) individual and cultural values theories (Morales et al. 2019).

because you could compute average differences across groups (countries) but never verify if the variance between groups was smaller or larger than the within variance. When analysts checked by fitting a statistical model separating individual and group variance in values (Fischer & Schwartz, 2011), they found (not surprisingly) that countries predicted a meager share of the variance of values across individuals (using aggregated cross-national surveys). There was much more consensus across various values across countries than there was dissensus (except for values signaling "conformity").

Leading the authors to conclude:

> Our results pose challenges for cross-cultural researchers who view culture as a meaning system shared by most members of a group. How can they justify comparing cultures on values that exhibit little within-society consensus or between-society difference? Our findings suggest that the "shared meaning" conception of culture applies at most to the internalized functional value system that regulates individuals' conformity to social norms and expectations. Internalized values that regulate other domains of life and about which there is little within-society consensus do not fit this conception of culture. Other views of the value component of culture may therefore merit more attention (1140).

In a follow-up piece, Schwartz (2014) reiterates that this empirical finding strikes a death knell for approaches that build the sharedness criterion into their conceptual definition of culture. Schwartz also (correctly) points out that this calls into question the use of "group" (usually country) averages to characterize this alleged sharedness, given the fact that it is meager to non-existent, an anti-groupist conclusion that some cultural theorists in sociology had already reached (Sewell, 2005b). Nevertheless, somewhat unexpectedly, Schwartz concludes that while we can reject the notion of culture as *necessarily* shared, "there is no need to abandon the empirical side of this approach" since it is still OK to compute group means to characterize "cultures."

Schwartz does this by proposing a conceptually bizarre and utterly speculative concept of culture (mixing several mutually inconsistent claims). According to Schwartz (2014), "societal" culture is (1) "a latent, hypothetical construct" that "cannot be observed directly but can be inferred from its manifestations," (2) "external to the individual…[culture] is not a psychological variable. The normative value system that is the core of societal culture influences the minds of individuals, but it is not located in their minds" (3) and is "expressed in the functioning of societal institutions, in their organization, practices, and policies" (6). In other words, it appears that the only way to "save" the idea of culture as a shared value system characteristic of different groups from empirical disconfirmation is to make a radical move in cultural ontology. Ultimately, Schwartz recommends adopting a

non-empirical, purely externalist (non-cognitive) conception of culture. At the same time, culture is considered to have powers of (efficient?) causation on individual cognition, just to keep the *methodological* procedure that is licensed by the sharedness criterion; technically, regressing right back to the failed Kluckhohn/Parsons stance of mid-twentieth century functionalism.

Beyond the Conceptual Limitations of Previous Work

During the last two decades or so, sociologists have moved beyond the underlying definition of culture typical of Hofstede and Schwartz, emphasizing sharedness, cultural "programming," and a collectivist—or "groupist" see Brubaker (2002)—conception of cultural systems standing above and beyond individuals, on two fronts. On the one hand, we have conceptions of culture that go beyond conceptualizing culture as an integrated, coherent "whole" and toward a dynamic, fragmented conception of culture usable by people in everyday dealings and interactions. On the other hand, there has been a general critique of the idea that culture is necessarily tied to action when it takes the shape of "values" conceptualized as abstract conceptions of the desirable. We discuss each in turn.

The non-empirical conception of culture developed by Schwartz, given the empirical failure of the groupist criterion, was discussed (and rejected) by DiMaggio (1997) in an influential review essay on "Culture and Cognition." In that essay, DiMaggio referred to Schwartz-style conceptualizations of culture as "the latent variable view" (p. 267), which thinks of culture as "a tight network of a few abstract central themes and their more concrete entailments." DiMaggio went on to contrast the latent variable conception to the toolkit conception of culture derived from the work of Ann Swidler (1986), emphasizing fragmentation, dynamicity, and lack of coherence. This latter view is also more attuned to analyzing group *heterogeneity* in cultural orientations rather than shared homogeneity.

In an important and influential statement on culture, written about the same time as DiMaggio, social science historian William Sewell (2005a, p. 152ff) also criticized the "latent variable" conceptualization. For Sewell, thinking of culture as an overly integrated system plays all too well into "groupist" conceptions of culture, in which different human collectives are thought of as having their own distinct "culture" (e.g., American culture, Navajo culture, French culture, and the like). This approach has trouble linking culture to practice, struggles to account for cultural change, and cannot explain cultural conflict and the contestation of meanings. As such, Sewell recommends that we move to a conceptualization of culture that emphasizes contradiction, loose integration,

contestation, and weak boundaries (Sewell, 2005a, p. 170ff).

Post-functionalist theorists in sociology agree with Sewell in emphasizing fragmentation and non-systematicity as fundamental ontic properties of culture (J. L. Martin, 2010; Swidler, 2001a, 2001b). The view of culture as "fragmented," "contradictory," "weakly bounded," and "contested" has become the de-facto standard in contemporary discussions in cognitive sociology (e.g., DiMaggio, 1997) and "post-cultural" anthropology (e.g., Hannerz, 1992), the latter of whom have thoroughly rejected the "myth of cultural integration" (Archer, 1985)inherited from their forebears. The core observation is that individuals do not seem to possess the highly coherent, overly complex, and elaborately structured codes, ideologies, or value systems that the classical theory expects they should carry (Swidler, 2001a, pp. 29–30).

Instead, as the sociologist Ann Swidler (2001a) has pointed out, much of the coherence of culture is offloaded outside the social agent and into the external world of established institutional arrangements, objectified cultural codes, and extant relational commitments. That is, "cultural meanings are organized and brought to bear at the collective and social, not the individual level" (Swidler, 2008, p. 279) and gain whatever minimal coherence they can obtain "out of our minds" (Swidler, 2000), via concrete contextual mechanisms-instead of "inside" them. Swidler and Sewell converge on this point. For the latter, cultural coherence, to the extent that it exists, is not an inherent ontic property of culture but can only be obtained when culture grinds against external mechanisms (e.g., "powerful institutional nodes") in charge of producing cultural order and thus "organizing difference" (Sewell, 2005a, p. 172).[3]

Another way sociological conceptions of culture have moved beyond Hofstede/Schwartz is by *expanding* the notion of culture to include a much more comprehensive range of elements beyond values. Martin and Lembo (2020) provide a wide-ranging critique, focusing on why the (abstract) notion of "values" cannot perform the (motivational) job that values theorists need them to perform. While not endorsing all aspects of their various arguments, we do agree that values are measured in ways incompatible (using fairly broad items, which are then averaged at the group or national level) from how they should operate at the individual level if values are entered as a direct calculus in the

[3] As noted by Thornton et al. (2011, p. 109ff), scholarly work in the most recent trend on the effects of the cultural environment on entrepreneurship and innovation has begun to draw on this post-Parsonian (and post-Hofstede/Schwartz) approach, emphasizing complexity, diversity, and heterogeneity (both temporal and spatial) in institutional logics and orders as key to predicting entrepreneurial outcomes.

motivation of action (e.g., dictating specific behavior patterns, like opening up your own business). This is the difference between what Martin and Lembo refer to as "elevated values" (standing above and beyond people, like in Schwartz's non-empirical conception of culture) and "submerged values" operating as internalized and motivational imperatives, that people may not even have clear conscious access to. The analytic problem is that values go from being "conceptions of the desirable," (which could or could not be shared) to (necessarily) "shared/collective conceptions of the desirable," to "subjectively valid shared/collective conceptions of the desirable" at the individual level. As we saw above, the sharing is assumed rather than empirically verified. Accordingly, the last two are too strong to be empirically defensible or conceptually usable.

Furthermore, it is unclear why *values* are the cultural elements that should be the primary focus. After all, as DiMaggio noted in his famous review, contemporary culture scholars in sociology focus on a whole panoply of cultural elements, from practices to beliefs, schemata, discourses, narratives, and the like, located at different analytic levels. There is no *ex-ante* reason why these cultural elements cannot be as (or perhaps more) essential than "values" in generating cross-group and cross-societal differences in rates of innovation and entrepreneurship.

[Figure 1 About Here]

A Disaggregated Conception of Culture for Work on Entrepreneurship and Innovation

How do we deal with these conceptual issues? We suggest that work on the links between the cultural environment, entrepreneurship, and innovation should move away from a "holistic" or entitative conception of culture as some sort of shared collective "programming" or unobservable construct (a literal latent variable) and toward the *disaggregated* and *heterogeneous* conception of culture that has become the de facto model in cultural sociology and cognitive anthropology in the last three decades (Giorgi et al., 2015). One such model, outlined in detail by Lizardo (2017), is shown in Figure 1.[4] While space considerations prevent us from going into detail about every aspect of this classification, we can point to some of the most important implications for future work on cultural

[4] Lizardo (2019) also discusses how this model applies to organizational and institutional theory more generally. See Giorgi et al. (2015) for an alternative approach that also emphasizes the heterogeneity of cultural elements.

effects on entrepreneurship.

Note that, at the very least, we must distinguish culture as it appears in the (external) world from culture as it is—internalized—in persons. In the figure, these are referred to as "public" and "personal" culture, but the particular labels are less important than the overall analytic distinction (Strauss & Quinn, 1997).[5] We have seen that the work considered above, inspired by the Hofstede/Schwartz framework, *elides* this distinction analytically, essentially using some kind of aggregate (e.g., averaged) distribution of cultural orientations measured at the level of persons to construct indices of the "cultural environment" which are then correlated with downstream indicators of entrepreneurial activity or economic innovation. However, as Figure 1 shows, the (public) cultural environment is not an aggregate of personal cultural elements but composed of specific *kinds* of elements—inclusive of codes, frames, established narratives, categories, and so on (Giorgi et al., 2015)—not reducible to the personal ones; otherwise, we could not establish whether one affects the other in a systematic way (or fails to do so).

Measurement techniques then need to be calibrated to capture culture at the environmental level rather than relying on traditional approaches (e.g., questionnaires in surveys) designed to measure personal culture as *proxies* for measuring public culture. Recent work in "measuring culture" in sociology distinguishes between these different loci of measurement (Mohr et al., 2020) while providing strategies for tapping the "cultural environment" directly using methods from computational social science, linguistics, and related fields (Bail, 2014; Hannigan et al., 2022). Recent work in the "vocabularies" tradition in organization theory can also be leveraged to measure culture at the environmental or even meso-level to come up with direct traces of public culture that could be correlated with entrepreneurial and innovation outcomes down the line (Loewenstein et al., 2012; Thornton & Ocasio, 1999). The same goes for work emphasizing established narrative templates actors draw upon on to frame entrepreneurial projects for key stakeholders and construct entrepreneurial identities (Glynn & Lounsbury, n.d. this volume).

Recent work by Thornton & Klyver (2019) demonstrates why the level of public culture—one of the critical locus for institutionalization (Lizardo, 2019)—must be kept distinct from the level of internalization of personal cultural ideals, values, and beliefs in the study of entrepreneurship, if only

[5] We can also make finer-grained "level" distinctions by identifying "meso-level" culture in particular organizations and fields (Rinaldo & Guhin, 2022).

because by *not* distinguishing them, it becomes impossible to assess their interplay. Using a cross-national, multiyear survey dataset, Thornton & Klyver show that, as would be expected, at the personal level, the more people internalized self-efficacious perceptions of their capacity as entrepreneurs, the more likely they were to espouse declarative intentions to start their own business. But significantly, the strength of this link at the personal level depends on the extent to which the ideal of the entrepreneur as a high-status trajectory worthy of respect was institutionalized in the public cultural environment, with *more* public institutionalization resulting in a looser link between internalized self-efficacy and entrepreneurial intentions—a classic loose coupling effect in environments featuring high-levels of institutionalization and legitimacy of the entrepreneurial ideal.

Second, the distinction at the personal level between culture that can be "espoused" and thus measured using questionnaires and interviews (referred to as "declarative culture") and that which *cannot* be measured using these approaches, referred to as *non-declarative* culture, needs to be taken seriously by culture and entrepreneurship scholars, since, at the individual level, it is likely that the latter is more causally efficacious in determining most of the outcomes of interest to researchers in entrepreneurship and innovation studies.[6] The Hofstede/Schwartz "values" tradition focuses almost exclusively on such "espoused" declarative elements (Patterson, 2014) but virtually ignores non-declarative skills, practices, and elements encoded in "habitus" (Bourdieu, 1980/1990). Once again, the fact that these are more *challenging* to measure does not mean that they cannot be measured (Miles et al., 2019; Mohr et al., 2020; Schaap et al., 2019).

Importantly, recent work shows that at the individual level, it may be the diversity of cultural elements that the person has internalized (such as particular frames and schemas) that may matter most for whether they are capable of engaging in innovative work (Choi et al., 2023); thus, a focus on heterogeneity, cultural fragmentation, and the distribution of cultural elements in the environment points to different approaches for measuring culture at the personal level that go beyond traditional scaling based on averaged values. Finally, the analytic distinction between public and personal culture (and its different flavors) allows us to ask *multilevel* questions regarding cultural effects on entrepreneurship, analytic distinguishing causal chains that rely mainly on direct "macrolevel"

[6] For a critical take on the causal efficacy of such "espoused" values, see Martin & Lembo (2020); for a defense, see Vaisey (2021).

cultural mechanisms from those operating by activating declarative and non-declarative cultural elements at a lower level of analysis (personal and interactional) as they link to entrepreneurial and innovative action.

Multilevel approaches enable the development of stronger and more generalizable answers to the central investigation of how social, cultural, and economic forces drive entrepreneurship (Botelho et al., 2024). An expanded understanding of culture can help reveal how interactions between individuals and institutional contexts influence entrepreneurial activity and outcomes. Such an approach can better theorize the role of culture internalized in persons harking back to a Schumpeterian tradition without rendering the entrepreneur all-powerful and inexplicable. Finally, diversifying methods of measurement liberates scholars from shared-value frameworks and surveys (Hayton et al., 2002; Hayton & Cacciotti, 2013), allowing them to investigate settings beyond WEIRD nations and test theories that are potentially biased by these well-examined locales (Botelho et al., 2024; Henrich et al., 2010). Entrepreneurship scholars have established an understanding of how declarative culture influences entrepreneurship in certain contexts. Expanding the definition of culture to include non-declarative and public culture and their interactions will help identify mechanisms that link culture and entrepreneurial activity and advance existing theories through empirical testing and refinement.

References

Archer, M. S. (1985). The Myth of Cultural Integration. *The British Journal of Sociology*, *36*(3), 333–353.

Bail, C. A. (2014). The cultural environment: measuring culture with big data. *Theory and Society*, *43*(3-4), 465–482.

Botelho, T. L., Gulati, R., & Sorenson, O. (2024). The Sociology of Entrepreneurship Revisited. *Annual Review of Sociology*. https://doi.org/10.1146/annurev-soc-030222-014049

Bourdieu, P. (1990). *The logic of practice* (R. Nice (trans.)). Stanford University Press. (Original work published 1980)

Brubaker, R. (2002). Ethnicity without groups. *European Journal of Sociology*, *43*(02), 163–189.

Choi, Y., Ingram, P., & Han, S. W. (2023). Cultural Breadth and Embeddedness: The Individual Adoption of

Organizational Culture as a Determinant of Creativity. *Administrative Science Quarterly*, *68*(2), 429–464.

Dheer, R. J. S. (2017). Cross-national differences in entrepreneurial activity: role of culture and institutional factors. *Small Business Economics*, *48*(4), 813–842.

DiMaggio, P. J. (1997). Culture and Cognition. *Annual Review of Sociology*, *23*, 263–287.

Fischer, R., & Schwartz, S. (2011). Whence Differences in Value Priorities?: Individual, Cultural, or Artifactual Sources. *Journal of Cross-Cultural Psychology*, *42*(7), 1127–1144.

Giorgi, S., Lockwood, C., & Glynn, M. A. (2015). The Many Faces of Culture: Making Sense of 30 Years of Research on Culture in Organization Studies. *The Academy of Management Annals*, *9*(1), 1–54.

Glynn, M. A., & Lounsbury, M. (n.d.). Narratives of Cultural Entrepreneurship. In O. Sorenson & P. H. Thornton (Eds.), *Handbook of Sociology of Innovation and Entrepreneurship*. De Gruyter.

Hannerz, U. (1992). *Cultural Complexity: Studies in the Social Organization of Meaning*. Columbia University Press.

Hannigan, T. R., Briggs, A. R., Valadao, R., Seidel, M.-D. L., & Jennings, P. D. (2022). A new tool for policymakers: Mapping cultural possibilities in an emerging AI entrepreneurial ecosystem. *Research Policy*, *51*(9), 104315.

Hayton, J. C., & Cacciotti, G. (2013). Is there an entrepreneurial culture? A review of empirical research. *Entrepreneurship & Regional Development*, *25*(9-10), 708–731.

Hayton, J. C., George, G., & Zahra, S. A. (2002). National culture and entrepreneurship: A review of behavioral research. *Entrepreneurship Theory and Practice*, *26*(4), 33–52.

Henrich, J., Heine, S. J., & Norenzayan, A. (2010, June 30). *Most people are not WEIRD*. Nature Publishing Group UK. https://doi.org/10.1038/466029a

Hoang, H., & Antoncic, B. (2003). Network-based research in entrepreneurship: A critical review. *Journal of Business Venturing*, *18*(2), 165–187.

Hofstede, G. (2001). *Culture's Consequences: Comparing Values, Behaviors, Institutions and Organizations Across Nations*. SAGE Publications.

Kirzner, I. M. (1997). Entrepreneurial Discovery and the Competitive Market Process: An Austrian Approach. *Journal of Economic Literature*, *35*(1), 60–85.

Licht, A. N., & Siegel, J. I. (2005). *The Social Dimensions of Entrepreneurship*. https://papers.ssrn.com/abstract=824844

Lizardo, O. (2017). Improving Cultural Analysis: Considering Personal Culture in its Declarative and Nondeclarative Modes. *American Sociological Review*, *82*(1), 88–115.

Lizardo, O. (2019). Specifying the "what" and separating the "how": Doings, sayings, codes, and artifacts as the building blocks of institutions. *Research in the Sociology of Organizations*, *65A*, 217–234.

Loewenstein, J., Ocasio, W., & Jones, C. (2012). Vocabularies and Vocabulary Structure: A New Approach Linking Categories, Practices, and Institutions. *The Academy of Management Annals*, *6*(1), 41–86.

Martin, B. R. (2016). Twenty challenges for innovation studies. *Science & Public Policy*, *43*(3), 432–450.

Martin, J. L. (2010). Life's a beach but you're an ant, and other unwelcome news for the sociology of culture. *Poetics* , *38*(2), 229–244.

McClelland, D. C. (1961). *Achieving Society*. Simon and Schuster.

Miles, A., Charron-Chénier, R., & Schleifer, C. (2019). Measuring Automatic Cognition: Advancing Dual-Process Research in Sociology. *American Sociological Review*, *84*(2), 308–333.

Mohr, J. W., Bail, C. A., Frye, M., Lena, J. C., Lizardo, O., McDonnell, T. E., Mische, A., Tavory, I., & Wherry, F. F. (2020). *Measuring Culture*. Columbia University Press.

Parsons, T. (1951). *The Social System*. The Free Press.

Patterson, O. (2014). Making Sense of Culture. *Annual Review of Sociology*, *40*(1), 1–30.

Rinaldo, R., & Guhin, J. (2022). How and Why Interviews Work: Ethnographic Interviews and Meso-level Public Culture. *Sociological Methods & Research*, *51*(1), 34–67.

Rokeach, M. (1973). *The nature of human values*. Free Press.

Schaap, J., van der Waal, J., & de Koster, W. (2019). Improving Empirical Scrutiny of the Habitus: A Plea for Incorporating Implicit Association Tests in Sociological Research. *Sociology*, *53*(5), 967–976.

Schwartz, S. H. (2014). Rethinking the Concept and Measurement of Societal Culture in Light of Empirical Findings. *Journal of Cross-Cultural Psychology*, *45*(1), 5–13.

Sewell, W. H., Jr. (2005a). *Logics of History: Social Theory and Social Transformation*. University of Chicago Press.

Sewell, W. H., Jr. (2005b). The concept (s) of culture. *Practicing History: New Directions in Historical Writing after the Linguistic Turn*, 76–95.

Shane, S. (1995). Uncertainty Avoidance and the Preference for Innovation Championing Roles. *Journal of International Business Studies*, *26*(1), 47–68.

Shapero, A., & Sokol, L. (1982). *The Social Dimensions of Entrepreneurship*. https://papers.ssrn.com/abstract=1497759

Strauss, C., & Quinn, N. (1997). *A cognitive theory of cultural meaning* (Vol. 9). Cambridge University Press.

Swidler, A. (2000). Out of our minds: where cognition and culture intersect. *Sociology of Culture Mini-Conference Session on Culture and Cognition, George Mason University, August*, *11*.

Swidler, A. (2001a). *Talk of love: How culture matters*. University of Chicago Press.

Swidler, A. (2001b). What anchors cultural practices. In K. K. Cetina, T. R. Schatzki, & E. von Savigny (Eds.), *The Practice Turn in Contemporary Theory* (pp. 74–92). Routledge.

Swidler, A. (2008). Comment on Stephen Vaisey's "Socrates, Skinner, and Aristotle: Three ways of thinking about culture in action." *Sociological Forum*, *23*(3), 614–618.

Thornton, P. H. (1999). The sociology of entrepreneurship. *Annual Review of Sociology*, *25*(1), 19–46.

Thornton, P. H., & Klyver, K. (2019). Who is more likely to walk the talk? The symbolic management of entrepreneurial intentions by gender and work status. *Innovation (North Sydney, N.S.W.)*, *21*(1), 102–127.

Thornton, P. H., & Ocasio, W. (1999). Institutional Logics and the Historical Contingency of Power in Organizations: Executive Succession in the Higher Education Publishing Industry, 1958–1990. In *American Journal of Sociology* (Vol. 105, Issue 3, pp. 801–843). https://doi.org/10.1086/210361

Thornton, P. H., Ribeiro-Soriano, D., & Urbano, D. (2011). Socio-cultural factors and entrepreneurial activity: An overview. *International Small Business Journal*, *29*(2), 105–118.

Vaisey, S. (2021). Welcome to the real world: Escaping the sociology of culture and cognition. *Sociological Forum* , *36*(S1), 1297–1315.

Weber, K., & Dacin, M. T. (2011). The Cultural Construction of Organizational Life: Introduction to the Special Issue. *Organization Science*, *22*(2), 287–298.

Weber, M. (2013). *The Protestant Ethic and the Spirit of Capitalism* (S. Kalberg (trans.)). Routledge. (Original work published 1920)

Zhao, X., Li, H., & Rauch, A. (2012). Cross-Country Differences in Entrepreneurial Activity: The Role of Cultural Practice and National Wealth. *Frontiers of Business Research in China*, *6*(4), 447–474.

Botelho, Tristan L., Ranjay Gulati, and Olav Sorenson. 2024. "The Sociology of Entrepreneurship Revisited." *Annual Review of Sociology*. doi: 10.1146/annurev-soc-030222-014049.

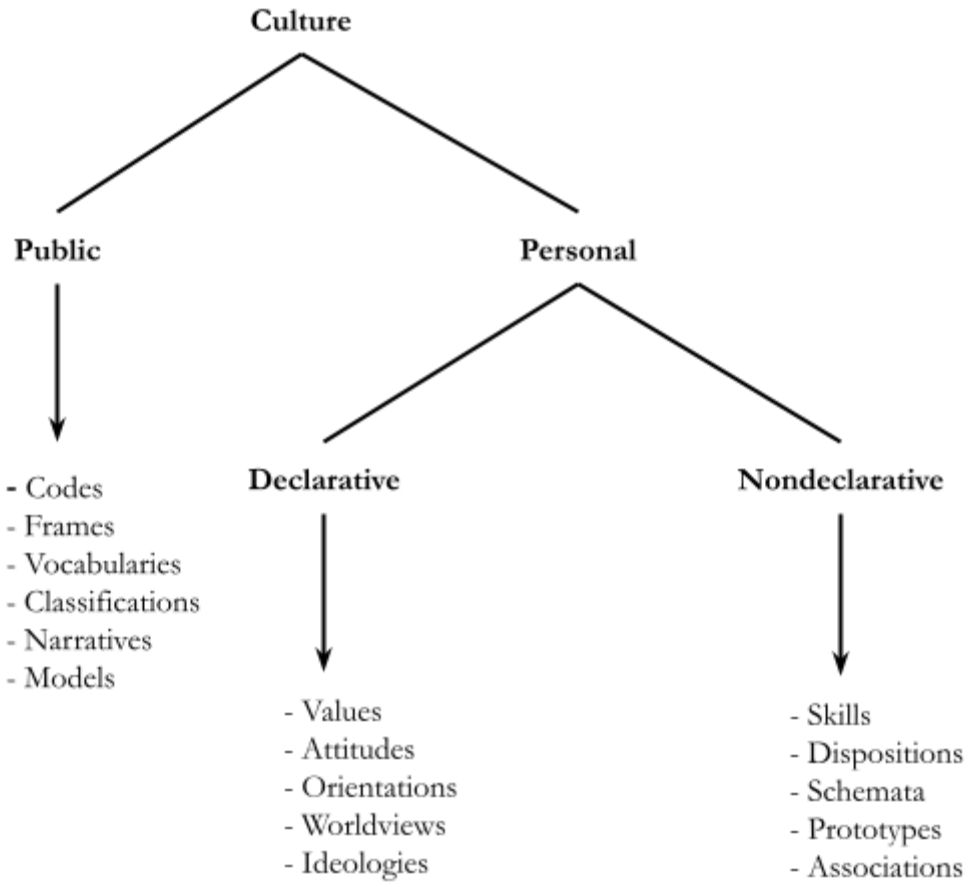

Figure 1. A branching diagram depicting the distinction between declarative, non-declarative, and public culture (Lizardo, 2017).