Interview



Narcissism within the scientific community: interview with Bruno Lemaitre

Narcisismo na comunidade científica: entrevista com Bruno Lemaitre Narcisismo en la comunidad científica: entrevista con Bruno Lemaitre



Bruno Lemaitre (born September 21, 1965, in Lille, France) is an immunologist and professor at the Ecole Polytechnique Fédérale de Lausanne (Switzerland). His research focuses on the mechanisms of innate immunity and endosymbiosis in Drosophila. One of his early discoveries demonstrated that the Toll receptor protein and its downstream signaling pathway are essential components of the fruit fly immune response (Lemaitre *et al.*, 1996). The 2011 Nobel Prize in Physiology or Medicine recognized the findings of Lemaitre *et al.* (1996). This pioneering work on innate immunity facilitated the identification of Toll-like receptors as crucial mediators of human innate immunity. Bruno has received several research awards, including the Noury, Thorlet and Lazare Prize of the French Academy of Sciences (2001), the First Prize of the Schlumberger Foundation (2002), the William B. Coley Prize (2003), the Lucien Tartois Prize of the Foundation for Medical Research (2006), and the Liliane Bettencourt Prize for Life Sciences (2010). Lemaitre is also the author of several books on the subject of this interview and a book on the philosophy of Michael Polanyi (Lemaitre, 2022).

Kenier Castillo (KC): How does an outstanding scientist like yourself, the discoverer of the Toll receptor, end up becoming a reference for ethics in scientific behavior?

Bruno Lemaitre (BL): I don't consider myself as a model of ethical behavior. Being part of a discovery that involved many key figures, I was exposed to high-level science and interacted closely with a select group of scientists who shaped the field. That was quite a rich experience for someone like me, who was probably a bit naive initially. Being exposed to the political and human dimensions of science was eye-opening. The visibility that accompanied the discovery of Toll receptors affected me personally by making me more sensitive to the tendencies of narcissism within

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the scientific community. I started reading a lot about narcissism, which is very well described in the literature, especially by personality psychologists in the United States. I realized that the description of narcissism, like the concept of dominance in evolutionary psychology, provides valuable information about the scientific community and our current era. I try to share what I've learned in the book I wrote about narcissism and science, which is now available for free as a PDF (Lemaitre, 2020).

KC: Where can we find the roots of narcissism?

BL: Classical psychologists generally trace the origins of narcissism to early childhood encounters, identifying three distinct causes that lead to different outcomes. For example, vulnerable narcissism has been associated to childhood trauma, namely childhood abandonment. It is believed that someone who was abandoned as a child will crave approval for the rest of his or her life. In addition, narcissism is understood to be the result of a particular parenting style that exploits the child to satisfy the parent's personal needs. This situation results in the child striving later in life to achieve the idealized image projected by the parents. Finally, some see narcissism as the result of spoiling a child - receiving too much admiration and expecting the same from others later in life. The latter could explain an increase in narcissism as the position of children in society has changed. However, like all personality traits, narcissism probably has a genetic component and is influenced by the environment. Some argue that the rise in narcissism can be attributed to the encouragement of narcissistic behavior on platforms such as social media, where this type of behavior is no longer suppressed. The rock star lifestyle of chasing young trophy wives and the constant search for visibility might be more acceptable in today's society.

KC: What are the main forms of narcissism?

BL: Experts distinguish two forms of narcissism: grandiose and vulnerable. Grandiose narcissism is the most well-known (as in the case of Berlusconi or Trump). It is characterized by high self-esteem, a charming attitude, and dominant behavior. Vulnerable narcissists, on the other hand, have low self-esteem and, as the name suggests, are very sensitive to criticism. Vulnerable narcissists tend to overreact to minor criticism, and this type of narcissism can be associated with violent tendencies in extreme cases. Both forms of narcissism show a high regard for social perceptions of themselves - grandiose narcissists seek the admiration of others, and vulnerable narcissists seek acceptance. However, narcissism is a complex trait that includes both positive attributes, such as leadership and creativity, and negative attributes, such as exploitation and conceit. Although the general public mostly understands narcissism in a negative light, there is the concept of healthy narcissism.



KC: Can you easily identify a narcissist in the academic world? What are the factors to look for?

BL: Keith Campbell, a well-known expert on narcissism, describes narcissism in four ways:

An emphasis on self-benefit concerns (standing out in the community) as more important than community concerns (being socially integrated);

An approach that is more motivated by rewards than by punishments (approach orientation);

A high self-esteem and regard for self;

A general desire for self-esteem.

A narcissist is someone who excels in the various facets of self-esteem. Therefore, according to this definition, narcissists are people who strive for success and recognition. Because they are more attracted to rewards, they can spend much money on their projects without overthinking about the cost to the community. Because they are prideful, they believe they are special and deserve special treatment without having to follow the general rule. They tend to exaggerate personal accomplishments and take credit for the work of others, exhibiting behaviors similar to the self-congratulation bias. This last trait is very useful for impressing an audience and publishing results, but usually the "big story" told by the narcissist ends up being exaggerated, lacking substance, and unimpressive in the long run. The strong desire for recognition coupled with high self-esteem leads individuals to pursue success, fame, and power to present themselves in the most favorable and esteemed light. I describe several examples in my book.







Source: Catarina Sobral©.1

KC: Is the academic world more susceptible to having high-ego personalities?

BL: We might think that scientists are a special breed of people who only work for the greater good of humanity in the eternal search for truth, but the reality is different. Passion, a key element in science, is driven not only by the desire for knowledge but also by the hunger for power and recognition. Although they may not realize it, scientists have achieved a prestigious position in our society, a position of power that may attract dubious individuals driven by their desire for recognition. However, scientists face constraints (such as limitations on experimental work and the need for rigor) that often inhibit the expression of narcissistic traits. Overall, narcissism is probably less prevalent in science than in other fields, such as the arts, politics, and the world of Hollywood. We shouldn't forget that because narcissists are often very visible, we can tend to exaggerate their numbers by forgetting about the many other sensible scientists who contribute to science.

¹ Illustrations specially designed to accompany this interview. Catarina Sobral is a Portuguese author and illustrator who won the International Illustration Prize at the 2014 Bologna Book Fair.



KC: How important is socialization in the academic world?

BL: The social aspect of science is key, and as Mickael Polanyi recognized it, science needs authority. This authority is not monolithic but is dispersed in academia, teaching positions, journal editors, and scientific societies. Some systems and communities regulate science very well most of the time and prevent the emergence of charlatans. However, it is more difficult to manage situations in which a scientific topic enters the public domain, and disagreements arise within the scientific community. This was exemplified by the challenge of managing Didier Raoult and his dominant personality during the Covid-2019 pandemic. Scientists are also susceptible to non-scientific influences, which can lead to the corruption of the scientific process.

KC: What is the reason for the increasingly visible rise of the narcissistic phenomenon in the academic world?

BL: Some experts have proposed the notion of an increase in narcissism in our society, in which case there may also be an increase in narcissism in science, as well as in politics, sports, and the arts. The rise of individualism and instrumental reason (i.e., 'the tendencies to use others as instruments for ourselves' or to 'objectify' our lives) may be a consequence of modernity, according to philosopher Charles Taylor. Like him, I believe that a decline in social synchronization, coupled with a decrease in religiosity, largely explains this rise in individualism. This is the other side of modernity. I'm fascinated by how the erosion of transcendental ideals that comes from criticism within the realm of science (or, let's say, from a particular perspective on science) has now completed a cycle that affects science itself. Science needs certain ideals to survive, such as devotion to truth or justice, but it can easily be corrupted when these ideals are denied. As we can see today, science can only flourish in a society that is not too corrupt.

KC: What should a young researcher expect when his curriculum is evaluated by a narcissist?

BL: Narcissists are more sensitive to the prestigious side of working in science, such as working at a prestigious university or publishing in trophy journals. They see science as a collection of breakthroughs, and may be less sensitive to the solidity and depth of the work.

KC: Would this narcissist feel uncomfortable evaluating a scientific curriculum that others would easily consider to be better than his or her own?



BL: There was a tradition among French professors (called Mandarins) working at a provincial university that they avoided hiring "too bright" collaborators who might steal the show, preferring to surround themselves with dependent scientists. Defaming excellent scientists is also another way of protecting self-esteem. Since they are motivated by egocentric motives, they can also recruit scientists who can bring them benefits.

KC: Do these narcissists have a tendency to think that their results and area of work are better than those of others?

BL: Yes, narcissists tend to exaggerate and overestimate the impact of their accomplishments. That's why the presence of narcissists, who are excellent at networking, is important for promoting a field of research, which is one of the positive aspects of narcissism. Politicians and journalists are more sensitive to this narcissistic dimension. Narcissism in life, as in love, is associated with short-term seduction. Narcissists are better at selling themselves in the short term but often fail at maintaining long-term relationships. Therefore, they are good at marketing their projects with big promises to get their desired funding.

KC: Is self-analysis possible for the narcissistic scientist?

BL: Studies in psychology suggest that personality traits are stable over time and difficult to change. One problem with narcissists is that they are generally unwilling to change. Why should they change once they consider themselves more intelligent than others? In fact, they usually suffer less from their personality than those around them.

It is likely that narcissists are not completely blind to themselves and that they may be aware of their negative personality traits, for example, by describing themselves as arrogant and understanding that the positive impression they make on others diminishes over time. However, this self-analysis may not be possible for the more self-delusional types of narcissism.

KC: How far is a narcissistic scientist willing to go to achieve his/her goals?

BL: One positive aspect of narcissists is that they want to succeed and can generally work harder to achieve success, especially in situations where there is public recognition. Therefore, scientists with higher narcissism may be particularly energetic when they receive recognition. This may partly explain their success or at least their visibility. Sometimes, some narcissists may cross the line, for example, by publishing biased or exaggerated results that advance their careers.



KC: What has more impact on a researcher's career: a network of friends in top positions and connections with editors, or their scientific achievements?

BL: A good network of friends in top positions and special access to editors will help enormously to get published in top journals, which will ultimately attract excellent students and financial support... and that's a good situation to be in to master a field. However, we shouldn't forget that intelligence, hard work, motivation, and opportunity are, and remain, the most important ingredients for success in science.

While I remain critical of certain aspects of current science, I want to avoid exaggerating the influence of narcissism. Many scientists do their best to keep the system going. The fact is that science has become highly competitive, which may have favored people who are good at selling themselves.

KC: Do you think that the current system of publications and evaluation provides fertile ground for narcissistic practices?

BL: As in our society, there is currently a focus on short-term impact. Personalitydriven scientists, as well as publishers and funding agencies, are more interested in big stories that impress in the short term than in deep knowledge. Personally, I am more sensitive to step-by-step approaches, and sometimes to descriptive work that lays the foundation for the field. But this kind of approach is hard to sell. For example, European Research Council grants look for innovative research and support a somewhat narcissistic approach to science. There is a whole terminology about these incentives 'frontier science', 'disruptive (i.e. 'unconventional aspects', 'high-risk/high-gain balance'). However, novelties or discoveries cannot be predicted and are simply the fruit of good research by dedicated scientists. What should be recognized is a certain way of doing "good" science that can eventually lead to discovery.



Figure 2
Rockstar



Source: Catarina Sobral©.

KC: What is the relationship between nepotism and narcissism in the academic world?

BL: Nepotism is a power strategy that consists of promoting friends, close relatives, and sometimes spouses to move up the hierarchy. It should be noted that narcissists do this naturally, as they tend to use others as a strategy for moving up the hierarchy. They tend to value the 'useful friend' rather than the friendly relationship. In hiring, they tend to favor colleagues who can bring them benefits. The key point is to understand that this is not necessarily a conscious behavior, but a consequence of the personality trait that distorts their view of the world.

KC: What advice would you give to PhD students and postdocs working under the guidance of a narcissistic professor?

BL: In the book, I discuss advice for individuals working with narcissistic professor. The best option for a student in this situation would be to become the 'protégé' and enter into the professor's self-improvement strategy, but it is a strategy more likely to work for successful students. Another important point is to distance oneself and become strategic in the relationship. A good strategy for the student would be to take detailed notes of what the student is doing and keep a time log of conversations. This will help you spot inconsistencies and also ensure that he was



right. Ideally, he should also have trusted friends at the institute with whom he can be natural and reinforce his point of view. Learning to manage colleagues with strong characters can also be considered useful. Understanding the influence of narcissism in a team can be useful in the long run and eventually in escaping a toxic environment.

KC: I believe that nowadays, a young researcher who is the victim of a professor's self-centered personality has few options for exposing this abuse. I feel that there has been a growing adaptation of the system when it comes to exposing incidents that disrespect human rights. However, when it comes to victims of narcissism, the system remains flawed and there is no clear way to expose this offense. Am I wrong?

BL: Over the years, we have made progress in limiting certain narcissistic behaviors that were prevalent in the past, such as sexual harassment. It remains difficult to criticize a professor who brings a lot of visibility and money to your institution. Some accusations against professors can also be exaggerated or unjustified. But I see progress or at least a greater awareness of toxic behavior in academia. Now, we should be aware that narcissists tend to play the victim, probably to protect their self-esteem. They are good at playing the victim and often blaming the system... So, it takes a lot of time and effort to deal with these delicate and conflicting situations at the university. The price for the community is very high and usually ends up in more regulations, which is not generally beneficial either.

KC: In your book on science and narcissism, you wrote: "In science most injustices are not repaired. This is unfortunately how the overall system functions" (Lemaitre, 2020, p. 237). Do you expect a change in the near future?

BL: Perhaps I was too negative at the time, but it's true that I saw many young scientists end up exhausted by a professor or a toxic environment, and leave the field disappointed. Maybe I was too sensitive to their suffering. In general, there are problems, but science is not one of the worst places to be. I don't see a lot of exploitation of the students around me. You have to be strong to do science and accept healthy criticism.

KC: What is the price of being a modern scientist with a highly developed sense of ethics?

BL: Perhaps the struggle lies in the lack of recognition and the challenge of securing grants that require adequate self-promotional skills. However, it is important to note that within a community, scientists are generally adept at recognizing excellence. The problem tends to occur between communities, as



narcissists are often conspicuous outside their field, but experts can see the reality behind the facade.

KC: Should we always expect a dose of fiction when reading a scientist's biography?

BL: I think there was a tendency in the past, perhaps unconsciously, to portray great scientists as heroic figures to promote science. Today, there seem to be fewer cases. Some biographers prefer to reveal the character of well-known scientists and sometimes their strategy for reaching the top. The critical moment in a scientific career is when one rises through the ranks at a young age - as a graduate student, postdoctoral fellow, and young principal investigator. This is the competitive moment when few survive. Once you are up the hierarchy, the best strategy is to be a humble scientist. So, of course, scientists change over the years, they get nicer as they get older.

An example of mythologization is Eureka, which tells the moment of discovery in a mythical way, see my website for a list of Eureka (Lemaitre, 2024). Thus, there is a tendency to reinterpret the scientific achievements of the past to better position our current contributions. It is crucial to recognize the diversity of factors that drive scientific progress and to acknowledge the concept of collective discoveries to honor the contribution of the community. However, I still believe that we need role models, and in my experience, I have found exceptional scientists around me, often less recognized, who have been a source of inspiration.

KC: Can you name some scientists whose biographies highlight their narcissistic personality?

BL: The biography of Niels Jerne by Thomas Söderqvist (2003) describes very well a scientist with a strong narcissistic character. It should be noted that the biographer ends up hating his subject... Now it's important to point out that there are positive aspects of narcissism in science, since this personality can increase passion (striving for success), originality (striving to be unique or different), and connections (networking).

KC: If a highly influential narcissistic figure supports a false claim about a researcher, the scientific community may easily accept that claim as true, with devastating consequences for the researcher. On the other hand, if someone publicly declares a known truth about that narcissist, the community will rally to his defense, even if that truth might have a positive impact on the community. How would you explain this phenomenon in an environment that is supposed to be more rational?



BL: Science is a human enterprise and scientists are affected by human bias, although they may be more aware of them. A statement made by a self-confident scientist is likely to have more impact because self-confidence is generally understood by people as competence. This case could play a negative role in the pursuit of science by encouraging false claims. As a colleague once said to me: "In science, you face two types of issues: people that are not competent or charlatans and great sellers that exaggerate their claims". You have to spend time and experience in a field to judge the depth of an article, and there is no hard and fast rule for determining what good science is. As Polanyi said, science practice is more like an art or a skill and is based on tacit evaluation.

KC: What is the price of standing up to a powerful narcissist and his/her corrupting influence?

BL: The first point is that before you confront them, you need to make sure that the criticism is supported by other staff and by accurate facts. Even students can be wrong! But unfortunately, if they are, criticizing someone powerful can often be costly because such a scientist brings a lot to their institution and is usually surrounded by friends. In a way, criticizing an unfair professor can have repercussions for the institution and its staff. However, universities have developed tools, support, and committees that allow for a degree of control.

KC: In your book, you chose Alexandre Grothendieck (Lemaitre, 2020, p. 161-164) to illustrate the complex relationship between personality and scientific achievements. As a mathematician, I wonder what motivated this decision.

BL: One might not expect to find many narcissists in mathematics because of the limitations of the discipline. It's probably more difficult to lie in this very restricted field. Grothendieck is interesting because of his creativity and visibility ("a genius"). We could make a connection between his multiple and unstable love relationships (five children by three different women), his chaotic life (which followed a fast-life strategy), or his difficult childhood since he was abandoned by his parents, who were anarchists. How this relates to a form of vulnerable narcissism is an open question. The point is that narcissism comes to the fore in the romantic domain and is associated with various behaviors, including compulsive sexuality, opportunism, gamesmanship, and attraction to celebrities, career-enhancing partners, or a trophy spouse (Trump, Chaplin, Sarkozy, Neals Jerne...). This is generally the concept of love displayed by celebrities on television and by artists and singers. I used Grothendieck to illustrate this link between childhood trauma and a somewhat unstable life.

KC: A Spanish journalist, Manuel Ansede, has recently uncovered a fraud in which Arab institutions paid Spanish scientists to falsely claim affiliation with them to



enhance their prestige (Ansede, 2023a). A Spanish mathematician acted as an intermediary for the Rey Abdulaziz University in Saudi Arabia for several years, earning commissions whenever he managed to convince Spanish scientists to lie and declare that they had worked at the Saudi institution (Ansede, 2023b). How do you think this kind of practice has managed to survive in universities over the years? Why do some tend to protect corrupt leaders?

BL: I am not aware of this story. The intense pressure to succeed and get noticed in today's competitive world of science creates various problems, especially in new institutions/universities, such as the proliferation of fake papers or authorships. Whenever this happens, the system is undermined. The problem with unhealthy narcissism is that it destroys trust, which is so important in science. One temptation is to create new rules to control these behaviors, but these lead to increased bureaucratization. So we all pay a cost: what used to work naturally in a community now requires complex regulation.

KC: Do you believe, as you mention in your book, that the current peak of narcissism may only be transitory or may prefigure a positive social change?

BL: The question of increasing narcissism in our current society and science is a difficult one. When I think about all the professors from the past, I am not sure they were any better than those of today. What is clear is that we are more sensitive to this aspect, and in some ways, the increase in communication and media exposure has created opportunities for people with high communication skills. At the same time, we are less naive. But we shouldn't lose our ideals and become cynical. Many great scientists are doing excellent work. Regarding the rise of narcissism in our society, it is an open question whether we need a shock, a major catastrophe like a war to destroy individualism... or perhaps a spiritual revolution, or just hope for better times.



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