

**EXPRESSIO**  
Rivista di Linguistica, Letteratura  
e Comunicazione

EXPRESSIO. Rivista di Linguistica, Letteratura e Comunicazione

La rivista intende applicarsi agli ambiti specifici della Linguistica, della Letteratura e della Comunicazione, intersecando gli aspetti teorici al monitoraggio delle realtà esistenti, in prospettiva sincronica e diacronica. Saranno privilegiate le riflessioni su temi precisi e circoscritti, legati anche a valenze pragmatiche. Le intersezioni fra le tre componenti, considerate nella loro sfera d'azione più ampia, costituiscono un obiettivo prioritario del progetto.

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# **Fearlessly Making the Impossible Possible: A Stylistic Inquiry into DARPA's Ground-breaking Research**

*Roxanne Barbara Doerr*

## Abstract

To ensure national defense in the United States (Moreno 2006), the Defense Advanced Research Projects Agency (DARPA) has elaborated a model, known as the “DARPA model” (Bonvillian *et al.* 2019), that has led to the discovery and development of revolutionary medicine and technology. The implementation of such a model has entailed the surpassing of the limits and ethical concerns of traditional R&D institutions and scientific and medical research in general in favor of military ethical values and priorities (Howe 2003; Miles 2013; Mehlman and Corley 2014; Parasidis 2015) although the agency collaborates with a diverse community including universities, industries, businesses, the government and the public. To reconcile the military (Moreno 2008; Gross 2013) and civilian parts, DARPA has publicly provided information about its model through a variety of texts (official website and framework, description of ongoing research projects, promotional ‘vignettes’) that introduce and sustain its alternative values. By means of the evolving Corpus stylistics methodology, the present study intends to define the explicit and implicit linguistic, discursive and stylistic strategies that are enacted throughout the texts and reflect the unique model of research thought and process of the “DARPA model” that differs both from civilian and military communicative strategies.

**Keywords:** DARPA, national defense, research ethics, scientific research communication, corpus stylistics

### 1. *The hybrid “DARPA model”*

In view of the specific requirements and risks of military activity, which presents ever-changing emergency situations that pose new questions for science and medical ethics (Moreno 2006; Moreno 2008; Sessums *et al.* 2009), DARPA (Defense Advanced Research Projects Agency) has focused on military and national defense R&D since its foundation in 1957. Such a mindset has resulted in specific and task-oriented projects whose products have been adapted and presented to the civilian context, where they are appreciated to this day (such as GPS, Siri, language translators, improvements in medicine and prosthetics and the Internet). In time, there has been an increase in the promotion of this sort of “dual use-technology”, i.e. “technology that could be used for both civilian and military purposes” (Selgelid 2013: 139) due to their marketing and progressive potential. At the same time, concerns about this dual-use research being employed for harmful purposes and about such knowledge falling into the wrong hands have emerged. To avoid controversies of this sort, DARPA has maintained cutting-edge research and national defense as its priority but still made a point of informing the public about the importance and benefits of its technology for national security and well-being (Tennison and Moreno 2012). The DARPA website in fact contains information about the agency, its research ethos and its past and current work, as well as ways in which other subjects and institutions (i.e. universities, industries, small businesses, the government, the public and the media) may become familiar with and support the agency.

The conception and development of these and many other revolutionary technologies and capabilities have been enabled by the “DARPA model” uniting the breadth of scientific and technological aspirations towards progress with an entrepreneurial focus on results and deliverable products and competences. In fact, the model is aimed at surpassing the limits of current knowledge by means of its “adaptability and flexibility to respond to changing circumstances” (Bonvillian *et al.* 2019: 25). It is “challenged-based” and “connected” (Bonvil-

lian *et al.* 2019: 36), meaning that the goals are associated with specific deliverable challenges that still do not exist and that they are attained by uniting science and engineering with the challenge in an interdisciplinary manner. DARPA is therefore not interested in general discovery, theories or knowledge, but rather in the immediate application and evolution of fundamental research. This is proven by the fact that the model “works ‘right-to-left’ in the R&D pipeline, foreseeing new innovation-based capabilities and then working back to the fundamental break-throughs that take them there” (Bonvillian *et al.* 2019: 137), in clear opposition with academic and scientific research standards that verify the validity of theory before applying it to attain concrete results.

This unique institution thus presents a paradigm of its own that is homogenous for some aspects and adjusted to the audience and intent of the genre for others based on the intent of the text. Accordingly, the communicative forms that are used are hybrid, for the agency addresses multiple audiences and provides information with varying levels of content and precision, so its linguistic and stylistic choices reflect its research ethics. After outlining the aims and presenting the dataset and methodology, the present study will specifically explore how the texts’ discursive and stylistic choices differ from those of traditional scientific and research writing so as to align it with the unconventional values and goals of the DARPA model.

## *2. Aims and outline of the study*

In view of this unique and hybrid (Zanola 2011) approach to medical and scientific knowledge and research, the aim of the present study is to outline how the “challenge-based” and “right to left” philosophy at the heart of the DARPA model is mirrored in the institution’s alternative discourse on and phrasing of its history, standards of procedure, and aims. In order to do so, it will focus on a series of key semantic fields where these differences emerge clearly and observe the stylistic framing of the texts that the agency releases to the public along with its implicit messages.



Section 3 will present the corpora of DARPA texts that were gathered and analyzed both separately and together to detect stylistic differences based on their individual communicative objectives. This will be followed by an illustration of the chosen methodology, i.e. corpus stylistics, and the reasons underlying this specific choice as opposed to other corpus linguistics frameworks.

Such premises will be followed by section 4, representing the analysis itself, which is divided into subsections based on the previously mentioned separate key areas where the peculiar nature of the DARPA model is most evident. For sake of clarity, the subsections will pivot around significant lexical occurrences and unite the resulting observations with stylistic analyses in order to determine if and where DARPA's communicative style (Enkvist 1964; Crystal, Davy 1969) diverges from that of traditional academic and scientific discourse. More specifically, the semantic areas will consist in newness, fearlessness and high-risk, possibility and capability, and time, and expound on the reason behind the agency's choices. The findings will be followed by final considerations and thoughts on possible future research in the field in section 5.

### *3. Dataset and Methodology*

The observations of the present study stem from the gathering and analysis of the following dataset and related corpora:

- The latest DARPA Strategic Framework, dated 2019 (hitherto referred to as Framework, 12108 tokens, 2659 types), representing an overall guideline on the agency's establishment and work;
- 39 Research projects tagged as 'med devices', 'health', 'injury', 'therapy', 'restoration' (hitherto referred to as Research Projects, 12001 tokens, 2487 types), describing specific ongoing projects;
- 11 'Vignettes' of the Fundamental Research: Seeds of Surprise section (hitherto referred to as Vignettes, 16123 tokens, 3204 types), focusing on DARPA's most popular discoveries and technology.

These corpora are composed of documents in PDF format (in the cases of the Strategic Framework and Vignettes) and of individual pages of the research archives that are accessible to all visitors and collaborators at the *Our Research* section of DARPA's website. Although they were not considered a corpus *per se*, at times certain excerpts from the *About Us* section of the DARPA website will be mentioned in order to further motivate its claims and choices. The union and comparison of these corpora will grant them the "representativeness" that "allows for generalisations to be made about the particular type of language under investigation" (McIntyre, Walker 2019: 3). This is even more relevant in the present study, in that the variety of language and style that is used here is positioned at a unique crossroads between academic/research and military language which, to the author's knowledge, has not been investigated to date. In particular, it unites the dissemination intent of the former with the clarity of the latter while maintaining the precision that characterizes both.

The adopted methodological framework is that of corpus stylistics, which is currently gaining ground in analyses of professional and promotional texts (Nørgaard, Montoro, Busse 2010; McIntyre, Walker 2019) due to its combination of critical qualitative and rigorous quantitative exploration and its ability to probe into the communicative intents of linguistic stylistic patterns (Burke 2014). In fact, "style is the form of a certain content which is adopted by a certain user, and thus anything which may express that which is particular, unusual or/and deviant" (Shepherd, Sardinha 2013: 66). Therefore, the interpretation of recurring rhetorical and syntactic features, along with semantically significant lexical choices, can allow typical and relevant conclusions about DARPA's use of language to be drawn.

As regards the quantitative survey of the corpora, the AntConc 3.5.8. program (Anthony 2019) was employed to detect relevant occurrences and collocations, and isolate significant segments in order to better observe the insertion of the keywords within the text and related stylistic patterns. In this manner, the quantification of data may become "an aid of possible explication of the piece of writing" (Shepherd, Sardinha 2013: 85) and a way to uncover implicit values and messages.

4. *DARPA's linguistic and communicative patterns*

In accordance with its peculiar position between the military, academic and civilian worlds, DARPA's preferred lexical and stylistic choices and their ranking differs from those of commonly studied academic and scientific communities. This may already be demonstrated by observing the main keywords of the individual corpora, as outlined in the table below:

#	Framework corpus	N. hits	Research P. corpus	N. hits	Vignettes corpus	N. hits
1	DARPA	161	program	105	DARPA	139
2	program	71	will	56	program	135
3	technologies	70	health	56	technology	71
4	new	67	disease	48	research	67
5	systems	61	brain	44	new	62
6	will	59	military	42	can	48
7	security	56	new	41	systems	48
8	capabilities	55	systems	40	technologies	47
9	technology	52	develop	39	would	40
10	national	37	medical	39	aircraft	39
11	research	34	novel	38	data	39
12	space	34	aims	38	based	39
13	military	31	technologies	36	defense	33
14	agency	28	devices	35	development	33
15	critical	25	injury	35	Covid	32
16	cyber	25	would	35	commercial	31
17	development	24	can	34	military	30
18	threats	24	DARPA	34	researchers	30
19	first	23	threat	34	silicon	30
20	high	23	countermeasures	29	learning	29
21	advances	22	technology	29	could	29
22	defense	22	threats	29	developed	28
23	enable	22	biological	28	chip	27
24	system	21	system	27	system	27
25	today	21	time	26	chemical	26

Table 1. Key words in the corpora.

Although an attentive reading of the data and a comparison with common choices in traditional research writing would already lead to interesting findings, the most relevant occurrences will be reiterated and referred to throughout the following subsections. In combination with the connotation they take on within texts and segments, as well as a stylistic analysis, they highlight important implicit messages sustaining the agency's line of reasoning and action and further spread information justifying the agency's activity among the general public.

#### 4.1 *Newness*

The semantic field that most immediately defines the DARPA model and its related research is 'newness' (in the form of the adjective 'new') and its connection with the verb 'create', a lexical pairing that strikes the reader as ambitious and stronger than more common, cautious choices found in academia and research such as 'innovative' and the verb pertaining to the same root 'innovate'. In fact, in all the corpora the term 'new' was the most common adjective (often used like in [1], [2], and [3]) and ranked within the first 10 lexical words, and 'novel' is also one of the top 20 in the 'Research programs' corpus:

- [1] These investments in GaN are enabling a *new* generation of military systems that can scan space for debris (Framework, 30)
- [2] The program is developing *new* closed-loop, non-invasive systems that leverage the role of neural 'replay'... (Research programs, RAM)
- [3] [...] overcome the ongoing challenges of transistor scaling through the discovery of *new* materials that circumvent current limitations... (Vignettes, Very large scale integration)<sup>1</sup>

Although it certainly rings as less formal and impressive than 'innovative', this preference for the word 'new' stems from DARPA's desire to communicate very strongly and clearly with all collaborators, including the non-expert

<sup>1</sup> All emphases in the paper are the author's.

public, and it defines its end goal, which consists in something completely unseen and often unconceived: “Our goal is nothing less than to create fundamentally *new* concepts, technologies, and capabilities for warfare in the ground, maritime, air, space, cyber, and human domains” (Framework, 5). Moreover, the words ‘create’ and ‘new’ are inserted within a rhetorically powerful three-part list (“concepts, technologies, and capabilities”) whose parts range from the most abstract initial phase, i.e. “concepts”, to a form of concretization, i.e. “capabilities” (another semantic key word). The list remains within the semantic field of a work in progress state, as opposed to the more comforting and complete terms that are usually employed in research writing as a means of ensuring maximum usable results from the available resources.

This less comforting quality of the language of DARPA is a common denominator, as later subsections will confirm, but is perceived as a natural consequence of pioneering rather than simply improving new technologies, for it claims that “incremental improvements are inadequate to achieve our vision. That is why DARPA solicitations frequently note: ‘Specifically excluded is research that results in evolutionary improvements to the existing state of practice’” (Framework, 7). In fact, ‘safer’ words like ‘innovate/innovation’ are connected to bettering something existing, while DARPA seeks a revolutionary novelty that may initially not be better but has not been seen yet and may prove itself worthy of keeping until the necessary related discoveries and technology are conceived and combined. This is also a direct reflection of the “right to left” approach and the willingness to risk both in economic and in scientific terms. It also implies a sense of urgency that accompanies the mission of national defense: “even before a program launches, DARPA starts developing strategies for transitioning anticipated results into applicable, real-world domains” (Framework, 34).

Such urgency is mirrored in an overall stylistic approach that favors present active tenses and highly connotative lexical choices, as opposed to intentions to ‘plan for’ and ‘adjust’ hinting at reaction and time consumption more than action.

#### 4.2 *Fearlessness and high-risk*

Another important feature of DARPA's programs, and the resulting language, lies in its specific intent not only to avoid, but even to actively pursue its ambitious intents without the limits and fear that can shackle traditional scientific research. This is enabled in part by its focus on the military as a highly collectivistic context where service members are willing to sacrifice certain freedoms and rights to protect the nation (Howe 2003; Fleming 2010; Miles 2013; Mehlman, Corley 2014; Parasidis 2015). To be fearless means to take on a decisive and pioneering attitude, which is sustained by the direct syntactic structure and prevalence of active tenses of the texts – as opposed to the more extensive use of passive tenses in academic and scientific research writing – but also by the above mentioned concept of 'newness' and other semantic markers, which may be noticed in the following explanation of DARPA's approach to ethical matters resulting from its findings:

DARPA's job is twofold: First, the Agency must be *fearless* about exploring *new technologies and their capabilities*; this is DARPA's core function, and the Nation is best served if DARPA pushes *critical* frontiers ahead of its *adversaries*. At the same time, DARPA is committed to addressing the broader societal questions raised by its work and engaging those in relevant communities of expertise to provide context and perspective for consideration. [...] Societal consensus on difficult questions of technology and policy is notoriously difficult to achieve. And while new technologies can help defuse previously polarizing issues – it is possible, for example, that technology will eventually help manage the problem of assuring privacy, even though technology today has exacerbated that problem – it is important to recognize that technological advances are bound to keep generating new societal quandaries, and that resolving them will demand broad community engagement. (DARPA website, *Ethics & Societal Implications*)

The text above clearly indicates, by virtue of the order of the agency's priorities and the syntactic separation between the two parts of its 'job' (i.e. fearlessness and societal issues), as well as by the incisiveness of the words referring to the first,

where its priorities lie. Because the institution's goal is national security and everything surrounding that, its technologies must serve the nation and military first, and the population second. In fact, the only mention of morality is made in reference to service members, as they are responsible for maintaining national security: "DARPA considers it a moral obligation to attend to and roundly improve all aspects of warfighter performance" (Framework, 22). This concept is further enforced throughout the corpora thanks to the extensive use of terms like 'military', 'threat(s)', 'security', and 'critical'. In contrast, the second part of DARPA's activity is to address the societal quandaries that may emerge within the civilian context and collaborations due to their differing ethical and bioethical values. The tone of the lexical choices is mitigated with verbs indicating processes like 'addressing', 'engaging', 'recognize' that are not frequently found in the corpora, including the DARPA 'vignettes' with their promotional intent of presenting and explaining the agency's greatest accomplishments to the non-expert public.

The 'threat environment' is frequently mentioned and represents a hallmark of the military ethical sphere of action that constantly changes and requires the military – as opposed to civilians – to work outside of the sphere of personal, professional and moral comfort:

- [4] Perhaps no domestic security *threat* today exceeds that of a nuclear or radiological 'dirty bomb' detonation. (Framework, 13)
- [5] Successful PPB technologies would therefore change how the military and public health communities perform in unpredictable *threat* environment. (Research programs, PPB)
- [6] Continuous *threat* monitoring over large areas requires thousands of detector feeds to be collected... (Vignettes, SIGMA)

The urgent need to deter such threats determines and shapes DARPA's investments and choices in research programs, as well as the manner in which they are conducted:

The results have included *game-changing military capabilities* like precision weapons, stealth technology, and unmanned aerial vehicles, as well as *icons of modern civilian society* such as the in-

ternet, automated voice recognition and language translation, and Global Positioning System receivers small enough to embed in myriad consumer devices. (Framework, 3)

The institution's priorities are underlined by its strategic positioning of three-part lists: the first names military implementations of its research that have been contested in the public arena and are referred to as "game-changing" and therefore crucial for national defense. This is followed by another list of "icons" (and therefore no longer inventions) that have not only been accepted but also appreciated by civilians, and range from the most renowned to tools that deal with work in progress. Through this stylistic ordering and combination of lists, the first series of controversial technologies is implicitly connected with the second and therefore just as worthy of appreciation and trust. Consequently, tools that seem dangerous, like the questions they raise, may be dealt with and 'translated' into a form and use that civilians may enjoy, but only at a secondary and later phase. This is confirmed by the fact that the corpora seldom mention commercial applications if not in programs for which they are seeking help from companies and civilian institutions.

DARPA's fearlessness is also a natural result of its innovative research model, which is fueled by a "high-risk, high-payoff" mentality that "thrives on risk and rewards. DARPA projects address the *highest payoff, highest risk*, and most forward-looking technology concepts" (Framework, 33). This is in stark contrast with traditional research and its focus on best results with as little (social, health and economic) risk as possible. Interestingly, however, as opposed to the word 'threat(s)' which is often found, 'risk(s)' is not very present, presumably because it would be thought to refer to DARPA's activities rather than the outside enemies whose existence justifies the agency's work. To avoid worry among the public, 'risk' becomes something that must be contemplated to proceed fearlessly, but can also be channeled to attain results:

The agency makes thoughtful decisions [...] in full knowledge that R&D is unpredictable and some programs and projects will fail.



Indeed, if none failed, the agency's culture asserts that it would not be doing its job; it would not be bold enough. Investing in a wide range of projects and technical approaches within those programs increases the chances that the agency's investments will lead to some significant successes as well as some failures. (Bonvillian *et al.* 2019: 37)

Therefore, taking high risks without fearing, but even embracing, failure – a prospect which is very difficult in traditional R&D – is seen by and in DARPA simply as yet another natural part of its model and of the underlying challenge-based mentality.

#### 4.3 *Possibilities and capabilities*

Another semantic field that shapes the style of DARPA texts regards that which is possible, even more than that which is feasible and present in non-DARPA research institutions. The concept of possibility is multifaceted, for it is manifested through different means. The first, and most obvious, indication lies in the agency's claim that "DARPA's job is to change what's *possible* – to do the fundamental research, the proof of principle, and the early stages of technology development that take '*impossible*' ideas to the point of 'implausible' and then, surprisingly, '*possible*'" (Framework, 26). Such an assertion is linked to the 'newness' and 'fearlessness' fields explored in the previous subsections, but because the agency's results remain in the realm of the conceivable yet hitherto unattained, its lexical, discursive and stylistic choices are decisively vague. In this aspect, the language DARPA uses to describe its work diverges from the clear and measured purposes and means of research of academic research writing. It is also worth noticing that while the word 'impossible' is only present in the corpora 5 times, its more optimistic counterpart 'possible' counts 32 hits.

Another relevant element that ingrains possibility into the style and structure of the sentences is the presence and use of modality, which is distributed throughout the corpora as follows:

Modal verb	Framework	Research Projects	Vignettes
can	31	34	48
would	20	35	40 (14 of which is the past reported tense of 'will + infinitive')
could	14	24	28
must	16	7	1
may	11	9	1
might	5	7	6
need (+ to)	2	10	1
has to/Have to	0/0	0/2	0/1
should	0	0	1 (hypothetical)
ought (+to)	0	0	0

Table 2. Presence of modal verbs in the corpora.

As the table illustrates, the modal verbs that are most present in all corpora are epistemic modal verbs, which deal “with the possibility, probability or impossibility of a certain proposition” (Winiharti 2012: 534), and in particular ‘can’, ‘could’ and ‘would’ as a hypothetical form, like in the examples below:

- [7] [...] approaches such as proteolysis targeting chimeras (PROT-ACS) and similar methods *can* achieve superior outcomes over existing therapies. (Research programs, HEALR)
- [8] DARPA recognized early in its institutional existence that AI *could* address a range of national security needs. (Vignettes, Deep Learning)
- [9] In doing so, the program *would* create one of the most comprehensive datasets of systems-based brain activity ever recorded. (Research programs, SUBNETS)

The only deontic modal verb that ranks high is ‘must’, and is used to enforce the sense of urgency that spurns the fearless research mentioned in the previous subsection. It is immediately followed by the less forceful epistemic modal verbs ‘may’ and

‘might’, again indicating a decisively epistemic stance in all three corpora.

A connected concept having an important role in DARPA’s language and enhancing the idea of possibility is that of “capabilities”:

- [10] Realizing new *capabilities* across the land, sea, and air domains will be important... (Framework, 9)
- [11] [...] delivering centralized laboratory *capabilities* even in the low-resource environments typical of many military operations. (Research programs, ADEPT)
- [12] [...] without some game-changing *capabilities* for making aircraft more survivable amidst the new threats... (Vignettes, Stealth)

When referring to scientific and technological development, a common term is ‘ability/ies’ to underline power or qualities that are known and have been, or must be, confirmed in a predictable manner. On the contrary, the agency starts from an earlier stage, since “DARPA aims to drive the technological advances and *capabilities* that will determine the future” (Framework, 2). The words ‘capability’ and/or ‘capabilities’ are among the first 30 lexical words in the Vignettes corpus, ‘capabilities’ is eighth in the Framework corpus, while it is understandably less present in the ‘Research programs’ due to their specific focus on goals and means. From a semantic point of view, ‘capability’ and ‘capabilities’ are more closely associated with potential, which is less certain than the power of an ‘ability’, for it must still be tested and better suits ‘possibility’ and its epistemic modality and hypothetical syntactic structure.

#### 4.4 *Time*

Finally, the idea and flow of time itself differs in DARPA’s mentality from that of science as is known, starting from one of its most ambitious projects “to develop new *possibilities* for extending the golden hour, not by improving logistics or battle-field care, but by going after *time itself*, at least how the body manages it. [...] Essentially, the concept aims to slow life to

save life” (Framework, 24). While such control over time has not yet been achieved, the findings are sometimes so groundbreaking that it is not possible to use them at the moment so “years may pass before a DARPA-supported advance gets the opportunity to make its mark – perhaps because related technologies have matured or because geopolitical or economic contexts have evolved in ways that have made the advance more practicable or more critically needed” (Framework, 34).

Upon an initial view of the texts, it is possible to notice an extensive use of gerund tenses, especially in reference to pursuits, to convey a sense of novelty, dynamicity and urgency, in all of the corpora. The word ‘time’ is also consistently present (27 hits in the Framework corpus, 26 in the Research programs corpus and 24 in the Vignettes corpus) which, considering the agency’s diverse activity, indicates that time is an omnipresent component.

- [13] This is a *time* when incremental improvements are inadequate to achieve our vision. (Framework, 6)
- [14] If the MPS program is successful, the resulting platform should decrease the *time* for development (Research Programs, MPS)
- [15] [...] is focused on new methods to extend the *time* that atomic clocks and other quantum systems can maintain their quantum characteristics... (Vignettes, Quantum sensing and computing)

Nevertheless, a more in-depth qualitative and quantitative analysis of the corpora leads to the realization that time and technology do not run parallel, as is demonstrated in the discourse and the very style of the corpora, which surprisingly vary among the corpora based on their purposes. The DARPA Framework, with its intent to openly justify and promote, rather than explain, its activity to the non-expert public, makes extensive use of present and active tenses, as well as gerunds and deontic modal verbs (see Table 2 in the previous section). It is therefore focused on the ‘here and now’ (as is confirmed by the word ‘today’ and its 21 hits) in order to enforce the importance of current research as a response to ongoing and emer-

gent threats. In the Research programs corpus, where ongoing programs are introduced and explained in the register that most closely recalls research writing, ‘will’ (62 hits) is the second most common word after ‘program’ and therefore implicates great focus on the future, in accordance with the program’s aims to emphasize potential goals, findings and benefits. Finally, the ‘vignettes’, with their poster-like structure and display, each present a ground-breaking discovery by DARPA and are divided into four parts: “The need and opportunity”, “The DARPA solution”, “The impact” and “Looking ahead”, among which the temporal markers of the tenses are distributed. More specifically, because the first two parts deal with the history leading to the technology at hand, the verb tenses pertain to the past; the third part concerns the ongoing situation with present tenses; the final part concerns future potential and implications, and therefore generally blends present and future tenses to unite current research and expected applications.

As a result, in what has been proven to be typical ‘DARPA style’, time itself is not measured and followed like in traditional scientific writing, but is conceptually and linguistically manipulated so as to convey the revolutionary potential of the research that is being carried out. Such communicative force motivates both open claims by the agency itself and more implicit choices, including the strategic use of time-related words and mastery over verb tenses.

##### *5. Concluding remarks*

In light of the application of the corpus stylistics methodology to detect and explore specific semantic and discursive peculiarities, it is possible to confirm that the linguistic and communicative patterns used by DARPA stand out as a clear reflection of its unique status and position between national security and R&D. Its everlasting priority to defend the country by providing the most revolutionary and potent technology possible at the cost of risking and reaching towards the inconceivable is ingrained in the institution’s choice of key words,

modal verbs and verb tenses, as well as their positioning within sentences and phrases.

To start, this has been proven in its insistence on using simpler but bolder lexical choices, like ‘new’ as opposed to ‘innovation’, or ‘capabilities’ instead of ‘abilities’, and openly addressing uncomfortable ‘threats’ and ‘adversaries’ to enforce the sense of need and urgency that is consistent with the importance of national defense and security. Interestingly, the latter strategies lead to the belief that the agency would make extensive use of the deontic modality to convey a sense of duty and obligation, as is usually found in military and national defense discourse. However, DARPA must and does remain true to its calling to respond to the greatest challenges with pioneering science and technology by means of its strong prevalence of epistemic modality and hypothetical scenarios in an attempt to underline the role of possibility in reconceptualizing that which has been hitherto considered impossible. Finally, the analysis of the institution’s texts has shown its ambitious intention to control time itself, with its research and its strategic distribution of temporality within the corpora, to underline the consistent presence and impact of the agency.

In conclusion, the combined qualitative and quantitative analysis of the corpora on various levels has enabled a rather singular language of and on research to emerge and shed light on an alternative research model. Further research on diverging stylistics and their underlying mental frame within such a standardized academic and professional context could make research institutions more aware of the message they truly convey to their recipients and enable them to single out limiting aspects and trends in traditional research writing and dissemination of research findings.

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