

# Academic excellence and community relevance: Can we have it all?

Public Understanding of Science  
2022, Vol. 31(3) 314–322  
© The Author(s) 2022  
Article reuse guidelines:  
sagepub.com/journals-permissions  
DOI: 10.1177/09636625221087321  
journals.sagepub.com/home/pus



**Ayelet Shavit and Yael Silver**

Tel-Hai College and Technion, Israel

## Abstract

Academic excellence, in its original meaning (areté), combines intellectual and moral merit, grounded in one's relevance to and impact on one's world. However, in the current era of limited time and high-stake competition, social relevance is pre-assumed to trade-off against scientific distinction. This paper is one long argument against such excellence-relevance trade-off. We first briefly describe the history of academic 'excellence' and argue it does not support the current use of the term nor vindicate a necessary community-academia trade-off. Second, we review the current game theory framework for addressing community-academia interactions. We argue that due to its pre-assumed trade-off, it often entrenches an unjust hierarchy between science and society, even when motivated by honest goodwill and ending with reciprocal "win-win" benefits. Given these difficulties, in the third section we present a practical alternative, a case study of "Town Square Academia", which operates in peripheral and heterogenic communities. We review its success and failures in the attempt to combine excellence with relevance, and argue for expanding such attempts. To conclude, given the importance of bridging the gap between science and society, even if scientific excellence only sometimes manages to unite with social and environmental relevance, it should all ways be attempted before rolled out.

## Keywords

academia, accessibility, areté, communality, community, cooperation, dialog, engagement, excellence, partnership, relevance.

"All men want, not something to do with, but something to do, or rather something to be," wrote Thoreau (2008 [1859], p. 20), swiftly revealing the interlock of active engagement ("to do") with identity ("someone to be"). The 21st century academia aims to implement Thoreau's insight, flagging "community impact" in university missions and grant criteria. Yet one cannot miss the critical overtones among many faculty members experiencing a crushing trade-off between the university's goals of social relevance and research excellence. The sad result is mediocre levels of social engagement among faculty (Anzivino et al., 2021)—and relatively low levels of trust in science

---

## Corresponding author:

Ayelet Shavit, Tel Hai College, Tel Hai 12208 and Technion- Israel Institute of Technology, Haifa, 3200003, Israel.  
Email: ashavit@telhai.ac.il

among the general public, particularly in lower socioeconomic communities (Wellcome Global Monitor 2018, 2019).<sup>1</sup> Various factors are used for explaining the problem of trust, yet in this article our main focus is justice. We argue that the commonly pre-assumed excellence–relevance trade-off, even if originating from the best intentions and resulting in a win–win situation, overall further entrenches an unjustified hierarchy between science and society. Is there an alternative? In a nutshell, academic excellence need not be separated from social relevance nor be in conflict with it. *Excellence is relevance.*<sup>2</sup>

To justify this short and somewhat cryptic aphorism, we will first briefly describe the history of academic “excellence” (areté) and argue that it does not support the current use of the term nor vindicate a necessary community-academia trade-off. Second, we will briefly review and criticize the game model schema, its pre-assumed trade-off, and its resulting “win–win” and “balanced middle ground” for the community–academia trade-off. Third, as one could still argue that our theoretical and ethical criticism holds no ground as long as no practical alternative is presented, we shall do exactly that, utilizing a decade-long project named “Town Square Academia” (TSA).

This case study will demonstrate that resisting social and environmental injustice sometimes becomes more efficient *because* of its academic backing, and that academic papers, grants, and prizes are every so often received *because* of their social relevance. By “social relevance” we mean a fitting answer of someone or some group to the question: “How can I be relevant to you?” or “what common goals do we have?” in the context of community–academia interaction. To conclude, given the importance of bridging the gap between science and society, and given the growing anti-science sentiments we seem to see around us today, we argue that even if excellence only *sometimes* implies relevance, it should *all ways* be attempted before rolled out.

## I. A brief historical background

The modern term of academic excellence was founded upon the Greek word areté, meaning a holistic combination of intellectual and moral merit, grounded in one’s successful impact on one’s surroundings (Guthrie, 1969). Pythagoras, Socrates, or Plato did not separate “knowledge” and “truth” from polis “politics” (Chalozin-Dovrat, in press). On the contrary, as far as we know the first two died, and the third nearly died, explicitly due to their pro-activity for political change (Guthrie, 1962: 175, 1969: 413–414). In fact, the classical quest for knowledge was not only an intellectual endeavor but an active *way of life* (Hadót, 1995).

It was the Middle Ages monasteries that so reshaped the term. It was their political needs that raised the lone monk as an epitome of a wise man (Hadót, 1995); while Plato’s Academy was a *community*, as were the first European universities in Bologna, Paris, or Oxford in the 11th–13th centuries. Teaching, researching, and social solidarity were not separated in early university life: “The university” had no buildings or classes of its own, but, like other medieval guilds, was an autonomous professional collective, sustaining itself through inner and outer solidarity, especially during times of conflict with city authorities over its freedom of study (Schwartz, in press). Unfortunately, this ecological and pro-active meaning of areté is now typically assumed to be in a trade-off relation with academic excellence.

Change began in the enlightened 19th century. Standardization and differentiation in the service of the state took off with Napoleon’s new administration, Kant’s (1992 [1798]) “Conflict” between the practical and theoretical faculties, Humboldt’s “Bildung” structure for educating future citizens in different faculties in the hope of experiencing different research perspectives (Feldhay and Frumer, in press), and a diverse group of scholars articulating epistemic and methodological boundaries between the social sciences, natural sciences, and the humanities (Snyder, 2011).

The enlightened new standards of academic professionalization also meant an increased emphasis on detachment, both in the sense of emotional detachment that helps one to suppress one's own subjectivity (Daston and Galison, 2007) and in the sense of disciplinary detachment. Distinction, separation, and then detachment or alienation gradually took place both within and outside the campus (which by now was a physically separate entity). No longer could one freely move across all these different faculties in the liberal 19th and 20th century academia, nor across the boundaries of lay-academic knowledge-cultures, as Socrates or Newton could. However, it was also clear for the liberal scholar that one still needs the "other" for one's own excellence. Indeed, Liberal Arts Colleges train physicists' with courses in the humanities, and zoological fieldwork require local trappers' advise (Shavit and Griesemer, 2018). Mixed boundaries, as in "interdisciplinarity" research, became a practical and epistemic problem yet also a signifier of brilliance; hence, until today it labels highly competitive research grants, research centers, or academic programs.

However, what one finds today in standard academia is not its classical liberal version. Since the 1980s and moreover since the 1990s, liberal academic excellence is under a severe neoliberal subversion, at least according to critical education (Giroux, 2014) and critical history (Schwartz, in press) studies.

Neoliberalism perceives the university as yet another commodity provider, no different than any farm, factory, or big pharma company (Feldhay and Frumer, in press). The academia's liberal role as a repository of true and detached knowledge or its classical role as a community of true and proactive knowledge, are both suspected. Since neoliberalism perceives all institutions as an aggregate of self-motivated individuals, the motivation and trustworthiness of the individual academic expert is no different than any other interest-driven expert, and hence should be regularly monitored (Goldreich and Shemesh, in press).

The monitoring procedure is a quantifiable and content-neutral measurement (e.g. publication number, Impact Factor (IF), H-Index, G-Index). Goldreich and Shemesh explain that by no mistake all these neutral numeric measurements similarly apply to all academic disciplines and activities, although they hold inner inconsistencies. It allows the administrator to replace the academic expert in measuring quality and to remain indifferent to built-in measurement biases. Therefore, at least in this context, "indifference" is the opposite of "neutrality." It actively strengthens the few large cultures of knowledge and marginalizes all "others," without a transparent disclosure. Moreover, a single number constitutes a single center-periphery hierarchy, which deepens the community-academia gap rather than builds a bridge across it.

Journals with high IF typically require large-scale, generalizable, and replicable studies, while local communities are, by definition, nonuniversal and inherently different (Shavit and Ellison, 2021). Therefore, they are not a preferred target of study. In effect, given one's limited time, it would practically mean one *must* choose between academic excellence and local relevance; either to avoid one or the other altogether or to separate the two and clearly prioritize one until tenure is reached.

Yet, the literature on the history of the university clearly contests such a trade-off dichotomy. Tracking the meanings of academic "excellence" across time turned out to be highly contingent upon particular settings—rather than unavoidable—dynamically changing—rather than stable—and with only a few short decades—rather than centuries—in its current neoliberal meaning. Most importantly, it revealed more than one way for becoming an excellent scholar, and in that sense, noticing history increase one's sense of freedom (Ben-Menahem, 1994). For those drawn to the origin of academic excellence, its moment of birth, they should notice it has nothing to do with neutral measurements or emotional detachment but with enthusiastic, pro-active, and politically involved *areté*.

## 2. History aside, any other escape from the excellence–relevance trade-off?

In the current competitive and self-regulatory academic atmosphere, given its structure, publication payoffs metrics and contending strategies of excellence versus relevance, a game theory framework Morrow (2020), with its pre-assumed zero-sum gain dichotomous two-player setting, seem well suited.

Among such games, the renowned prisoner dilemma,<sup>3</sup> with its undesirable stable state solution, seem especially fit here. Under this model, rational laypeople and academics who seek mutual cooperative engagement are nonetheless driven to mutual distancing, hence few partnerships between academics and community members are expected, if at all. In other words, one would expect a rational scientist aspiring for academic excellence not to engage in research or talks with local communities; and for a community member honoring her local heritage and knowledge to maintain their distance from scientific programs designed to “enlighten” and “educate” her. For the former, an open-ended dialogue with lay people cannot guarantee a replicable published product, and since only such products receive payoffs under the current scientific structure, it will be irrational for her to devote time and effort to the local community. Similarly, it also seems irrational for a community member who aims for an immediate policy change, to set aside the amount of time needed for producing the standardized results required by academic journals. Even in the rare case that she does, she would be wise not to expect her local knowledge and expertise to be academically recognized.<sup>4</sup>

The prisoner dilemma perspective, either formally modeled or informally assumed (“it is what it is”), may indeed praise community engagement as morally worthy, yet expect it to last only if a large and persistent effort is devoted to it (O’Connor, 2019).

The problem with the above, similar to many other intuitive examples for the prisoner dilemma game (O’Connor, 2019), lies in its lack of fit to the facts. Studies show that academics who publish more also obtain higher levels of public engagement (Anzivino et al., 2021; Besley et al., 2013; Entradas et al., 2019; Jensen, 2011). The evidence—not only historical but also current—shows that the presumed excellence–relevance trade-off is wrong. In fact, it looks more like a win–win situation.

One possible explanation to this finding is that, as long as individual costs remains very low—for example, via rare and short meetings—incorporated into the self-monitoring system—for example, via standard yearly reports on academic progress—and without an expected high or transformative impact, then individual risk and uncertainty is greatly reduced. Therefore, a game with a lowered bar also predicts a new stable state for community–academic interaction. Short and sporadic lectures could continue to increase indefinitely (until their frequency generates a burden difficult to sustain). Instead of the frustrating trade-off, a win–win situation emerges, with an aim for a balanced middle-ground among competing needs.

However, although the concept of win–win is everywhere to be found in social interactions, a practically new buzzword (Shavit, 2021), we argue *against* sufficing with win–win of middle-ground balance for academia–community interaction. Although for some important contexts it is well suited and beneficial, as a default strategy it could be harmful. First, because it complies—rather than resists—the unequal and unjust underlying framing for scientists communicating with locals, while it is exactly this setting that constitutes the science–community rift in the first place (Kabat, 2017). In these one-time lectures, typically the local community only has? “questions,” “needs,” or “problems,” and if locals own important knowledge at all, it is mostly about their specific needs and problems; a clear case of epistemic injustice (Shavit et al., 2017), which is “a wrong done to someone specifically in their capacity as a knower” (Fricker, 2007, p. 1).

Second, because this mode of interaction makes a dialogue between the academic and her audience more difficult to obtain (Shavit et al., 2017), not only does it reduce a feeling of connectedness but it also hampers the goal of increasing critical thought through the communication of science. In practice, during such meetings the scientist mostly talks and community members mostly listen. At the end, 10 minutes are typically set aside for clarification questions, all directed to the lecturer and not to each other. The lecturer typically talks without any peer rivals, hence a monolith, consensus-oriented, and fastened description of science typically emerges. Even if personal bonding and epistemic agreement indeed emerge at the end of the talk, such a fictional description of science is both factually and educationally wrong. It portrays a narrow, idealized, and non-critical picture of science. In the long-run, this consensual meaning of “science” is both self-harming—since it does not encourage inner self-criticism (Beatty, 2017)—and it justifies public distrust in science (Kabat, 2017): both in the positivistic tradition, which saw, ever since Socrates, critical thought as *the* cornerstone of science (Popper, 2014), and the critical education tradition, which described academic discourse as non-critically constructed—a tool to reproduce hegemonic ideas and thus justify economic, racial, and gendered stratification (Apple and Weis, 1986; Freire, 1970).

Third, as long as an unbearable gap remains, between repeated public declarations of the academia’s unwavering commitment for a fully open dialogue and for closing socioeconomic gaps, while its underlining hierarchal practice of marginalizing local knowledge remains firmly intact, many community members, perhaps rightly so, suspect the trustworthiness of science, even when they fully trust the honest intentions of the individual academics they meet. To conclude this part, celebrating a “win–win” solution and a “balanced” middle-ground compromise may actually deepen and widen the rift between science and society.

### 3. Is there another way?

All the above notwithstanding, one still seems justified in arguing that our world is far from perfect, hence it is far better to take one small imperfect step after the other than to wait until the perfect storm appears. We could not agree more. Popular science articles, especially when digitized, are relevant for reducing inequality suffered by minorities, especially for events with a life-threatening potential (Zoubi et al., 2021), and sometimes citizen science projects,<sup>5</sup> even if led exclusively by scientists, for end in policy change and substantial community empowerment. Our complaint is not with these blissful projects, nor with those promoting “Public Understanding of Science” as a whole, but with those framing such activities as *sufficient* and the *default* strategy for satisfying “the third mission” of the academia.

A follow-up criticism we need to face, given science communication imperfection, is the claim that a feasible alternative framing does not practically exist. Our answer presents such an actual case named TSA, not as the only or leading way for science–society interaction but as one example that could inspire the seek and cultivation of additional examples, which no doubt already exists yet is so far not noticed.

TSA emerged in the outskirts of the small city of Kiryat Shmona, near the sources of the Jordan River and during the midst of the 2011 “tent protest” and global social justice movement. The objective was to galvanize a socially relevant, heterogenic, and excellent academia that would use different experts—both local and academic—for co-involving local groups in a critical and proactive dialogue over knowledge, with an aim to resist the existing power structure in Israeli culture.

A heterogenic dialogue allows the knowledge of each participant to be heard, and thus reduces epistemic injustice, strengthen the positioning of one’s identity and increases the trust

among different individuals and identity-groups joining the discourse. In practice, 10 courses and 5 long-term community science action groups take place each year, most of them co-built and co-led through an ongoing dialogue between volunteering authorities in their field—both academic and local—and freely attended<sup>6</sup> by over 500 citizens per year, holding different, often conflicting, worldviews—Jews and Arabs, religious and secular, progressive and conservative—and meeting in various locations outside the campus walls—hummus joints, pubs, schools, community centers, forests, and streams—as part of an activist learning community. The curriculum is built and designed with and by TSA's participants, therefore it is also relevant for them.

After 10 years, we are still approached by too many volunteering teachers. So far, the project itself produced 14 published peer-review papers and book chapters, 4 national prizes of academic excellence (awarded to 1 academic and 3 local experts), 4 policy changes on a regional scale, and over US\$1 million recruited for community activities, scholarships, dissemination of local knowledge, and technical equipment. After a decade in an extremely peripheral region, it seems safe to say that an alternative framing is practically feasible, and could work also in less challenging circumstances.

Not only the results matter. The working process is the project's focus. A dialogic process requires initial differences; hence it is crucial that the teachers not all deliver a homogeneous message. Therefore, there are typically several expert lecturers: either educated in different types of expertise (academic alongside non-academic) or within the same discipline but holding different—often conflicting—views. Learners are even more-so heterogenic, since a course never opens only for a single group, even if its content is ethnic-based, disability-based, religious-based, or other. Not all courses and long-term action groups succeed in obtaining all their goals, but they all aim for this alternative process framing.

The research topics addressed by TSA are very wide, ranging from abstract riddles in climate modeling or evolution, to more practical environmental trade-offs regarding water quality or agriculture, to the underrepresentation of certain groups from the modern history of Israel. Each topic is led by different experts and may change according to different local interests, yet nearly all those involved share a critical, proactive, and dialogic research perspective.

An example for a critical and heterogeneous dialogue about science that strengthens public trust is the course: "Genetic Engineering in Plants." The leading lecturer had a lifelong career in studying and producing genetically modified (GM) crops, yet during the pre-course dialog, it was argued that some course attendants probably hold opposing, critical views. Together, we decided to foreground the opposing arguments rather than "educate the masses." The lecturer was happy for this opportunity, and the course's ad was designed accordingly. Indeed, a heterogeneous audience showed up, and she added course meetings so that ample time would be dedicated to critical discussion within each meeting. Responding to critical questions, after each meeting the lecturer uploaded articles holding opposing interpretations of the data. The final meeting was dedicated to a public debate with her colleague, a respectable scientist and personal friend, which ecologically criticizes the use of GM food. Using this method, the leading lecturer's scientific expertise did not silence opposing lay people and did not lead her audience to a narrow dichotomy about GM. Although unanimous agreement over GM was not obtained, such a collective agreement was reached regarding the value of the discussion, and mutual respect was clearly obtained among rival parties, each one including the other in a common collective effort to find truth.

In this and in other examples, instead of an individualistic goal of defeating my rival, instead of the game theory schema that separate academic from community interests, and then target, for each side apart, its individual loss (trade-off) gain (win-win) or middle-ground unhappy compromise, an alternative collectivist perspective is employed here (Griesemer, 2018). It holds dynamic boundaries rather than fixed ones, and instead of a single hierarchy of knowledge most heterogenic



participants are assumed to hold, if actually asked, valuable knowledge to donate to a common pool.

To conclude, given the constitutive role of the concepts touched upon in this essay (e.g. “academia,” “community engagement,” “dialog,” and “excellence”), and given the relatively low levels of trust in science even while science communication has increased in its quantity and quality; then it seems an argument can be made for an alternative, more communal, framing for science and society interaction. Specifically, we argue that the current demand for academic excellence ought to include a demand for a critical and heterogenic dialog that is relevant to the community. Such a dialog aims to decrease academic–community hierarchies, and such a bridging process, expected under a communal perspective of excellence, is also expected to increase public trust in science. We argue that, given all the above, it is enough that communal academic projects—such as TSA—*sometimes* practically succeed in combining excellence with relevance, that such a communal farming should *always* be attempted before being ruled out.

### Acknowledgements

We thank the many local and academic experts that volunteer in “Town Square Academia,” the local communities, research intuitions—Tel Hai College and MIGAL—and state authorities—ICHE (Israel Council of Higher Education) and LKDSA (Lake Kinneret Drainage & Stream authority)—that support this project. It is a truly humbling and gratifying experience to be part of such a generous collective.

### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

### Notes

1. The degree of public trust in science is far from uniform across the globe, yet it holds a strong and opposite correlation with income and scientific education. In a large global survey, participants marked their level of trust in scientists on a scale of low, mediocre and high. 54% of all participants reported a mediocre level of trust, on a range of 42%–64%. In South America, Southern and Central Africa over 30% (!) reported on a low level of trust, while in central Asia, Northern Europe, Australia, and New Zealand over 30% reported a high level of trust (Wellcome Global Monitor 2018, 2019).
2. We thank Denial Milo for this framing, and for sharing his plentitude of original and insightful ideas.
3. In this model, two players aiming to maximize their individual payoff by mutual/reciprocal cooperation are led to a worse result of mutual defection. This occurs because—in a single meeting or a series of meeting with a known endpoint—the payoff metrics for each strategy is  $T(\text{temptation}) > R(\text{reciprocity}) > D(\text{defection}) > S(\text{sucker})$ . Since both players are rational and aware of all options, both will be tempted (T), thus both will defect (D) regardless of the other player’s strategy. It keeps them in an undesirable Evolutionary Steady State (E.S.S.). That is, any new strategy is expected to lose against the status quo strategy, or at least not win. Even if the new strategy begins to spread in the population, it will lose when played against itself, and thus remain a minority (Maynard Smith, 1982).
4. Typically, in the mayor’s office or the published paper, holders of academic titles are disproportionately visible, while community members are not part of the discussion. At best, a warm and very general “thank you” will address community members, without specific names or knowledge.
5. For a useful review of the concepts: civic science, citizen volunteer, scientist-activist, and citizen=activist see: Clark and Illman (2001)
6. The price of attending a full course is US\$8 and long-term community science activities are free.

### Reference

Anzivino M, Ceravolo FA and Rostan M (2021) The two dimensions of Italian academics’ public engagement. *Higher Education* 82(1): 107–125.

- Apple MW and Weis L (1986) Seeing education relationally: The stratification of culture and people in the sociology of school knowledge. *Journal of Education* 168(1): 7–34.
- Beatty J (2017) Consensus: Sometimes it doesn't add up. In: Gissis S, Lamm E and Shavit A (eds) *Landscapes of Collectivity in the Life Sciences*. Cambridge, MA: MIT Press, pp. 179–199.
- Ben-Menahem Y (1994) History as therapy: Michel Foucault. *Iyyun: The Jerusalem Philosophical Quarterly* 43: 123–143.
- Besley JC, Oh SH and Nisbet M (2013) Predicting scientists' participation in public life. *Public Understanding of Science* 22(8): 971–987.
- Chalozin-Dovrat L (in press) The material from which the truth is made: The academia in Israel, between idea and reality. In: Chalozin-Dovrat L, Schwartz Y, Kotef H, Chowers E and Lavie S (eds) *Think About the University*. Tel Aviv, Israel: Tel Aviv University Press.
- Clark F and Illman DL (2001) Dimensions of civic science: Introductory essay. *Science Communication* 23(1): 5–27.
- Daston L and Galison P (2007) *Objectivity*. Cambridge, MA: MIT Press.
- Entradas M, Marcelino J, Bauer MW and Lewenstein B (2019) Public communication by climate scientists: What, with whom and why? *Climatic Change* 154(1): 69–85.
- Feldhay R and Frumer N (in press) From knowledge to commodity and from autonomy to government: The neoliberal university in the world and in Israel. In: Chalozin-Dovrat L, Schwartz Y, Kotef H, Chowers E and Lavie S (eds) *Think About the University*. Tel Aviv, Israel: Tel Aviv University Press.
- Freire P (1970) Cultural action and conscientization. *Harvard Educational Review* 40(3): 452–477.
- Fricke M (2007) *Epistemic Injustice: Power and the Ethics of Knowing*. Oxford: Oxford University Press.
- Giroux HA (2014) *Neoliberalism's War on Democracy*. Chicago, IL: Haymarket Books.
- Goldreich O and Shemesh N (in press) Content-free indices in academia. In: Chalozin-Dovrat L, Schwartz Y, Kotef H, Chowers E and Lavie S (eds) *Think About the University*. Tel Aviv, Israel: Tel Aviv University Press.
- Griesemer J (2018) Individuation of developmental systems. In: Bueno O, Chen R-L and Fagan MB (eds) *Individuation, Process, and Scientific Practices*. Oxford: Oxford University Press, pp. 137–164.
- Guthrie WKC (1962) *A History of Greek Philosophy: The Presocratic Tradition from Parmenides to Democritus*, vol. 2. Cambridge: Cambridge University Press.
- Guthrie WKC (1969) *The Sophists*. Cambridge: Cambridge University Press.
- Hadót P (1995) *Philosophy as a Way of Life* (trans. M Chase). Oxford: Basil Blackwell.
- Jensen P (2011) A statistical picture of popularization activities and their evolutions in France. *Public Understanding of Science* 20(1): 26–36.
- Kabat GC (2027) Taking distrust of science seriously: To overcome public distrust in science, scientists need to stop pretending that there is a scientific consensus on controversial issues when there is not. *EMBO Reports* 18(7): 1052–1055.
- Kant I (1992 [1798]) *Der Streit der Fakultäten* [The Conflict of the Faculties]. Lincoln, NE: University of Nebraska Press.
- Morrow JD (2020) *Game Theory for Political Scientists*. Princeton, NJ: Princeton University Press.
- O'Connor C (2019) *Origins of Unfairness: Social Categories and Cultural Evolution*. Oxford: Oxford University Press.
- Popper K (2014) *Conjectures and Refutations: The Growth of Scientific Knowledge*. New York, NY: Routledge.
- Schwartz Y (in press) From cooperation to corporation? The institution of university knowledge in its historical incarnations. In: Chalozin-Dovrat L, Schwartz Y, Kotef H, Chowers E and Lavie S (eds) *Think About the University*. Tel Aviv, Israel: Tel Aviv University Press. (in Hebrew)
- Shavit A (2021) Altruism vs. cooperation: From personal loss to perpetual victory, and why it is sometimes a problem. *Zmanim* 145: 70–80. (in Hebrew)
- Shavit A and Ellison A (2021) Diverse populations are conflated with heterogeneous collectives. *Philosophy of Science* 118(10): 525–548.
- Shavit A and Griesemer JR (2018) Science and sentiment: Grinnell's fact-based philosophy of biodiversity conservation. *Journal of the History of Biology* 51(2): 283–318.



- Shavit A, Kolumbus A and Silver Y (2017) Epistemic collectives, heterogeneity, and injustice: The case for Town Square Academia. *Landscapes of Collectivity in the Life Sciences* 20: 199.
- Smith JM (1982) *Evolution and the Theory of Games*. Cambridge: Cambridge University Press.
- Snyder LJ (2011) *The Philosophical Breakfast Club: Four Remarkable Friends Who Transformed Science and Changed the World*. New York, NY: Random House Digital.
- Thoreau HD (2008 [1859]) *Walden*. New Haven, CT: Yale University Press.
- Wellcome Global Monitor 2018 (2019) Wellcom. Available at: <https://wellcome.org/reports/wellcome-global-monitor/2018>
- Zoubi K, Sharon AJ, Nitzany E and Baram-Tsabari A (2021) Science, Maddá, and ‘Ilm: The language divide in scientific information available to Internet users. *Public Understanding of Science* 31(1): 2–18.

### Author biographies

Ayelet Shavit is a philosopher of science and a co-founder of Town Square Academia. Ayelet studies the concepts of group, individuality and cooperation, in ecology, evolution and society.

Yael Silver is a co-founder of Town Square Academia. She studies how community-academia interactions can benefit both sides and reduce social and environmental injustice.