Antifragile Tactics for Translators—A Primer

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Translation agents, in their professional lives, face a reality characterised by uncertainty. This uncertainty is rooted in the complexity of translation systems. Systems consisting of translators, clients, texts, languages (among other elements) are complex systems, as they are composed of several interacting elements, in which what happens to one element influences the reactions of other elements, which in turn influence the original element, in a cascade of interactions which can only be analysed as emergent phenomena. For those who work in the field of translation, the behaviour of these emergent phenomena seems to be the result of pure chance. Each agent is in a particular position at the intersection of several of these systems, exposed to complexity and unpredictability in a particular and, in itself, unpredictable (and complex) way. We must find a way to deal with uncertainty and complexity *immediately*, while researchers in the field of complexity in translation continue to seek a more complete description of emergent phenomena. In this article, I present five tactics which are a foundation of an antifragile strategy to deal with uncertainty: avoiding fragility, optionality and redundancy, trial and error, via negativa, barbell. This five-fold strategy is based on the twin concepts of fragility and antifragility, as described by Nassim Nicholas Taleb (2012).

Keywords: translation practice; uncertainty; fragility; antifragility; translation agents

1. Introduction: Complexity in Translation

A complex system is a system in which a large number of elements, with manifold interactions and feedback loops between them, make any kind of prediction of future behaviour extremely difficult.¹ Some typical behaviours of complex systems are described as follows (Holland 2014, 5–6):

• self-organization into patterns, as occurs with flocks of birds or schools of fish

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This unpredictability is perfectly consistent with physical determinism. Theoretically, knowledge of the position of all particles in a given system would make it possible to calculate the future behaviour of that system. However, bearing in mind that systems are unpredictable due to "chaotic behaviour" where small changes in initial conditions ('the flapping of a butterfly's wings in Argentina') produce large later changes ('a hurricane in the Caribbean')" (Holland 2014, 5–6; original emphasis), the calculation of future behaviour would require a computing capacity impossible to perform in this universe.

- *chaotic behaviour* where small changes in initial conditions ('the flapping of a butterfly's wings in Argentina') produce large later changes ('a hurricane in the Caribbean')
- 'fat-tailed' behaviour, where rare events (e.g., mass extinctions and market crashes) occur much more often than would be predicted by a normal (bell-curve) distribution
- adaptive interaction, where interacting agents (as in markets or the Prisoner's Dilemma) modify their strategies in diverse ways as experience accumulates. (original emphasis)

Systems consisting of translators, clients, texts, languages (among other elements) are clearly complex systems. They are systems composed of several interacting elements, in which what happens to one element influences the reactions of other elements, which in turn influence the original element, in a cascade of interactions that are extraordinarily difficult to analyse. On the other hand, these systems are very sensitive to changes in initial conditions (for example, the quality of the text to translate), some of them invisible to agents in the system (for example, the real expectations of clients are invisible to translators). Therefore, they are unpredictable systems (client reactions are not fully predictable), and they are emerging systems: they have their own organisation, which makes it possible—at least in theory—to study the characteristics of the system, making up for the unpredictability to some extent.²

Despite the emerging organisation of some of these systems, for the agents involved in them, the behaviour of translation systems seems to be the result of pure chance. Each agent is in a particular position at the intersection of several of these systems, exposed to complexity and unpredictability in a particular and, in itself, unpredictable (and complex) way. The complexity of the world of translation—entrenched as it is in the life of each agent in a way that is difficult to analyse separately—implies that it is impossible to understand the reality of translation through general theories or simple explanations.

Faced with this reality, a researcher in Translation Studies tends to reduce the field of study, which seems not only a legitimate but also a recommended strategy: the choice of a particular, well-defined research topic that can be productively analysed is an essential step in

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² Emerging phenomena are patterns and behaviours that cannot be practically analysed by the individual behaviour of the various elements—they emerge from the complex coexistence of the various elements. A good example of a complex system is the weather, in which unpredictability is moderated by the possibility of studying behaviors *emerging* from the system, which allows us to predict future developments to a certain degree. However, predictability is limited in time, since weather, as all complex systems, is extremely sensitive to changes in initial conditions.



any research project. However, the division into specialised, well-defined studies risks missing out on essential aspects of the reality being studied. A complex system cannot be broken down into pieces: the very interactions between the different parts and between the different systems in play are an essential part of the subject of study. In the field of Translation Studies, complexity thinking begins to find its place, especially since the publication of Marais (2014) and Marais and Meylaerts (2018). Translation Studies research is embedded within a reductionist model, always striving to reduce systems into elementary units (Marais and Meylaerts 2018). The reductionist paradigm represents a real limitation for Translation Studies research, since it cannot deal with exceptions, randomness, change (Marais and Meylaerts 2018). Complexity thinking helps us avoid the trap of reductionism, allowing us to rigorously study the complex realities underlying the translation process. Research in the field of translation complexity will allow us to gain new insight into the characteristics of the translation process, improving our ability to predict translation phenomena. This approach also has the immediate advantage of giving us a more realistic picture of how unpredictable translation processes, agents and interactions are. One relevant example of the complexity around translation agents is the unpredictable implications of using machine translation (MT). These implications go beyond the question of how to edit machine-translated text and how good the specific system is. The use of MT changes the expectations of clients and the attitudes of participants in the translation process, as studied by Lucas Nunes Vieira and Elisa Alonso (2019).

Having recognised the complexity and unpredictability of the relationship between agents and systems, we must find a way to deal with complexity *immediately*, while researchers in the field of complexity in translation continue to seek a more complete description of phenomena. Complexity is a real problem, which is experienced on a daily basis by translation agents. If researchers may limit their analysis to a particular aspect of reality, translators feel a continuous aggression of disparate elements, as they are situated at the intersection of several different systems, with complex interactions between the elements. Translation agents, in their professional lives, face a reality characterised by opacity and uncertainty. Is it possible for Translation Studies to present models that can help agents deal with and live in this complexity? I will try to present the basis for such a model, centred on the professionals themselves. This approach is linked to studies focused on the translation process, one of the most productive research areas in the last few years (Li and Lei 2018), specially cognitive studies as exemplified

by Shreve and Angelone (2010), Ferreira and Schwieter (2015) or the study of emotions in translation (Hubscher-Davidson 2017). The general approach may be described as part of what Andrew Chesterman (2009) called *Translator Studies*, after dividing Translation Studies into four areas: textual, cultural, cognitive and sociological, where the last three may be considered part of *Translator Studies*. My particular approach is based on concepts developed by Nassim Nicholas Taleb (2012),³ which gives us an original and productive perspective on complexity in practice, combined with theoretical reflection grounded in my practical experience as a translator and manager of translation projects. This approach is necessarily partial and does not attempt to replace other ways of looking at these phenomena; it is presented as a complementary line of reflection on the work of translators.

The question I am trying to answer is this: how to deal with complexity and uncertainty around translation agents and processes? A recent and productive approach to dealing with uncertainty is risk management. In the field of Translation Studies, this approach has been proposed by Anthony Pym (2005; 2015). Pym's approach is summarised in three points (Pym 2015, 78):

- 1. Translation is a communicative act in which, with respect to its specificity as a translation, the greatest risk is of losing of the translator's credibility.
- 2. Texts have some elements that have high communicative risk and some that have low communicative risk in specific contexts.
- 3. Experienced translators rationally invest greater effort in the high-risk elements.

This is a very useful approach to understand decisions by translators when translating specific instances of text—the amount of effort expended is usually dependent on a mental calculation of the risk that the translation will be rejected or otherwise negatively evaluated, with loss of credibility.

However, when thinking in more general terms, in order to use risk assessment as a decision tool, we need to be able to assess the probability of future events. The truth is that we do not know what the real risks are or the likelihood of repetition of known events—and we are completely exposed to the uncertainty related to unknown events. In other words, risk management works to some extent—but it might ignore rare events, which, being unlikely at

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³ The conceptual framework devised by Taleb was already applied to other areas, such as medicine and financial services by Taleb (2012) himself, but also to areas as different as management and software development, as exemplified by Monperrus (2017), Alhir (2017) and Devendorf, Zeliff and Jabbour (2016).

any given moment, are practically inevitable over a lifetime (or within a sufficiently large group of people).

What rare events are these? In the case of translators, we can imagine some of those rare events: the loss of a client, a computer malfunction, a crisis in the sector of most of their clients, a problem in the company where they work, a new technology that reduces the amount of work or implies learning new skills, a new technique that gives competitors an advantage, a health problem that reduces productivity, a mistake that leaves them exposed to legal problems, a family issue that prevents timely delivery. In the case of project managers, it is also relatively easy to imagine those rare events: a translator who, after five years of on-time deliveries, fails in a very important project, a computer that stops working, a typo that made it through all the checks and ended up being the basis of a complaint. To all this, we must add those events that, being unrelated to translation, may change translators' lives radically: an earthquake, a war, a financial crisis, etc.

We are in the realm of uncertainty: the risk of each of these events is not easily computable (or not computable at all), but the translator's or translation company's *fragility* in the face of these events may be assessed.

Hence, rather than trying to calculate risk, we could start with the more practical analysis of the *fragility* of each element, that is to say, of its negative exposure to the very uncertainty that prevents proper risk analysis. As Taleb explains (2012, 8):

I said that we can estimate, even measure, fragility and antifragility, while we cannot calculate risks and probabilities of shocks and rare events, no matter how sophisticated we get. Risk management as practiced is the study of an event taking place in the future. . . . But fragility and antifragility are part of the current property of an object, a coffee table, a company, an industry, a country, a political system.

Taleb is very critical of all those who create a system based on what has happened in the past. One way to understand his epistemological scepticism is to think how the analysis of the past can hardly predict rare events. When we base ourselves, for example, on the historical maximum (or minimum) of some variable, we forget that, up until the day that this maximum (or minimum) occurred, the same thing had never happened. It seems obvious, but we easily forget it. Imagine a house that is built on the bank of a river with a tendency to flood—the house is built to withstand the largest flood ever recorded, which occurred on January 5, 1979 (this is



an imaginary scenario). Now, if the house had been built in December 1978, it would have been based on the previous maximum and would have been flooded a month later.

We can see this impossibility of predicting rare events in the following case: a freelance translator's single client sends work constantly, with some ups and downs, until the day he stops doing so, and the translator loses all income at once. The translator is extremely fragile. No amount of risk assessment, bearing in mind the opacity of the world (in this case, the opacity is related to the complexity of the client's decision-making processes), will solve this problem. The complexity of the world implies uncertainty—and this uncertainty is often opaque. We do not even know that we do not know (Taleb 2010, 8):

The human mind suffers from three ailments as it comes into contact with history, what I call the *triplet of opacity*. They are:

- a. the illusion of understanding, or how everyone thinks he knows what is going on in a world that is more complicated (or random) than they realize;
- b. the retrospective distortion, or how we can assess matters only after the fact, as if they were in a rearview mirror (history seems clearer and more organized in history books than in empirical reality); and
- c. the overvaluation of factual information and the handicap of authoritative and learned people, particularly when they create categories—when they "Platonify." (bold emphasis added)

The opacity is compounded in complex systems, full of non-linearities. There is so much we do not know, with limits so difficult to define, that the only solution is to learn to live with uncertainty. Thus, more than the suppression of uncertainty or the mathematical analysis of risks, what I propose is the use of two concepts present in Taleb's work: *fragility* and *antifragility*. These are conceptual tools that will allow us to face uncertainty. Together with a specific set of tactics, they are the basis of what can be called the *antifragile strategy*. This strategy is not an attempt to explain the world, but rather to deal with it—which is particularly important for translators and other translation agents.⁴

Taleb's model, developed as a general proposal for action in many fields, is well-suited to be used by translation professionals as a basis for decision-making. As proposed by Taleb, when deciding what to do, we should seek *antifragility* (i.e., positive exposure to volatility), the opposite of *fragility* (i.e., negative exposure to volatility). In the middle of these two poles, we

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⁴ I note, moreover, that in certain cases our attempts to create explanatory models may result in greater complexity and uncertainty by creating wrong expectations in our contact with other people, who may have other, also wrong, models about the phenomenon in question.



have *robustness* (i.e., neutral exposure to volatility). An antifragile strategy implies taking all steps towards positive exposure (or, at least, neutral exposure) to volatility. We can think about the exposure of three objects to fire:

- 1. Paper is fragile—it is destroyed in contact with fire.
- 2. A stone is robust—it remains unchanged in contact with fire.
- 3. Food is antifragile—it improves in contact with fire.⁵

My intention is to try to find *food* in the world of translation (i.e., all that gains from the fire of volatility)—or, at least, find ways of escaping fragility in the face of volatility.

In this way, and with the aim of making the path between fragility and antifragility more concrete, I will present five antifragile tactics, of practical and immediate application, based on Taleb's concepts, selected and adapted to the world of translation.

Before we move on to the five tactics, I must stress that all of these concepts are interconnected. Thus, for example, optionality can be analysed in terms of the barbell tactic, and avoiding fragility implies using the remaining tactics, among many other links between the concepts. The selection of these five concepts as central to an antifragile strategy for translation agents is my responsibility—the concepts put forward by Taleb are much more numerous.

2. Fragility Reduction

The first thing to do to increase the antifragility of any system is to detect fragilities, be aware of them and, as far as possible, correct them. Many of these fragilities have, as a symptom, an emotional imbalance which guides us towards its correction. However, in some cases, fragility is hidden behind an appearance of stability. For example, the situation usually associated with stability and security—the work situation of the in-house translator (i.e., hired by a company)—may hide a hidden fragility of the translator.

The situation of the in-house translator varies greatly depending on the institution he or she works for. A translator in a small business with an open-ended employment contract⁶ has stability, but that stability is dependent on the financial health of the business or other factors

⁵ Note that we must take into consideration the non-linearity of the world: food improves up to a certain point; under a certain *dose of fire*, the food is also fragile.

⁶ The type of contract is relevant: a fixed-term contract implies greater instability.



that the translator does not control or often does not see. Thus, the fragility to which they are subjected is an opaque fragility.

In contrast, the freelance translator receives more direct signals of the probability of losing income. In other words, the internal translator is not exposed to volatility, but may face a black swan (i.e. an unpredictable negative event that eliminates all income at once).

At the other end of the stability of internal translators, we have the situation of the public translator in a large institution, such as the European Union, where stability is assured, at least if the institution does not disappear (which is not an impossibility).

Fragility does not correspond to risk. The risk of the company disappearing may be small, but the fragility can be very high. However, because an in-house translator rarely has the data to assess risk, he or she should focus on reducing fragility.

To detect fragility, we need to ask questions. What would happen if the company went out of business? What would happen if I got fired? What would happen if I had an accident that would prevent me from working?

Some of these fragilities can be corrected through insurance. Others can be corrected by saving. There is still a need to have ways of finding new work. Thus, even while a contract is in force, it is important to be aware of opportunities. In other words, optionality is a very important strategy for the internal translator—a strategy that is often forgotten precisely because of the contract.⁷ If we look at a freelance translator, fragility is more visible, but it will not be greater.

In order to perceive the degree of fragility—and thus be able to correct it—it is necessary to perform tests, that is, simulations of what would happen if a certain event—either more or less probable—occurred.

Thus, when it comes to the fragility of the freelance translator's position, the first test involves understanding the dependence on certain clients. In order to perform the test, it is necessary to create a list of clients ordered by annual turnover. From there, the translator simulates what would happen if the client in first place disappeared. If this disappearance implies a serious financial problem, the client is considered a 'red client.' The test continues for the second, third and fourth clients—until it finds the client whose disappearance would not

⁷ Another source of antifragility is the social safety nets that exist in each society. Thus, unemployment benefit will allow translators' transition to another company, profession or business of their own.



cause any serious financial problems. Red clients are clients who imply high fragility in relation to the loss of income. It is necessary to dilute their percentage of monthly income, so that we do not have any red clients.⁸ These actions should be made gradually.

An especially safe situation would be when income from the translator's largest client is not strictly necessary to pay the monthly expenses. In this case, we do not depend on any particular client, leaving us with the necessary peace of mind to make good decisions.

These tests can be applied to an organisational structure, such as the company for which the in-house translator we spoke about earlier works—and it is precisely because it is more difficult for the translator to do this calculation as an in-house that their fragility is not so easy to measure. On the other hand, a business has high, fixed costs, which increase fragility.

It is also possible to test what would happen to the translator in the event of practical problems: an Internet failure for more than two hours, a power failure, etc. If the test indicates that there is a major fragility at any of these points, the translator can create redundancies: two internet connections, a public Internet access point nearby, etc.

The freelance translator can also test the fragility of the situation for a particular client: what would happen if the project manager with whom you work left the company? To avoid this situation, it is advisable to create relationships with several people in the organisation of each client, trying to make the relationship broader and less dependent on a single person and their whims.

The tests can continue: What would happen if I had a legal problem with a certified translation? What would happen if I had a health problem?

The professional fragility of each person is only one part of the fragility of their personal situation. In the case of freelance translators—and also business owners—this link is clearer. For example, the fragility of translators towards their clients depends on the debts they have incurred—debt (to buy a car, a house, etc.) is always a source of fragility. Thus, the reduction of debt—professional or personal—corresponds to a greater antifragility.

A company has some inherent fragility that is difficult to eradicate: by its very nature, it implies debt-equivalent commitments (for example, monthly payments to its employees). Thus, in view of the social protection afforded to employees but not to business owners in some countries, the owners of a company must take account of their particular fragility in relation to

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⁸ This test can only be performed taking into account the translator's monthly expenses.

the possibility of the company closing down. On the other hand, they have the possibility to analyse the situation more directly by applying the tests described above.

The situation of a business owner or freelance translator is similar. In the case of the business owner, it is necessary to add the company's debts to their personal debts to measure fragility.

To all of the above, we should add the following: in the case of professionals who are part of a family, the analysis of fragility should also be done at the family level. So, let us imagine a couple made up of two translators, both working for the same company—or, in the case of freelancers, with similar clients. We have, in this case, a shared fragility. If the two incomes have different origins, fragility decreases very markedly. Thus, a translator married to someone with a very different profession will have less fragility than a single translator, as the spouse's income allows for a smoother transition in the event of an abrupt fall in income. On the other hand, this decrease in fragility will depend on the health of the relationship itself. Similarly, family businesses—for example, where the owners are married—have a particular weakness, which must be remedied. There is also fragility, for example, when one of the members of the couple works for a company, and another translates for that company (with some degree of dependence).

It should also be stressed that any saving—mainly in liquid assets—is a concrete and immediate decrease in fragility. Thus, the fragility of some of the situations described above—for example, a freelance translator working for only one client—can be offset by high savings arising from this situation. In the same way, the particular fragility of companies can also be corrected in this way.

3. Optionality and Redundancy

Optionality is a central concept for understanding what antifragility is at any level and situation (Taleb 2012, 171):

This ability to switch from a course of action is an option to change. . . . Optionality will take us many places, but at the core, an option is what makes you antifragile and allows you to benefit from the positive side of uncertainty, without a corresponding serious harm from the negative side.

In the case of translation, this description applies more directly to the translator's own career: he or she should not follow a previous plan too closely; he or she should try several



paths almost randomly, thus understanding what works and what does not. In this sense, we are close to the trial and error described in the following point.

Let us look at the application of this concept on several levels. In the relationship with each client, it is good for the translator to have many contacts within the company, to avoid losing the client after a specific person leaves the company. The translator should also be useful to each client in many ways (as a translator and as a revisor, for example). In the same way, the translator must have several clients in order to escape fragility.

This optionality is also important in the way the translator is exposed to the opportunities—through the distribution of business cards, conversations at parties, ontacts at conferences, etc. Each one of these different and numerous contacts is quite opaque: it is impossible to know which business card will prompt a business contact afterwards. However, the quantity of contacts will allow us to expose ourselves to positive volatility.

After exposing ourselves to positive volatility, we act rationally when it comes to seizing opportunities. This is the description of rational optionality, a great source of antifragility (Taleb 2012, 429): "Not being locked into a given program, so one can change his mind as he goes along based on discovery or new information. Also applies to rational flâneur."

We must have more options than it seems strictly necessary because what is strictly necessary is extraordinarily fragile—first because we never know what these "strictly necessary" measures actually are. Thus, the translator must have redundant contacts, redundant tools, redundant clients.

Taleb finds three types of redundancy based on natural systems. The first type is *redundancy as insurance* (Taleb 2010, 312):

The first, the simplest to understand, is defensive redundancy, the insurance type of redundancy that allows you to survive under adversity, thanks to the availability of spare parts. Look at the human body. We have two eyes, two lungs, two kidneys, even two brains (with the possible exception of corporate executives)—and each has more capacity than needed in ordinary circumstances. So redundancy *equals* insurance, and the apparent inefficiencies are associated with the costs of maintaining these spare parts and the energy needed to keep them around in spite of their idleness. (original emphasis)

⁹ "I am fond of the brand of the unexpected one finds at parties (going to parties has optionality, perhaps the best advice for someone who wants to benefit from uncertainty with low downside)" (Taleb 2012, 176).

In the world of translation, this type of redundancy—the most obvious—lies in the need to have backup systems or multiple tools to solve the same problem (e.g., multiple PDF to Word conversion programs).

The second type of redundancy refers to the tendency not to create systems that are too large. In the economy, Taleb translates this natural principle into mistrust of large companies, which are more vulnerable to uncertain events and will require outside help quite often (Taleb 2010). The redundancy implicit in having many smaller businesses in the same industry implies greater social robustness—and even antifragility because the various businesses allow more people to see their particular needs met.

Redundancy is also linked to the size of the projects. A translator or company working on many small projects is less fragile than a translator or company with a few large projects. A smaller number of projects is more comfortable, but a mistake will have a very large impact on the translator or company. The size of projects does not only weaken financial management: a large project, if it fails (if, for example, the client refuses payment), may be sufficient to lead a company to closure. The same turnover in several small projects is less fragile.

The principle of redundancy denies some common ideas about the organisation of companies and work, for example, regarding optimisation (i.e., the elimination of redundancies). An overly efficient system is fragile as it quickly breaks down in the face of unpredictable events. Taleb (2012, 274) states:

This is a hint to a central problem of the world today, that of the misunderstanding of nonlinear response by those involved in creating "efficiencies" and "optimization" of systems. For instance, European airports and railroads are stretched, seeming overly efficient. They operate at close to maximal capacity, with minimal redundancies and idle capacity, hence acceptable costs; but a small increase in congestion, say 5 percent more planes in the sky owing to a tiny backlog, can give rise to chaos in airports and cause scenes of unhappy travelers camping on floors.

A translation company that is so efficient that it has only the resources needed for the usual jobs will miss several opportunities. This necessary redundancy does, however, come at a cost: a company with too large a structure fails easily. Therefore, redundancy should be considered when choosing employees: even without immediate need, it is better to have two employees each with knowledge of two languages than two employees each with knowledge of a different language.

This last observation is in line with the third type of redundancy, the functional redundancy. "Functional redundancy, studied by biologists, is as follows: unlike organ redundancy—the availability of spare parts, where the same function can be performed by identical elements—very often the same function can be performed by two different structures" (Taleb 2010, 317).

Functional redundancy is not only useful regarding employees' skills. As we see in the previous quotation, an element can gain a new function (something very common in the evolution of species). Whoever knows how to take advantage of the tools at their disposal to solve problems without getting stuck by the initial function of this tool knows the usefulness of this functional redundancy. In fact, many practical innovations are of this type: a translator finds a new way to take advantage of a tool he or she was already using.

4. Trial and Error

Antifragility implies winning with the passage of time, with volatility, with uncertainty. The most obvious way to gain something is with exposure to mistakes. Mistakes—those of others and, even more so, our own—are the main source of antifragility.

How to explain this in practice? Let us start with the translator's own body—if a translator is always in a certain posture and this posture creates a specific pain, the pain will allow us to find a better posture. Similarly, the position of the screen in relation to sunlight can cause headaches, and it is not always easy to find the best solution—we have to practice *trial* and error.

Note, in this example, that there are two conditions for the error to be a source of antifragility: it cannot be fatal—in the sense of not creating permanent maladies—and it must be used rationally to improve the situation. We must not use trial and error to learn that taking a step forward on the edge of a cliff is a mistake. On the other hand, in order to know which shoes are the most comfortable, we have to try and look for the best ones.

Let us notice now that the non-fatal errors that allow us to improve exist at various points in translation work: when we try various types of language for a particular client; when we test various tools; when we test various ways of working; when we realise, by mistake, what style or terminology the client—or that particular type of client—does not accept.



Once again, there are two conditions for a translation error to be a source of antifragility. First of all, it cannot be fatal. This 'fatality' can occur at the level of the text (a text can be refused because it contains a critical error), at the level of the client (a project that goes wrong can lead to the loss of a client), at the level of the translator's career (an error with public exposure or with serious financial consequences can end the translator's career). Except at the last level, 'fatality' at the text and client level can be turned into antifragility at the level immediately above. Thus, an error in a text that leads to a complaint helps us to understand what the client prefers (or, alternatively, what fragilities we have in our knowledge); an error that leads to the loss of the client may, although fatal at its level, help us to understand what not to do if we want to keep the clients; and, finally, even the highest level 'fatality' is not really fatal—it leaves us still alive, having learned the consequences of that type of error.

As we can see, it is necessary to know how to take advantage of errors—and that is the second condition. All the above errors will have fewer negative consequences, without losing the ability to provide us with information about the world, if we are in a situation of high optionality, one of the main sources of antifragility. It should be noted that when we are in a fragile situation—with little optionality—all errors can be fatal. Optionality allows us to accept the error and make the most of it. In this way, volatility becomes less dangerous, and we can use it to our advantage—the definition of antifragility. In other words, we can learn from our mistakes.¹⁰

Trial and error results in heuristic rules, that is, rules applied in practice that do not require a theoretical knowledge of the reality we are dealing with. Heuristic solutions are created by evolution, in the contact between humans and complex natural and human systems. Despite the possibility of transposing the heuristic rules to paper, these are, in fact, typical of little studied habits acquired over time. We are dealing with what Taleb (2012) calls "evolutionary heuristics," which involves learning by doing, with rapid feedback. Similarly, we have to bear in mind that heuristic rules are difficult to transfer to other areas, considering that they cannot even be shared between different people doing the same work.

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¹⁰ Errors are recognised as sources of practical knowledge by many, including Daniel C. Dennett (2013), who considers mistakes an "intuition pump."

Here we need rational application of the concept: to what extent can we distil this knowledge into simple rules that can be applied in teams? Only in practice can we answer this question.

The process of trial and error and the learning it implies—heuristic learning—are a source of antifragility because we are gaining from mistakes, gaining from time and gaining from volatility and exposure to the complexity of the world. To manage this complexity and unpredictability, we need simple, time-tested rules that are not always systematically understandable. These include work habits, apparently meaningless rituals, procedures refined over time and simple rules. Let us imagine a translator who, before translating, always closes his or her eyes and touches his or her forehead. It is like a superstition, a meaningless ritual. However, performing the same action calms him or her down. We do not consciously understand the brain and the way our system functions (body and mind), but we learn to manage it. Another example is a proof-reader who looks for a certain type of error, seemingly random, to evaluate a translation. When he or she finds it, he refuses the translation. It seems arbitrary, inaccurate, but it will be a time-saving action and, after years of practice, will serve as a quick test. Yet another example: a translator only accepts work from companies that agree to pay within 30 days—and refuses work after only one delay. It seems too strict a rule, but it was the way the translator found of not having to constantly evaluate clients. Given that you have many clients and the possibility to refuse jobs, you can afford to employ this rigid line of separation. In another example, a translation company has the principle of seeking a gross margin of 50% in each project. This simplifies financial analysis and ensures, on top of that, the coverage of all expenses by projects. The company loses some clients because of high prices, but never loses money on any project.

Heuristics is important not only for a translator or project manager, but also for teams. There are procedures that work well for one person, but not within a team. We have to take into account the cognitive load and the fact that a change in a team has to be understood and applied by everyone. Everyone has their own concerns, and something that may seem obviously important to someone will be a detail or an irritation to a colleague.

5. Via Negativa

One of the best strategies to deal with the complexity of systems and organisations is to reduce complexity itself.

It seems obvious, but it will not be so obvious in practice. Faced with unpredictability, we are tempted to complicate procedures—this applies to both individuals and translating teams. The new procedures will serve to reduce the probability of something going wrong in the future, but end up inserting complexity and fragility, as professionals start training to deal with the procedures and not with the work itself. On the other hand, excessive procedures can be a way of showing the legitimacy of the activity and the trust of the client. However, the client is not always aware of what is actually done and often also does not give importance to procedures they do not understand. Finally, excessive procedures can be a way of controlling the work of others from above.

With excessive procedures, professionals may feel disconnected from the volatility of projects, and this may lead them to stop solving problems by trial and error or using evolutionary heuristics. They may fall into a mechanistic approach, following, sometimes blindly, specific procedures. The increase in system parts—more people, more technology, more bureaucracy—also increases nonlinearities, unpredictability and, thus, fragility.

One of the sources of antifragility will be, therefore, the use of *via negativa* (Taleb 2012), that is, the reduction of parts, the reduction of procedural complexity—which must be done without reducing redundancy and optionality. This can be done, for example, by reducing the number of fields in a form, trying to do certain types of work internally, analysing the bureaucratic steps of a project to reduce the necessary documentation.

Via negativa allows us to quickly solve many problems, sometimes imperfectly, but without having to find a perfect tool for each problem. Basically, a system that solves many problems in a simple but imperfect way works better than a system that solves many problems in a complex but perfect way. The latter may fail more quickly because we do not know how the various pieces will act together in the future.

The concept of *via negativa* is extraordinarily useful for translation structures where procedures are complicated to the point of exhaustion in an attempt to control and systematise at all costs—which is impossible. Sometimes professionals spend more time filling in forms,

learning tools, following secondary instructions than they do translating and solving translation problems.

Thus, one of the moves we can take to reduce fragility is precisely to eliminate procedures. This implies the courage to change things in an unusual direction.

Via negativa is also useful, beyond procedures, in more general terms. For example, if the following elements of a translator's life are eliminated, the translator's professional and personal fragility immediately decreases. It must be said that, even if their elimination is impossible, the reduction of each of these elements is enough to make the future more predictable using via negativa (i.e., it becomes more unlikely that he or she will have problems with each of these elements). The first of these elements is debt, which is the source of fragility par excellence. Thus, a translator without debt or with very low debt is able to risk more with regard to clients, accepting or refusing jobs with more confidence and, finally, is able to translate without thinking that he or she has an absolute obligation to keep all his or her clients. This may seem obvious, but debt is considered a good thing in some situations: creation of new debt to obtain new equipment or a larger structure may be seen as a way to stabilise a translation business in the short term. However, it increases unpredictability and, hence, fragility. Another element that implies fragility is jobs with a very high risk of civil and/or criminal liability. For example, certified notary jobs have a level of responsibility that is not always compensated for by their remuneration. More translation jobs always seem to be a good thing—however; many high-risk jobs increase the likelihood of one of them going wrong, and a serious problem with a job of this kind is enough to put the entire career of the translator at risk.

As we can see, fragility sometimes hides itself in actions that seem positive or even essential. It is not always possible to avoid it, but fragility must be mitigated or compensated with more antifragility at some other level.

6. Barbell

The last tactic focuses on the concept of *barbell*, a prosaic term with which Taleb baptised joining actions that are a little risky with others that are very risky (barbells have two weights in the extremes: we put the weight of our actions at both the safe end and the risky end). As Taleb explains (2012, 428):

Barbell Strategy: A dual strategy, a combination of two extremes, one safe and one speculative, deemed more robust than a "monomodal" strategy; often a necessary condition for antifragility. For instance, in biological systems, the equivalent of marrying an accountant and having an occasional fling with a rock star; for a writer, getting a stable sinecure and writing without the pressures of the market during spare time. Even trial and error are a form of barbell. (original emphasis)

Despite the peculiar and somewhat opaque name, it should be noted that the barbell tactic is one of the main sources of antifragility. By combining actions that reduce negative exposure with others that expose us positively to what we cannot predict, this tactic makes translators and organisations not only robust, but antifragile in the face of uncertainty.

This tactic is naturally applied by many translators, for example when they learn one or two very common languages and one rare language. In this way, the translator is exposed to frequent jobs in the most common language pairs, but also to infrequent, but better paid, jobs in one rare language pair. The barbell tactic can also be useful when looking for new translation jobs. Thus, in the midst of secure clients, working in industries we know a lot about, a translator may seek jobs from clients in other industries, which would imply a great deal of research, but also mean an expansion of our knowledge and our exposure to new areas of translation activity.

The barbell tactic is also to be found in many diversification actions, as studied in Adams (2013), which are naturally sought by translators. Diversification usually involves the choice of an activity close to translation (e.g., technical writing), but may also include more risky activities such as literature, theatre, sports, as well as financial investments. Such activities would be very risky as the sole activity of a person, as income is very unpredictable. However, in conjunction with regular translation income, they present a positive exposure to rare events: a significant success in one of them will be difficult to predict (and unlikely), but possible. The worst that can happen is that we are not successful in these alternative activities. Yet, as we do not depend on them for daily survival, we are not negatively exposed to uncertainty. We are facing an asymmetric positive exposure to unpredictability.

7. Conclusion

The activity of translators and project managers (and other translation professionals) is fraught with opaque complexities and, as a result, a high degree of uncertainty. Translation agents must find ways of dealing with uncertainty. One approach is to apply risk analysis



techniques. However, these techniques are of limited use due to the very unpredictability they try to solve.

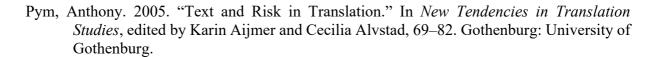
Thus, bearing in mind the urgency of finding ways to act in the face of complexity, I adapted a model created by Taleb (2012), which has the advantage of accepting complexity and unpredictability as an integral part of the world we live in. Based on Taleb's model, I outlined an *antifragile strategy* based on five tactics: fragility reduction, optionality and redundancy, trial and error, *via negativa*, barbell. This strategy allows translation professionals to face uncertainty confidently, without the need to predict the future. In other words, considering the opaque complexity of systems and the resulting uncertainty, we must assess and correct fragility rather than simply assessing risk. This implies a decision-making strategy that increases positive exposure to volatility.

The future development of this model may be useful for the practice and teaching of translation, by providing a more realistic view of the activity and offering useful mental tools to decide and act. This strategy is presented as a basis for further research, including empirical studies testing the results of antifragile tactics and the reactions of translation agents while applying those tactics.

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