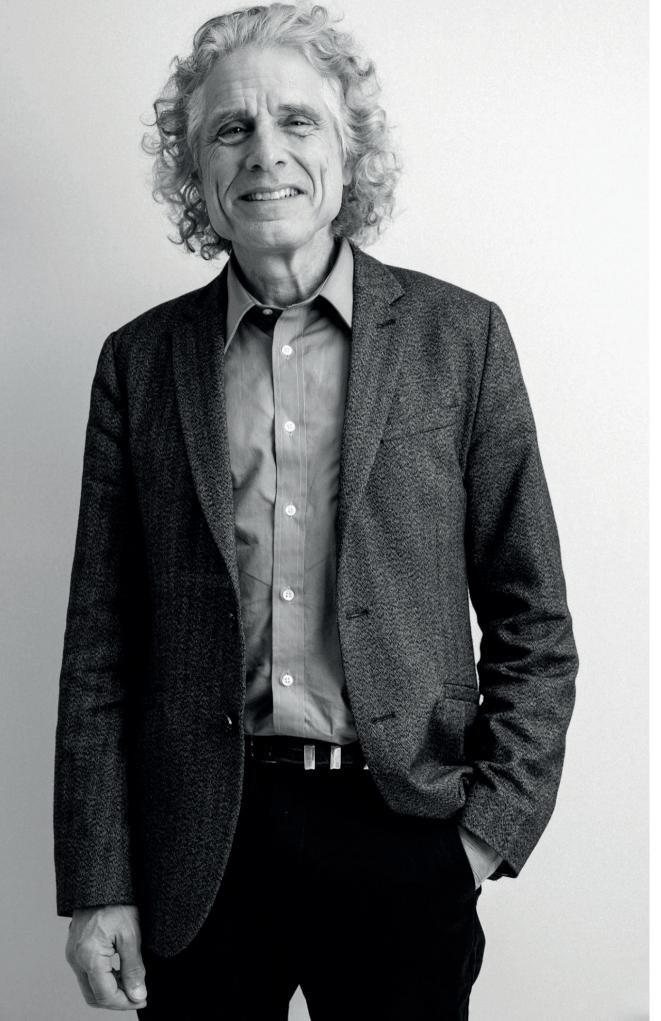
MAN BITES DOG IS NEWS,

DOG BITES MAN IS NOT.

Steven Pinker



↑ Photography by ROBERT SHIRET

WE CAN
OPEN OUR EYES
AND SEE

Steven Pinker, a prominent cognitive psychologist, linguist, and author, has dedicated his life to researching human nature. His academic work has challenged prevailing opinions about human behaviour and societal progress. We sat down with the renowned thinker to discuss the irreversibility of time and the impact that new digital worlds have on our own. Read on to discover Pinker's opinion on the significance of privacy in a world that desires transparency, the future of humanism, and the ways that art and science are shaping our world.

2023 THE INTERVIEW

54

1984 LEARNABILITY AND LANGUAGE DEVELOPMENT

hube:

The irreversibility of time remains a fundamental truth. We see its presence in the material world and our intellectual and emotional experiences. What is your relationship to time?

Steven Pinker:

The one recommended by Benjamin Franklin: "Dost thou love Life? then do not squander Time; for that's the Stuff Life is made of." I'm conscious of not wasting time, and therefore life. I try to avoid needless commutes, needless meetings, needless commitments, to spend as much of my precious time on earth as I can on activities that are pleasurable or meaningful.

Speaking of meaning, it's the irreversibility of time that, in a very real sense, gives life meaning. As you hint, physicists tell us that events involving single objects are reversible (a film of one billiard ball clacking into another could be played backwards and you'd never know) but events involving complex, patterned assemblies are not (a film of a billiard ball scattering a triangular rack of balls would look comical if played backwards). The arrow of time is defined by entropy or disorder, which inexorably increases, giving time its arrow. But purposive agents like ourselves can deploy energy and information to create local zones of order (at the cost of increasing disorder in the system overall,

that is, pollution). And that, in the broadest terms, also gives life its arrow. We use will and knowledge to push back against disorder, at least locally and temporarily, until it prevails, as it inevitably does, with our deaths.

h: The erosion of privacy is a significant aspect of modern society. Can you imagine a world where absolute transparency and access to information prevails, while withholding information becomes a crime?

SP: Not a world that anyone would want to live in. Social harmony depends on benign fictions: that family, friends, and lovers are unstintingly loyal and generous; that authorities deserve the respect that comes with their station; that we are all equal in dignity and virtue and worth. We prosper with these white lies, but we also must occasionally share subversive truths. Sometimes we share these impolitic thoughts to challenge norms that ought to be challenged; more often, we share them to relax and bond. And so, we have the unguarded observations, delicious gossip, politically incorrect humour, naughty jokes, and wicked thoughts that are the stuff of intimate conversation. As Pascal observed: "Few friendships would endure if each party knew what his friend said about him in his absence." The disappearance of privacy would be a totalitarian nightmare.

Steven Pinker 57

LEARNABILITY 196 AND COGNITION

h: New platforms and modes of communication provide users with access to what seems like an unlimited number of people. These new digital spaces have significantly modified the ways we interact today; both in the digital and the physical world. How might such changes to our interactions affect our future? Will digital worlds replicate the problems that plague our physical world, or will they develop new systems and ethics in order to avoid them?

SP: It depends on the tacit rules that govern those digital worlds. The best of these worlds are virtual communities in which people are brought together by common passions and can set aside superficial differences and disadvantages—as one cartoon in the early days of the web put it, "On the internet, no one knows that you're a dog." The worst of them equip people with little dart guns with which they can injure strangers in anonymity, without the face-to-face cues and reputational fears that inhibit blatant social aggression in real worlds. Or they facilitate mobbing, in which a target is singled out for collective denunciation and humiliation, like Emmanuel Goldstein in Nineteen Eighty-Four.

h: Do you believe that hierarchy is a necessary condition for the existence of society?

SP: Not in the sense of a pecking order or dominance hierarchy. The kind of hierarchy that is necessary is a hierarchy of *organisation*: large cooperative units are composed

of smaller ones, which are composed of still smaller ones, and so on—think of the programs, departments, divisions, and schools within a university, or the wards, municipalities, counties, states, and nations in a political organisation. At each level, the unit may be coordinated by an administrator, but he or she should be bound by fiduciary duties to act in the interests of the whole. The challenge for modern institutions is to prevent a hierarchy of organisation, which is good, from devolving into a hierarchy of dominance, which is bad.

h: Virtual platforms, such as computer games and metaverses, transports users' consciousness to spaces with different social and ethical standards. In the battle for humanity's most precious resource, human time, which realm will triumph: the digital or reality?

SP: It's not the first time we've dealt with this problem. The same concerns were raised about the novel. I remember when a bookish child was criticised for immersing herself in stories instead of engaging the real world. I don't think that digital worlds will "defeat" reality, since we all put a value on authenticity and reality—people strive to see an original painting, not an indistinguishable reproduction, and they buy exorbitant tickets to hear Bruce or Paul or Beyoncé, not a lifelike simulation. But virtual platforms will definitely make inroads—we just don't know how far.

1994 THE LANGUAGE INSTINCT

h: Social change often involves ethical and aesthetic innovation. From your perspective, how do ethics and aesthetics interact?

SP: Aesthetics can provide pleasures that bring people from diverse nations and cultures together in common enjoyment—think of "musical ambassadors" like Louis Armstrong, Leonard Bernstein, Pete Seeger, and Yo-Yo Ma. Fiction can mobilise people's emotions of empathy and compassion, encouraging them to see the world through the eyes of people unlike them. The historian Lynn Hunt has suggested that the Enlightenment "humanitarian revolution," in which barbaric practices like slavery and sadistic corporal and capital punishment were abolished, was accelerated by the popularity of the realistic novel. Conversely, the experience of horror conveyed by art-Goya's drawings of gruesome mutilations during the Napoleonic wars, Harriet Beecher Stowe's Uncle Tom's Cabin before the abolition of slavery, the novel and movie All Quiet on the Western Front after World War I, Picasso's Guernica, the anti-war songs and movies of the 1960s—can mobilise apathetic audiences to appreciate the enormity of human suffering.

h: Art and science are two elements of the human experience that have been with us for millennia. We associate science with progress, while art seems to disconnect us from reality. How can we relate art to progress?

SP: See my answer to the previous question.

h: Humanism, as an intellectual idea, was formulated almost two centuries ago and continues to serve as the foundation for social modernisation. What does the future hold for humanism?

SP: The weakness of humanism is that it seems unhip, uncool, stodgy, and tepid compared to alternatives like religion or authoritarian nationalism. As I wisecracked in Enlightenment Now, "Should humanists hold revival meetings at which preachers thump Spinoza's Ethics on the pulpit and ecstatic congregants roll back their eyes and babble in Esperanto? Should they stage rallies in which young men in coloured shirts salute giant posters of John Stuart Mill?" But for all that, humanism has a strength, which explains why it makes slow, quiet, but inexorable progress. It is an inevitable product of the expansion of reason and experience, given our common humanity. As Spinoza put it, "Those who are governed by reason desire nothing for themselves which they do not also desire for the rest of humankind." Once diverse people have to confer on how to manage their affairs to everyone's benefit, they cannot appeal to parochial tribal or scriptural values. And we see apparently irreversible historical tectonic trends such as the abolition of slavery, the legal equality of women and minorities, the decriminalisation of homosexuality, the decline of capital punishment, and many others.

1997 HOW THE MIND WORKS

THE IRREVERSIBILITY OF TIME... GIVES LIFE MEANING

Steven Pinker

O Steven Pinker

WORDS 199 AND RULES

2007 THE STUFF OF THOUGHT

h: The information we consume shifts our understanding of the world. Often, the media doesn't simply reflect an idea or reality, it also takes an active part in shaping and creating it. What are your thoughts on this?

SP: It's true that journalists often see it as their mission to enforce the correct moral tone and political spin. But I see other effects that are more insidious, because they are baked into the very nature of news reporting. News is about things that happen, not things that don't happen. It's about sudden events, not gradual trends. It's about the unusual, not the commonplace (MAN BITES DOG is news; DOG BITES MAN is not). And it is about failure, not success (a plane crash is news; a plane taking off is not). As a result, vast waves of human progress-regions of the world free of war, life spans increasing, extreme poverty declining by a few percentage points every year-are invisible in the view of the world from journalism. The result is an impression that everything is failing, which makes people either fatalistic or open to radical or reactionary ideologies.

h: One sceptical position in the theory of knowledge is the thesis that a thing (or a human) cannot fully know itself. Do you believe that AI will help with this?

SP: We're limited in self-knowledge for several reasons. No system can examine every last detail of itself, including the very mechanism that does the examining. We can, however, work around that limitation when each of us examines the workings of someone else. That's the basis of academic psychology (which abandoned the method of introspection long ago); it's also the basis of the intuitive psychology or "theory of mind" that we all engage in when we deal with other people.

Another reason it's hard to know ourselves is that we appear to have been designed by evolution in such a way that the conscious mind is denied access to certain beliefs and motives, namely those that are socially unacceptable or make us look bad. This idea, of course, lies behind Freud's theory of the unconscious, but it also motivates Robert Trivers' theory of self-deception: we lie to ourselves about our virtue and wisdom so that we are more convincing when we lie to others.

A third roadblock to self-knowledge is what William James called "the anaesthetic of familiarity": our mental processes work so well and so automatically that they fail to register in our awareness. That is where artificial intelligence can have the biggest impact. By trying to duplicate the feats of human intelligence, we are forced to become aware of what it takes to achieve intelligence in general. And we can understand the human mind as just one out of a huge space of possible designs for intelligence. To take a recent example, the strange powers and limitations of ChatGPT, such as its tendency to hallucinate statistically probable but nonexistent patterns, shows us that the human mind does not just soak up correlations in petabytes of data, but composes beliefs out of basic concepts like events, agents, objects, and intentions.

2011 THE BETTER ANGELS OF

2013 COGNITION, AND

HUMAN NATURE

COLOUR IS ALSO A DIMENSION OF PERCEPTION

Steven Pinker

h: Rationality is used by humans to achieve the best outcome. What is the meaning of irrationality?

SP: Doing things that are known not to achieve one's goals.

h: Words are just one of many modes of communication available to humans. However, words are not always the most precise, especially when trying to articulate abstract concepts. We try our best to overcome the verbal curse with the help of images, sounds, and gestures. In this context, what role does colour play in our communication?

SP: In perception, differences in colour "pop out" (that's the technical term) from their neighbours, providing a boost to selective attention—the ability to absorb relevant information while filtering out noise. Colour is also a dimension of perception that is independent of motion and form. That means that it can multiply the amount of information that a perceiver can process and mentally organise. So in data graphics and scientific

communication, colour is not an ornament but a crucial means by which viewers can comprehend complex data. Coloured graphs allow them to disentangle a spaghetti of overlapping lines; and false-colour maps of brain activity, energy usage, prosperity; and other complex datasets allow them to grasp high-dimensional patterns.

In cognition, colour can be a metaphor for a dimension that is independently combined or overlaid on top of a system. For example, in the United States, we speak of red (rightwing) and blue (left-wing) states, because political orientation doesn't correlate well with north-south or east-west. In physics, quarks [a type of elementary particle and a fundamental constituent of matter] are said to come in three "colours" ("red," "green," and "blue"), not because that distinction has anything to do with colour, but because it's a way that quarks vary which has nothing to do with the other ways in which particles can vary such as their mass, charge, spin, and (in the case of quarks), the whimsically named "up, down, charm, strange, top," and "bottom."

2014 SENSE OF STYLE

Steven Pinker

67

h: Mythology holds a significant place within social frameworks. It complements, distorts, and modifies our perception of reality. What, in your opinion, gives rise to this phenomenon?

SP: In Rationality, I distinguish between the "reality zone," where ideas are evaluated in terms of their logical coherence and empirical support, and the "mythology zone," where ideas are evaluated in terms of their contribution to tribal pride, their emotional uplift, and their moral lessons. The mythology zone encompasses all the beliefs that are untestable in everyday experience, and before the Scientific Revolution and the Enlightenment, were unknowable by anyone. We can open our eyes and see whether there's food in the pantry. But who really knows about the origin of the world, of life, of humanity, or the causes of disease and misfortune, or the movers of history and current events? Today we like to think that our best science and history can bring these cosmic questions into the realm of the empirically knowable.

ENLIGHTENMENT

But human intuition doesn't easily credit these modern institutions, and in our guts we feel that mythology is as good a way of knowing as anything.

h: In a prosperous consumer society, a symbol can have greater value than a material object. We might call this "emotional capital." In the future, will our emotions be more valuable than material objects?

SP: That's been happening for more than a century, ever since the industrial revolution and globalisation mass-produced luxury goods and made them affordable to the masses. These days, it's harder to stand out from the hoi polloi with designer clothing or a shiny watch or a big car, now that anyone can afford them. So elites differentiate themselves by their taste for baffling or ugly art, or by ostentatious displays of political commitments, like lawn signs announcing that the homeowner believes "Women's rights are human rights; Black lives matter; No human is illegal," and so on.

RATIONALITY: WHAT IT IS, WHY IT SEEMS SCARCE, WHY IT MATTERS

BEAUTY ISN'T ENTIRELY SUBJECTIVE

Steven Pinker

h: Beauty is subjective. Circling back to the verbal curse, is it possible to explain or comprehend beauty?

SP: Beauty isn't entirely subjective. Certain motifs and patterns, like symmetry, repetition, intensity, contrast, geometric regularity, signs of biological or mechanical integrity and efficiency, tend to be attractive across cultures, and maybe even across species. Peacocks, flowers, and butterflies evolved to attract peahens, pollinating insects, and other butterflies, but we humans find them beautiful too. And though we may not personally choose the gussied-up people or decorated objects of other cultures and periods, we can appreciate their distinctive beauty. I suspect that an eye for beauty is a sensitivity to improbable, counter-entropic patterning: unlikely arrangements that bespeak some nonrandom organising process.

Pavel Prigara